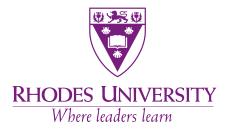
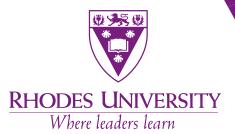


Rhodes University RESEARCH REPORT A Year in Review





2017 RESEARCH REPORT

A publication of the Rhodes University Research Office, compiled and edited by Tarryn Gillitt, Jill Macgregor, Thumeka Mantolo and Jaine Roberts.

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FOREWORD Dr Sizwe Mabizela, Vice-Chancellor

Many of the goals of our recently completed Institutional Development Plan have to do with retaining and improving our research and scholarly contribution as a university, and ensuring that we not only generate dependable knowledge, but that the knowledge that we create has a positive impact on the social and natural world around us.

In summary, our goals are to

- Maintain and strengthen our general formative degree offering and the research, teaching, and communityengagement nexus which enables our students to access powerful knowledge;
- Enable access to all academically-qualifying students and provide them with conditions which allow them to flourish as critical and engaged citizens;
- 3. Maintain and strengthen our unique institutional niche as a research-intensive university outside a major urban area;
- 4. Ensure financial and environmental sustainability practices through good governance, leadership and management;
- Attract, nurture and retain staff of high-calibre and maintain an inclusive, welcoming, affirming and positive intellectual environment;

- Provide relevant and appropriate academic infrastructure, equipment and facilities to support our academic project; and
- 7. Promote Rhodes University as an institution for the public good in local, provincial, national and international contexts.

The plan calls upon all of us to re-imagine our University as one in which sustainability permeates every aspect of our academic endeavour, including an elevated sense of awareness and responsibility of our graduates for building sustainable communities. It calls upon us to ensure that we are simultaneously locally responsive and globally engaged. It calls upon us to work towards advancing social justice and do all that we can to restore the dignity and humanity of those who were treated as lesser beings by the previous dispensation. And it calls upon us to remind ourselves that our university does not exist in a vacuum. It exists within a social, cultural and economic



Rhodes University Vice-Chancellor, Dr Sizwe Mabizela reading to children at a day care centre for Trading Live for Mandela week. Photo: Rhodes University, Communications & Advancement Division.

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milieu, and has an important role to play in lifting the standard of living of our local community.

Rhodes University is very fortunate to have outstanding, dedicated and committed academic and support staff who take a deep and keen interest in the growth, development and academic success of each and every one of our students.

Our intellectual community is well placed to grow with determined pace along our planned trajectory. The Transformation Summit held in 2017 was an opportunity for our community and stakeholders to reimagine our place, purpose and value in society, and our role in building a better world, and was a primary data source for informing the Institutional Development Plan.

The results of the 2017 academic year were celebrated during a bumper graduation weekend in April 2018, in which a record 2492 graduates were capped at 6 graduation ceremonies, 42% of whom were Postgraduates, 63% were women, and 16% were international students. We are proud that ours is a university that inspires hope, creativity and imagination.

The Centre for Biological Control in the Department of Zoology and Entomology was officially launched in 2017 in recognition of this high profile research focus area of the University.

Many of our outstanding scholars attracted external acclaim. Among them were:

Professor Michael Neocosmos whose book *Thinking Freedom in Africa* won the 2017 International *Frantz Fanon Outstanding Book Award.*

Professor Pam Maseko, who was a double winner at the South African Literary Awards.

Distinguished Professor Heila Lotz-Sisitka and Dr Leigh Price, who received the 2017 Cheryl Frank Memorial Prize for their book *Critical Realism, Environmental Learning and Social-Ecological Change.*

Professor Andrew Buckland who won the *Fleur du Cap Best Actor Award* for his lead role in *The Inconvenience of Wings*.

Distinguished Professor Tebello Nyokong who attracted a rare funding award in the *South Africa / Canada Research Chairs Trilateral Partnership Initiative*, and who received two Council for Scientific and Industrial Research (CSIR) awards for her student graduations in the National Laser Centre Programme.

Professor Rosie Dorrington who attracted a highly competitive SARChI *Community of Practice* grant for establishing a Marine Science Community of Practice in South Africa.

Dr William Bennett, who received a Prestigious Award rating (P-rating) from the National Research Foundation.

The 'Amanzi for Food' project, a student group in the SARChI Research Chair in Global Change Social Learning Systems Development, which was selected for a 'pitch' focussing on innovative education and training for green economy development at the "Partnership on Action for a Green Economy Inter-Ministerial conference", held in Berlin.

Professor Janice Limson and her team who brought distinction to the University by winning the best prototype award on show at the National Innovation Bridge held at the Gallagher Convention Centre, with a low-cost, biological toolkit for running a remote diagnostic laboratory, which allows for the diagnosis of a range of viral, bacterial and fungal infections.

The Vice-Chancellor's Distinguished Research Award (in the age group 40 and below) for 2017 had two (2) recipients, Dr Sally Matthews of the Department of Political and International Studies, and Associate Professor Ferdi Botha of the Department of Economics and Economic History. The Vice-Chancellor's Distinguished Senior Research Award for 2017 went to SARChl Chair Professor Russell Kaschula of the African Language Studies Section in the School of Languages and Literatures, while the Book Award went to Professor Gary Baines of the Department of History for his book entitled *"South Africa's 'Border War': Contested Narratives and Conflicting Memories"*.

Many other individual academics received widespread national and international acknowledgement of their work. Their fine accomplishments are contained within the pages of this report.

We extend our congratulations and thanks to all of our researchers, supervisors, collaborators, funders, donors, and partners who contributed to making 2017 a year in which research at Rhodes University flourished. Your expertise, integrity, dedication, rigour and generosity make Rhodes University the rich and distinctive intellectual space that it is.

Dr Sizwe Mabizela Vice-Chancellor



Rhodes University's position as a small research-led and rural based university is relatively unique in the sector, and is something that we seek to build upon. In terms of absolute contribution of research outputs, our capacity is modest in relation to big urban research-orientated institutions. But in terms of measures which are normalised to our size, we are outstanding. The per capita accredited research output benchmark that the Department of Higher Education and Training (DHET) releases annually is a rough measure of value for money - research output of an institution in relation to the Council's academic staff cost.



Rhodes University Deputy Vice-Chancellor, Dr Peter Clayton on a tour of Joza Township during Trading Live for Mandela week. Photo: Rhodes University, Communications & Advancement Division.

Rhodes University has in past years been consistently amongst the top achievers in the sector by this measure, and in the most recent audited report is tied in the first position (alongside the University of Stellenbosch). This is something that we as a community of scholars can be proud of.

The rate of increase in this measure has been consistent at Rhodes University, and it says much about the creativity,

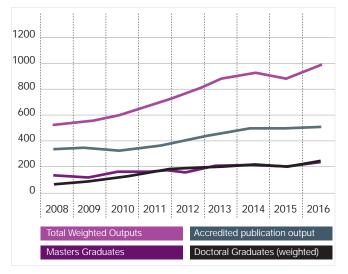
dedication and rigour of our researchers and postgraduate supervisors.

The audit of 2017 accredited research outputs is still underway by the DHET at the time of writing. Our internal benchmarking indicates that we can expect the results to show a continued improvement.

All of those whose knowledge work is listed in this report have contributed wonderfully to the intellectual space of the university,



Rhodes University's Accredited Research and Postgraduate Graduation output growth 2008 to 2016 *(from the DHET annual national report on audited research outputs)*



and to the academic capacity and the scholarly reputation that Rhodes University enjoys. We have some significant challenges to address, chief amongst them being a narrow concentration of highly productive researchers, a skewed demographic representation amongst academic staff in relation to the student body, and the constant challenge of Postgraduate financial aid. But we have a strong base of outstanding scholars to build upon in addressing these issues.

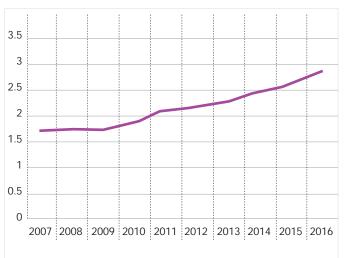
I add my warm thanks and congratulations to all of our researchers, funders, collaborators and partners who contributed to the strong accredited research results of 2017, as well as those generating the many forms of scholarship that are not counted in the accreditation exercise but which contribute much to the rich intellectual space that is Rhodes.

I also thank all the administrators who play a crucial role in preparing the university's meticulous audited submissions, and all who support the research endeavor intellectually, administratively, technically, creatively, and by maintaining our physical space as one that facilitates and encourages our diverse intellectual activity.

Dr Peter Clayton

Deputy Vice-Chancellor: Research and Development

Rhodes University's Weighted Research Output per Capita (2007-2016) (from the DHET annual national report on audited research outputs)





TOP 30 RESEARCHERS

Rhodes University acknowledges and congratulates the following for their accredited research outputs (Journal Publications, Books & Chapters, and Masters/Doctoral students) graduated in 2017:

- 1. Distinguished Professor Tebello Nyokong Department of Chemistry, RU/DST Centre for Nanotechnology Innovation
- 2. Professor Charlie Shackleton Department of Environmental Science
- 3. Professor Makaiko Chithambo Department of Physics and Electronics
- 4. **Professor Mellony Graven** Faculty of Education
- 5. Distinguished Professor Heila Lotz Sisitka Faculty of Education
- 6. Associate Professor Ozlem Tastan Bishop Department of Biochemistry & Microbiology
- 7. Professor Russell Kaschula School of Languages & Literatures
- 8. Professor Lilla Stack Department of Accounting
- 9. Distinguished Professor Catriona Macleod Department of Psychology
- 10. Associate Professor Emmanuel Mgqwashu Faculty of Education
- 11. Distinguished Professor Martin Hill Department of Zoology & Entomology
- 12. Associate Professor Barry Irwin Department of Computer Science
- Professor Keith Cowan Institute for Environmental Biotechnology Rhodes University (EBRU)
- 14. Associate Professor Candice Christie Department of Human Kinetics & Ergonomics
- 15. Professor Brett Pletschke Department of Biochemistry & Microbiology
- 16. Dr John Mack Rhodes University/DST Centre for Technology Innovation (CNI)
- 17. Professor Lynn Quinn Centre for Higher Education Research, Teaching and Learning (CHERTL)

- 18. Professor Carolyn Grant Faculty of Education
- 19. Associate Professor Kirk Helliker Department of Sociology
- 20. Professor Louise Vincent Department of Political & International Studies
- 21. Distinguished Professor Christopher McQuaid Department of Zoology & Entomology
- 22. Professor Rod Walker Faculty of Pharmacy
- 23. Professor Noel Pearse Rhodes Business School
- 24. Associate Professor Jeffrey Brukman Department of Music & Musicology

Professor Sheona Shackleton Department of Environmental Science

Professor Jo-Anne Vorster Centre for Higher Education Research, Teaching and Learning (CHERTL)

- 25. Mr Paul Wessels Institute for the Study of the Englishes of Africa (ISEA)
- 26. Dr Roman Tandlich Faculty of Pharmacy
- 27. Professor Adrienne Edkins Department of Biochemistry & Microbiology
- 28. Dr Earl Prinsloo Department of Biotechnology and the Biotechnology Innovation Centre (RUBIC)

Professor Martin Villet Department of Zoology & Entomology

29. Associate Professor Sam Naidu Department of Literary Studies in English

Associate Professor Helena van Coller Faculty of Law

30. Associate Professor Karen Bradshaw Department of Computer Science



World-Class Researcher

For the past two (2) decades Rhodes University's Distinguished Professor Tebello Nyokong has been raking in international and national awards for her hard work and commitment to the advancement of science in Africa. In 2004 she was a recipient of the **Presidency of South Africa's Order of Mapungubwe** in Bronze. In 2007, she was one (1) of the top three (3) publishing scientists in South Africa. She is also the recipient of Honorary Doctorates from Walter Sisulu University, University of KwaZulu-Natal, and the University of South Africa. In 2011 the Royal Society in Chemistry/Pan African Chemistry Network honoured her as a **Distinguished Woman in Chemistry**. In 2012 she was awarded the **South African Chemical Institute Gold Medal** in 2012, and named one of the Top Ten (10) most influential women in science and technology in Africa by IT News Africa. In 2013 she was awarded the **National Research Foundation's Lifetime Achievement Award**.



Photo: Snow Harris.

Distinguished Professor Tebello Nyokong Dinstinguished Professor of Chemistry and Director: RU/DST Centre For Nanotechnology Innovation & SARChI Chair

"There's nothing left to say about me!" Nyokong flashes one of her signature beaming smiles. "For the last so many years I've been the top publishing scientist at Rhodes and produced a lot of students. I don't have any space left on my office walls for awards" she chuckles. "So what do you want to ask me?"

Well, at an age when most other academics would be easing comfortably into retirement, what keeps the sextenegenerian

chemistry professor passionate about her field? "I think I am driven by young people," she says. "You know when you see these young kids who never thought in their lives that they'd have a PhD? Now all of a sudden they're thinking this is possibleeven if they happened to come from a village where they don't even know what a PhD is. To bring those possibilities out of students is what really keeps me going."

It's precisely Nyokong's dedication to passing on her expertise and producing knowledge that led to the CSIR National Laser Centre Rental Pool Programme (RPP), honouring her with two (2) awards: first, for the number of students trained and second, the number of doctorates awarded in 2016/2017. Nyokong currently holds the DST-NRF Research Chair in Medicinal Chemistry and Nanotechnology, and is Director of the RU/DST



Centre for Nanotechnology Innovation focusing on sensors. An impressive seven (7) doctoral students graduated from Nyokong's programme in the past two (2) years, which is an African record. The students conducted groundbreaking research on the development of new medicine and wrote a significant number of papers, a requirement of the programme.

"I believe our standard is very high and we need to expose students to international arenas, so they believe their standard is high," she says, explaining her motivation for taking six (6) of her most promising young scholars with her to Germany for a conference. "You shouldn't be a PhD student only in South Africa, you should be a PhD student who could be in Oxford. So my passion is really about training world class young people who are confident but also compassionate".

This last phrase strikes a particularly apt chord. Dubbed "the Compassionate scientist", Nyokong has dedicated her career, both nationally and internationally, to not only advancing the frontiers of scientific research, but also serving as an inspiration for women and previously disadvantaged communities in science.

"I think it's important for me to share my experience with others. When you grow up with very little you appreciate everything you get, and you learn how to share," she says.

She recalls her own journey from being a barefoot young shepherd girl living in the mountains of rural Lesotho to earning a bachelor's degree in chemistry and biology from the University of Lesotho in 1977, an MSc in chemistry from McMaster University in Canada four (4) years later, and a PhD in chemistry from the University of Western Ontario in 1987. After a Postdoctoral stint at the University of Notre Dame in the United States, Nyokong returned to teach at the University of Lesotho before joining Rhodes University in 1992 as a lecturer.

"Look, when I first arrived at Rhodes in 1992, as a black woman I wasn't expected to succeed. It was like I was given a rope to hang myself, the whole idea was 'let's see what this black woman can do'," she recalls. "But I can't complain because I was given space to do research and it helped me a lot to get started." Over the next decade persistence and an impeccable work ethic underpinned Nyokong's international reputation as a top class researcher in chemistry and nanotechnology. An invitation from the National Laser Centre urging her to apply for the use of their newly acquired Laser technology illustrates her commitment to innovative research. "Somebody called me at 10pm from the National Laser Centre saying, 'we will be there in the morning at 10am, could you have an application ready for us?'," she says. "What do you do? You're not going to sleep, you seize the opportunity, and if you fail you fail, but you've got to take a chance." After working throughout the night, Nyokong had completed the proposal and her application was successful. It was securing the use of this technology that empowered Nyokong to set up a research laboratory at Rhodes in order to conduct research on the effective treatment of cancer through photodynamic therapy, an alternative to chemotherapy.

"Cancer is a horrible disease. If you go through chemotherapy, you may as well die of chemotherapy rather than the cancer itself," she says. "So what we do as chemists is develop, among other things, drugs for cancer treatment, photodynamic laser treatment, and lasers allow us to test how stable they are." As a scientist Nyokong asserts that any practical application of such cutting edge research begins with the personal curiosity of the researcher. "Look, a lot of discoveries were made by curiosity, not necessarily by practical application," she says. "I wasn't interested in cancer research, but then I saw that I love lasers and they can be useful. The application wasn't my mission, my mission was to *play* with lasers. This is why they call it 'blue sky research' at the National Research Foundation. We need to have people who are dreamers. Otherwise we will never get Nobel Prize winners."

It is such an unabashed idealism that informs Nyokong's commitment to training future generations of chemists at Rhodes University. "I am a very positive person because I see positivity all around me," she says. "I like to protect the underdog and Rhodes is an underdog in the sense that it's a small university and it doesn't have much funding, yet I run a huge research centre here. No one believes how state-of-the-art we are. Some people don't think much of us, they come here and say: 'at Rhodes?' But yes, in terms of research in chemistry, Rhodes is one of the top three (3) universities, and per [student] capita we are still the top."

Nyokong argues that her own success in supervising ~ one hundred and twenty (120) MSc, PhD and Postdoctorates in the past twenty-five (25) years can be attributed to creating an academic environment where promising young researchers are given the break to kickstart their own research. "We work differently from other faculties in that students work *with* us, rather than independently. We are a part of the same research team: students work in the lab under my supervision, and then we write together," she explains. "So success breeds success. Many of the staff members that have joined us saw our success and wanted to come teach here. Students also see that success, and so they want to come and have high class training here. But if anyone is *not* creating new knowledge they should *not* be in the university!" she cautions animatedly.

"So I am here to motivate my students. If you talk to them they'll tell you that I am the most horrible person who made them work so hard! It is hard training, but we need to train people who appreciate the value of research, and are not afraid of hard work. Some young people view hard work as not having a life. That's not true," she says.



Distinguished Professor Tebello Nyokong Photo: Rhodes University Communications & Advancement Division.

"I can't call this work because it's fun. I get paid for having fun, so for me this is an absolute pleasure. I get up in the morning and know I'm coming to a happy place. I don't view this as work the way people define this as 'work', it is my passion," she continues.

It's this fundamental passion for furthering scientific research in South Africa that underpins Nyokong's unflagging commitment to mentoring the current crop of more than thirty (30) PhD and Masters as the Director of the Centre for Nanotechnology Innovation at Rhodes. "I have supervised a lot of students, maybe too many, so I sometimes wonder how long I can keep on doing what I am doing," she smiles. "I'm not feeling tired, maybe psychologically tired because I'm *supposed* to be tired at my age. But you know, for me it's the lives of the students, not the load that keeps me motivated."

It's such compassion that fuels Nyokong's desire to continue to empower the next generation of South African and African scientific researchers. "Students need to be challenged in order to succeed as researchers. Research is all about learning the discipline of critical thinking, it's all about learning the discipline of writing," she says. "But my wish is to help students realise that research is not just about learning new knowledge, it is also about advancing yourself and advancing science for the benefit of your community. It's about development through research for the good of the entire country. But it's also about working on what *you* really like doing, so don't follow the money! Follow your passion first, then the money will come."

- Miles Keylock



PhD Graduates at the 2017 Graduation Ceremony

FACULTY OF COMMERCE (6 PhDs)

DEGREE OF DOCTOR OF PHILOSOPHY

DUBE, **Nqobizitha**, MSc (Fort Hare), in Economics, in the Department of Economics and Economic History. Degree by thesis. Thesis: *Invasive alien plants and rural livelihoods: A case of* Cylindropuntia Fulgida Var. Fulgida *in Gwanda district, Zimbabwe*. Supervisor: Professor GCG Fraser. Co-Supervisor: Professor JD Snowball.

JOHNSON, Ryan Andrew, PhD (South Carolina), in Accounting, in the Department of Accounting. Degree by thesis. Thesis: *An historical perspective on the evolution of the United States internal revenue code from 1981 -2001*. Supervisor: Professor EM Stack. Co-supervisor: Professor JCS Lancaster.

MTHOKO, Hafeni Tulimewawa Wilhelmina Lyatenda, BBusSci (Rhodes), in Information Systems, in the Department of Information Systems. Degree by thesis. Thesis: *Outcome and impact assessment in the comprehensive evaluation of rural ICT projects in developing countries*. Supervisor: Professor CJ Khene.

NDORO, Tinashe Tsungai Raphael, MBA (Rhodes), in Management, in the Department of Management. Degree by thesis. Thesis: *Differentiating engagement of opportunity identification: A grounded theory study of Chinese immigrant entrepreneurs.* Supervisor: Professor L Louw. Cosupervisor: Dr M Kanyangale.

SCHNEIDER, Ferdinand Dirk, MCom (UJ), in Accounting, in the Department of Accounting. Degree by thesis. Thesis: *A critical evaluation of inter-jurisdictional rules in the South African value-added tax system.* Supervisor: Professor EM Stack.

SIMATAA, George, MPA (UNAM), in Management, in the Rhodes Business School. Degree by thesis. Thesis: *Talent management: A case study of Namibia's Directorate of Civil Aviation (DCA) in securing talent for aviation safety,* 2008 to 2014. Supervisor: Professor NJ Pearse.

FACULTY OF EDUCATION (13 PhDs)

DEGREE OF DOCTOR OF PHILOSOPHY

BALOI, Aristides Manuel De Estevao, MSc (Kharhov), in Education, in the Department of Education. Degree by thesis. Thesis: *Exploring transformative social learning and sustainability in community based irrigation scheme contexts in Mozambique*. Supervisor: Professor H Sisitka. Cosupervisor: Professor R O'Donoghue. **CHIDINDI**, Joseph, MPhil (Oslo), in Education, in the Centre for Higher Education Research, Teaching and Learning. Degree by thesis. Thesis: *Discursive constructions of quality assurance: The case of the Zimbabwe Council for Higher Education*. Supervisor: Professor SM McKenna.

DE BIE, Gabrielle Jacqueline, MPhil (Stell), in Education, in the Centre for Higher Education Research, Teaching and Learning. Degree by thesis. Thesis: *Analysis of a foundational biomedical curriculum: Exploring cumulative knowledge-building in the rehabilitative health professions.* Supervisor: Professor SM McKenna.

KANGELA, Nyameka Constance, MScEng (Business Management) (Warwick), in Education, in the Department of Education. Degree by thesis. Thesis: A study of mathematics teacher identity as shaped through participation in a mathematics professional development programme. Supervisor: Professor M Schäfer.

KNOTT-CRAIG, **Ian Duncan**, MEd (Rhodes), in Education, in the Department of Education. Degree by thesis. Thesis: *Am I my brother's keeper? Learner leadership development in a secondary school in the Eastern Cape, South Africa*. Supervisor: Professor H van der Mescht.

MANDIKONZA, Caleb, MEd (Rhodes), in Education, in the Department of Education. Degree by thesis. Thesis: *Exploring change-orientated learning, competencies and agency in a Regional Teacher Professional development programme's change projects.* Supervisor: Professor H Sisitka. Co-supervisor: Professor R O'Donoghue.

MISTRI, Gitanjali Umesh, MEd (HEd) (Natal), in Education, in the Centre for Higher Education Research, Teaching and Learning. Degree by thesis. Thesis: *A social realist analysis of participation in academic professional development for the integration of digital technologies in Higher Education*. Supervisor: Professor LE Quinn. Co-supervisor: Professor B Leibowitz (UJ).

MUKWAMBO, Muzwangowenyu, MEd (Rhodes), in Education, in the Department of Education. Degree by thesis. Thesis: *Exploring and expanding situated cognition in teaching science concepts: The nexus of indigenous knowledge and Western modern science*. Supervisor: Professor K Ngcoza. Co-supervisor: Dr C Chikunda.

NKOMO, Sibhekinkosi Anna, MEd (Rhodes), in Education, in the Institute for the Study of English in Africa. Degree by thesis. Thesis: *An investigation into the effect of an extensive reading programme on bilingual Grade 3 learners' reading attitudes in two primary schools in Grahamstown*. Supervisor: Professor M Hendricks. Co-supervisor: Dr M Mbelani.



O'SHEA, Catherine Mary, MA (Rhodes), in Education, in the Centre for Higher Education Research, Teaching and Learning. Degree by thesis. Thesis: *Understanding the reading practices of Fort Hare students*. Supervisor: Professor SM McKenna. Co-supervisor: Dr C Thomson.

RAMSARUP, **Presha**, MEd (Rhodes), in Education, in the Department of Education. Degree by thesis. Thesis: *A critical realist dialectical understanding of learning pathways associated with two scarce skill environmental occupations within a transitioning systems frame*. Supervisor: Distinguished Professor H Sisitka.

VALE, Pamela, MEd (Rhodes), in Education, in the Department of Education. Degree by thesis. Thesis: An exploration of the prior conceptual understanding of measurement of first year national certificate (vocational) engineering students. Supervisor: Dr B Brown. Cosupervisor: Ms S Murray.

WESTAWAY, Lise, MEd (Rhodes), in Education, in the Department of Education. Degree by thesis. Thesis: *The emergence and expression of teachers' identities in teaching Foundation Phase Mathematics*. Supervisor: Professor M Graven.

FACULTY OF HUMANITIES (29 PhDs)

DEGREE OF DOCTOR OF PHILOSOPHY

BAASCH, Rachel Mary, MFA (Rhodes), in Art History, in the Department of Fine Art. Degree by thesis. Thesis: *Visual narratives of division in contemporary Palestinian art and social space*. Supervisor: Professor R Simbao.

BOSHOFF, **Priscilla Ann**, MA (Rhodes), in Journalism & Media Studies, in the School of Journalism and Media Studies. Degree by thesis. Thesis: *Crime and punishment Mzanzi style: An exploration of the discursive production of criminality and popular justice in South Africa's Daily Sun.* Supervisor: Professor J Prinsloo.

CHIPAIKE, Ronald, MSc (Zimbabwe), in Political & International Studies, in the Department of Political and International Studies. Degree by thesis. Thesis: Chinese aid and African agency since 2000: Examining the cases of Zimbabwe, Angola and Ghana. Supervisor: Professor PH Bischoff.

COPTEROS, Athina, MA (Rhodes), in Geography, in the Department of Geography. Degree by thesis. Thesis: *Drawing on principles of Dance Movement Therapy practice in a South African water research context*. Supervisor: Professor CG Palmer. Co-supervisors: Professor RC Fox and Professor V Karkou (Queen Margaret).

GANISO, Mirriam Nosiphiwo, MA (Rhodes), in African Languages, in the School of Languages & Literatures. Degree by thesis. Thesis: *Sign language in South Africa: Pedagogic approaches, policy developments and new directions.* Supervisor: Professor RH Kaschula. **IDAHOSA**, **Grace Ese-Osa**, MA (Rhodes), in Political & International Studies, in the Department of Political and International Studies. Degree by thesis. Thesis: *Pushing the bounds of possibility: South African academics narrate their experiences of having agency to effect transformation*. Supervisor: Professor LD Vincent.

ISHAYA, Nandi Salome, MA (Jos), in French, in the School of Languages & Literatures. Degree by thesis. Thesis: *Transgression et métissage: Une lecture de l'œuvre d'Adelaide Fassinou. (Transgression and transcultural blending: Reading the work of Adelaide Fassinou*). Supervisor: Professor PK Mwepu.

KELLY, Leonard Eric, BAHons (Rhodes), MA (Nottingham), MTh (Unisa), in History, in the Department of History. Degree by thesis. Thesis: *A history of the Grahamstown Teachers' Training College 1894-1975*. Supervisor: Dr A Kirkaldy.

KUNJU, Hleze Welsh, MA (Rhodes), in African Languages, in the School of Languages & Literatures. Degree by thesis. Thesis: *IsiXhosa ulwimi lwabantu abangesosininzi eZimbabwe: Ukuphila nokulondolozwa kwaso*. Supervisor: Professor RH Kaschula.

LOTTER, Jaclyn Oehley, MA (Rhodes), in Psychology, in the Department of Psychology. Degree by thesis. Thesis: *A narrative, child-participatory study of domestic mobility within grandmother-headed households in the Eastern Cape, South Africa*. Supervisor: Professor LA Wilbraham.

MA, Xiujie, MA (Rhodes), in English Language & Linguistics, in the Department of English Language and Linguistics. Degree by thesis. Thesis: *Ellipsis in the* v*P domain in Mandarin and Xhosa*. Supervisor: Professor MA de Vos. Co-supervisor: Professor R Simango.

MAFRIKA, Andile Ernest, MA (Rhodes), in African Languages, in the School of Languages & Literatures. Degree by thesis. Thesis: *The life and literary works of Peter Tshobiso Mtuze - A critical analysis.* Supervisor: Professor RH Kaschula.

MAGADLA, Siphokazi, BAHons (Rhodes), MA (Ohio), in Political & International Studies, in the Department of Political and International Studies. Degree by thesis. Thesis: Demobilisation and the civilian reintegration of women excombatants in post-apartheid South Africa: The aftermath of transnational guerrilla girls, combative mothers and inbetweeners in the shadows of a late twentieth-century war. Supervisor: Professor PH Bischoff.

MAVURA, Mike Tigere, MA (Rhodes), in Political & International Studies, in the Department of Political and International Studies. Degree by thesis. Thesis: Transnationalism and re-thinking international relations in Southern Africa: A case study of cross- border migration from Zimbabwe to South Africa. Supervisor: Professor PH Bischoff.

MAZWI, Ntombomzi Rose-May, BAHons (Rhodes), MA (Stell), in African Languages, in the School of Languages & Literatures. Degree by thesis. Thesis: *Edition, translation and critical analysis of biographical poems contributed by*



SEK Mqhayi to early isiXhosa newspapers. Supervisor: Professor P Maseko. Co-supervisor: Professor RH Kaschula.

McCONNACHIE, Boudina Elizabeth, MMus (Rhodes), in African Languages, in the School of Languages & Literatures. Degree by thesis. Thesis: *Indigenous and traditional music's in the school classroom: A re-evaluation of the South African Indigenous African Music (IAM) curriculum.* Supervisor: Professor RH Kaschula. Cosupervisor: Dr L Watkins.

MKHIZE, Thulani, MA (Rhodes), in African Languages, in the School of Languages & Literatures. Degree by thesis. Thesis: *Nontsizi Mgqwetho's The Nation's Bounty: A prophetic voice towards an African literary theory.* Supervisor: Professor RH Kaschula.

MREWA, Bernard, MSc (Birmingham), in Sociology, in the Department of Sociology. Degree by thesis. Thesis: *A critical analysis of the role of aid agencies in the Kenyan land policy process (1999- 2012)*. Supervisor: Professor KD Helliker.

MWONZORA, **Gift**, MA (Erasmus), in Sociology, in the Department of Sociology. Degree by thesis. Thesis: *A critical analysis of the role of the movement for Democratic Change (MDC) in the democratisation process in Zimbabwe from 2000 to 2016*. Supervisor: Professor KD Helliker.

MZITE, **Martha**, MA (UCT), in French, in the School of Languages & Literatures. Degree by thesis. Thesis: *Étude postcoloniale: une analyse thématique et stylistique de quelques œuvres en littérature africaine francophone*. Supervisor: Professor PK Mwepu.

NKAMBULE, Sipho Jonathan, MSS (Rhodes), in Sociology, in the Department of Sociology. Degree by thesis. Thesis: *A critical analysis of housing provision, livelihood activities and social reproduction in urban communities in South Africa: The case of Ezamokuhle, Mpumalanga*. Supervisor: Professor KD Helliker.

NKAONGAMI, Josue Bosange, MA (UCT), in French, in the School of Languages & Literatures. Degree by thesis. Thesis: L'étude comparative des éléments merveilleux dans trois épopées africaines: Soundjata ou l'épopée mandingue, Emperor Shaka the great: A Zulu epic et Nsongo' a lianja: L}épopée nationale des nkundo. Supervisor: Dr AN Mukenge.

OELOFSEN, Heiletha Maria, MPhil (Stell), in Journalism & Media Studies, in the School of Journalism and Media Studies. Degree by thesis. Thesis: *Hearing the citizens: Inequality, access to journalists and the prospects for inclusively mediated spaces of political deliberation in South Africa.* Supervisors: Professor AC Garman and Professor HJ Wasserman.

PATTENDEN, Oliver, BAHons (Newcastle), in Anthropology, in the Department of Anthropology. Degree by thesis. Thesis: *Amasango "Special School": Contestations of morality and education in the Eastern Cape*. Supervisor: Professor RCG Palmer. SANTOS, Phillip, MA (Rhodes), in Journalism & Media Studies, in the School of Journalism and Media Studies. Degree by thesis. Thesis: *A political discourse analysis of social memory, collective identity and nation-building in* The Sunday Mail *and the* Standard of Zimbabwe *between 1999 and 2013.* Supervisor: Professor LN Steenveld. Co-supervisor: Professor E Msindo.

SINGH, **Jyoti**, MA (Rhodes), in English, in the Department of English. Degree by thesis. Thesis: *William Blake's animal symbols: Tensions and intersections between science and allegory in eighteenth century attitudes towards animals.* Supervisor: Professor D Wylie.

SITHOLE, Emmanuel, MA (Zimbabwe), in African Languages, in the School of Languages & Literatures. Degree by thesis. Thesis: *From dialect to "official" language: Towards the intellectualisation of Ndau in Zimbabwe*. Supervisor: Professor D Nkomo. Co-supervisor: Mrs BB Nosilela.

SNELL, Milner Charles, MA (UKZN), in History, in the Department of History. Degree by thesis. Thesis: *The making of "loyals" and "rebels": The 1880 Transkei rebellion and the subversion of the chieftaincies of east Griqualand, 1874-1914.* Supervisor: Professor JC Wells.

ZIMUDZI, Tapiwa Brown, MA (Zimbabwe), in History, in the Department of History. Degree by thesis. Thesis: *Information and propaganda in the federation of Rhodesia and Nyasaland with special reference to print and radio propaganda for Africans, 1953-1963.* Supervisor: Professor E Msindo.

FACULTY OF PHARMACY (1 PharmD and 1 PhD)

DEGREE OF DOCTOR OF PHARMACY

HAYWARD, Chantell

DEGREE OF DOCTOR OF PHILOSOPHY

RAMANAH, Ashmita, BScHons (Nottingham), in Pharmaceutics, in the Faculty of Pharmacy. Degree by thesis. Thesis: *Development and assessment of ketoconazole intravaginal thermosetting hydrogel formulations*. Supervisor: Professor RB Walker.



FACULTY OF SCIENCE (38 PhDs)

DEGREE OF DOCTOR OF PHILOSOPHY

ADESOLA, Abidemi Adejoke, MScAgric (Limpopo), in Fisheries Science, in the Department of Ichthyology and Fisheries Science. Degree by thesis. Thesis: *Apparent digestibility coefficients of feed ingredients and essential amino acid requirements of dusky kob* (Argyrosomus japonicus). Supervisor: Dr CLW Jones. Co-supervisor: Dr TA Shipton.

ADEYEMI, Christiana Modupe, MSc (Rhodes), in Chemistry, in the Department of Chemistry. Degree by thesis. Thesis: *Synthesis and biological screening of potential Plasmodium falciparum DXR inhibitors*. Supervisor: Professor PT Kaye. Co-supervisors: Dr KA Lobb and Dr R Klein.

ATEMKENG TEUFACK, Marcellin, MSc (Dschang), in Physics, in the Department of Physics. Degree by thesis. Thesis: *Data compression, field of interest shaping and fast algorithms for direction-dependent deconvolution in radio interferometry*. Supervisor: Professor OM Smirnov.

BANKOLE, Owolabi Mutolib, MSc (Lagos), in Chemistry, in the Department of Chemistry. Degree by thesis. Thesis: *Nonlinear optical responses of phthalocyanines in the presence of nanomaterials or when embedded in polymetric materials*. Supervisor: Distinguished Professor T Nyokong.

BARRETT, **Dennis Ian**, MSc (Rhodes), in Mathematics, in the Department of Mathematics. Degree by thesis. Thesis: *Contributions to the study of non-holonomic Riemannian manifolds*. Supervisor: Dr CC Remsing. Cosupervisor: Professor O Rossi (Ostrava).

BORG, Carl-Johan, MSc (Uppsala), in Geography, in the Department of Geography. Degree by thesis. Thesis: *Identifying growth criteria and sediment movement mechanisms of needle ice using high-frequency environmental and visual monitoring*. Supervisor: Professor I Meiklejohn. Co-supervisors: Professor J Boelhouwers (Uppsala) and Professor W Nel (Fort Hare).

CANAVAN, Kim, BScHons (Unisa), in Entomology, in the Department of Zoology and Entomology. Degree by thesis. Thesis: *Investigating herbivory and plant origin on tall-statured grasses in South Africa*. Supervisor: Dr I Paterson. Co-supervisor: Distinguished Professor MP Hill.

CHAKONA, Gamuchirai, MSc (Rhodes) in Environmental Science, in the Department of Environmental Science. Degree by thesis. Thesis: *Changes in household food security, nutrition and food waste along an agro-ecological gradient and the rural-urban continuum in mid-sized South African towns*. Supervisor: Professor CM Shackleton.

COLE, Mary Louise, MSc (NMMU), in Botany, in the Department of Botany. Degree by thesis. Thesis: *Systematics and biogeography of forest snails*, Chondrocyclus (*Mollusca: Gastropoda: Caenogastropoda: Cyclophoridae*) in southern Africa. Supervisor: Professor NP Barker (University of Pretoria). Co-supervisors: Professor MH Villet and Professor D Herbert (KwaZulu-Natal Museum).

EZURUIKE, **Ihesinaulo Hilary**, MTech (Chemistry) (UJ), in Chemistry, in the Department of Chemistry. Degree by thesis. Thesis: *Synthesis and characterization of polymer based nanocomposite materials for the removal of pollutants in water.* Supervisor: Professor RWM Krause.

GOBLE, David, MSc (Rhodes), in Human Kinetics & Ergonomics, in the Department of Human Kinetics and Ergonomics. Degree by thesis. Thesis: *A holistic investigation of amateur batters performance responses to a century protocol: A focused cognitive perspective*. Supervisor: Professor CJ Christie.

HEPBURN, Colleen, MSc (Rhodes), in Entomology, in the Department of Zoology and Entomology. Degree by thesis. Thesis: *The thrips (Insecta: Thysanoptera) community in Macadamia (Proteaceae) orchards of Mpumalanga Province, South Africa.* Supervisor: Professor MH Villet.

JESUMOROTI, Omobolanle Janet, MSc (Ibadan), in Chemistry, in the Department of Chemistry. Degree by thesis. Thesis: *Synthesis and biological evaluation of anti-HIV-I in integrase agents*. Supervisor: Dr R Klein.

KENFACK VOUKENG, Sonia Nadege, MSc (Yaoundé), in Entomology, in the Department of Zoology and Entomology. Degree by thesis. Thesis: *Biotic and abiotic factors promoting the development and proliferation of Water Hyacinth (Eichhorina crassipes (Mart.) Solms-Laub) in the Wouri basin (Douala- Cameroon) and environs, with implications for its control.* Supervisor: Professor MP Hill. Co-supervisor: Dr PSR Weyl (CABI).

KIBET, Caleb Kipkurui, MSc (Rhodes), in Bioinformatics, in the Department of Computer Science. Degree by thesis. Thesis: *Transcription factor binding specificity and occupancy*. Supervisor: Professor P Machanick.

KITUYI, Sarah Naulikha, MSc (Kenyatta), in Biochemistry, in the Department of Biochemistry and Microbiology. Degree by thesis. Thesis: *The role of HOP in emerin-mediated nuclear structure*. Supervisor: Professor AL Edkins.

MARSBERG, Tamryn, BScHons (Rhodes), in Entomology, in the Department of Zoology and Entomology. Degree by thesis. Thesis: *The isolation and genetic characterisation of a novel alphabaculovirus for the microbial control of* Cryptophlebia peltastica *and closely related tortricid pests*. Supervisor: Professor MP Hill. Co-supervisors: Professor C Knox and Dr S Moore (Citrus Reseach Institute).

MUGIDO, Worship, MScAgric (Stell), in Environmental Science, in the Department of Environmental Science. Degree by thesis. Thesis: *The contribution of non-timber forest products to rural livelihoods and their price determination in different agro-ecological zones of South Africa*. Supervisor: Professor CM Shackleton.

MURRAY, Taryn Sara, MSc (Rhodes), in Ichthyology, in the Department of Ichthyology and Fisheries Science.

PhD Graduates at the 2017 Graduation Ceremony



Dr Jonathan Britton, Ms Abonga Sofute, Distinguished Professor Tebello Nyokong and Dr Sarah D'Souza. Photo: Rhodes University, Communications & Advancement Division.

Degree by thesis. Thesis: *Estuary-dependency and multiple habitat connectivity of juvenile leervis* Lichia amia (*Pisces: Carangidae*) and the factors influencing their movements. Supervisor: Professor P Cowley (SAIAB). Co-supervisor: Dr A Childs.

MUSYOKA, **Thommas Mutemi**, MSc (Pharmaceutical Science) (Nagasaki), in Bioinformatics, in the Department of Biochemistry and Microbiology. Degree by thesis. Thesis: *Combined in silico approaches towards the identification of novel malarial cysteine protease inhibitors.* Supervisor: Professor O Tastan Bishop. Co- supervisor: Dr KA Lobb.

MUTEKWA, Vurayai, MA (Environmental Policy and Planning) (Zimbabwe), in Environmental Science, in the Department of Environmental Science. Degree by thesis. Thesis: *Forest governance, conservation and livelihoods: The case of forest protected areas and local communities in North-Western Zimbabwe*. Supervisor: Professor J Gambiza.

NKONKOBE, Sithembele, MSc (Rhodes), in Mathematics, in the Department of Mathematics. Degree by thesis: Thesis: *A combinatorial analysis of barred preferential arrangements*. Supervisor: Professor V Murali.

NTSHANE, Basane Claire, MEM (UFS), in Environmental Science, in the Department of Environmental Science. Degree by thesis. Thesis: *Ecosystem services in a biosphere reserve context: Identification, mapping and valuation.* Supervisor: Professor J Gambiza.

NYAKUNDI, David Onchonga, MSc (Barkatullah), in Biotechnology, in the Biotechnology Innovation Centre.

Degree by thesis. Thesis: *Characterization of the mito-chondrial Plasmodium falciparum heat shock protein 70.* Supervisor: Dr A Boshoff. Co- supervisors: Professor H Hoppe and Professor GL Blatch (Notre Dame).

OLUWOLE, Oluyinka David, MSc (Pharmaceutical Chemistry) (Lagos), in Chemistry, in the Department of Chemistry. Degree by thesis. Thesis: *Photophysical, nonlinear optical and photodynamic therapy activity of phthalocyanine-nanoparticle conjugates.* Supervisor: Distinguished Professor T Nyokong.

OONK, Paul Bernardus Hendrikus, MSc (Utrecht), in Geology, in the Department of Geology. Degree by thesis. Thesis: *Fraction-specific geochemistry across the Asbestos Hills BIF of the Transvaal supergroup, South Africa: Implications for the origin of BIF and the history of atmospheric oxygen.* Supervisor: Professor H Tsikos. Co-Supervisor: Professor P Mason (Utrecht).

OSAH, Umeoniso Joshua, MSc (Rhodes), in Information Systems, in the Department of Information Systems. Degree by thesis. Thesis: *A systems thinking approach to e-Government strategy formulation for water service delivery in South African local municipalities*. Supervisor: Professor CJ Khene.

OSIFEKO, **Olawale Lawrence**, MSc (Ibadan), in Chemistry, in the Department of Chemistry. Degree by thesis. Thesis: *Synthesis of indium and lead phthalocyanine as photocatalysts for photodynamic antimicrobial chemotherapy and photo-oxidation of pollutants.* Supervisor: Distinguished Professor T Nyokong.



PEEL, Richard Anthony, BScHons (Rhodes), MSc (UNAM), in Ichthyology, in the Department of Ichthyology and Fisheries Science. Degree by thesis. Thesis: *Colonisation and succession of fishes in Lake Liambezi, a shallow ephemeral floodplain lake in Southern Africa.* Supervisor: Dr OLF Weyl (SAIAB). Co-supervisors: Dr JM Hill and Dr C Hay (UNAM).

POWELL, Rebecca Tamsin, MSc (UKZN), in Environmental Science, in the Department of Environmental Science. Degree by thesis. Thesis: *Geomorphological connectivity and sensitivity examined in a recently degraded gravel-bed stream: Implications for river-floodplain rehabilitation*. Supervisor: Professor W Ellery. Co- supervisor: Professor K Rowntree.

RAMOEJANE, **Mpho**, MSc (Rhodes), in Ichthyology, in the Department of Ichthyology and Fisheries Science. Degree by thesis. Thesis: *Genetic, diversity, evolutionary relationships and conservation of southern African Labeo fishes in relation to water management*. Supervisor: Dr OLF Weyl (SAIAB). Co-supervisors: Dr E Swartz (Scientia Research) and Dr B Sidlauskas (Oregon State University).

RIDDIN, Megan Amy, MSc (Rhodes), in Zoology, in the Department of Zoology and Entomology. Degree by thesis. Thesis: *The epidemiology of African horse sickness in the Eastern Cape, South Africa.* Supervisor: Professor MH Villet. Co-supervisor: Dr G Venter (Onderstepoort Veterinary Institute).

SEKHOSANA, Kutloano Edward, MSc (Rhodes), in Chemistry, in the Department of Chemistry. Degree by thesis. Thesis: *Nonlinear optical behavior of lanthanide phthalocyanines and their conjugates with a selection of nanomaterials*. Supervisor: Distinguished Professor T Nyokong.

SHUMBA, Munyaradzi, MSc (Bindura), in Chemistry, in the Department of Chemistry. Degree by thesis. Thesis: *The effects of graphene and other nanomaterials on the electrocatalytic behaviour of phthalocyanines*. Supervisor: Distinguished Professor T Nyokong. **SIEBÖRGER**, Ingrid Gisélle, MSc (Rhodes), in Computer Science, in the Department of Computer Science. Degree by thesis. Thesis: *Evolving an efficient and effective offthe-shelf computing infrastructure for schools in rural areas of South Africa.* Supervisor: Professor A Terzoli. Cosupervisor: Professor C Hodgkinson-Williams (UCT).

SINGH, Alicia, BScHons (Rhodes), in Chemistry, in the Department of Chemistry. Degree by thesis. Thesis: *Physical organic studies of substituted norbornyl systems: Aspects of mechanisms and chirality.* Supervisor: Dr KA Lobb. Cosupervisor: Professor PT Kaye.

STRANGE, Emily Frances, MSc (Leeds), in Entomology, in the Department of Zoology and Entomology. Degree by thesis. Thesis: *Evidence for a biological control-induced regime shift between floating and submerged invasive plant dominance in South Africa.* Supervisor: Professor JA Coetzee. Co-supervisor: Dr JM Hill.

TAYLOR, Geraldine Claire, MSc (Rhodes), in Fisheries Science, in the Department of Ichthyology and Fisheries Science. Degree by thesis. Thesis: *Comparative fish ecology in three periodically connected rivers in the upper Zambezi and Okavango ecoregions.* Supervisor: Dr OLF Weyl (SAIAB). Co-supervisors: Dr C Hay (UNAM) and Dr JM Hill.



PhD Graduates at the 2018 Graduation Ceremony

FACULTY OF COMMERCE (6 PhDs)

DEGREE OF DOCTOR OF PHILOSOPHY

ARENDSE, Jacqueline Anne, MAcc (Taxation) (Natal), in Accounting, in the Department of Accounting. Degree by thesis. Thesis: *An investigation into the introduction of a new wealth tax in South Africa.* Supervisor: Professor EM Stack.

BEDSER, Mark Bernard, MBA (Rhodes), in Management, in the Rhodes Business School. Degree by thesis. Thesis: *Servant Leadership: Antecedent to quality of work life of customer service frontline employees.* Supervisor: Professor NJ Pearse.

CHIGWENDERE, Fungai Beaula, MSc (Management Research) (Aston), in Management, in the Department of Management. Degree by thesis. Thesis: *Towards intercultural communication congruence in Sino-African organisational contexts*. Supervisor: Professor L Louw. Cosupervisor: Professor T Jackson.

ISRAEL-AKINBO, **Sylvia Olawumi**, MSc (Agricultural Economics) (UFS), in Economics, in the Department of Economics and Economic History. Degree by thesis. Thesis: *Energy use patterns and trends: The impact of energy policy in South African low-income households.* Supervisor: Professor JD Snowball. Co-supervisor: Professor GCG Fraser.

PIDDUCK, Teresa Michelle, MCom (North-West), in Accounting, in the Department of Accounting. Degree by thesis. Thesis: *The South African general anti-tax avoidance rule and lessons from the first world: A case law approach.* Supervisor: Professor EM Stack.

RANTLO, Ashby Montoeli, MAgric (Agricultural Economics) (Fort Hare), in Economics, in the Department of Economics and Economic History. Degree by thesis. Thesis: *Integration of small-scale mohair farmers into the commercial agricultural economy in Lesotho: A new institutional economics approach.* Supervisor: Professor GCG Fraser. Co-supervisor: Professor JD Snowball.

FACULTY OF EDUCATION (13 PhDs)

DEGREE OF DOCTOR OF PHILOSOPHY

GIQWA, Nomfundiso Louisa, MEd (Rhodes), in Education, in the Department of Education. Degree by thesis: Thesis: *Waste management knowledge, its production, recontextualisation and circulation in Expanded Public Works Programme (EPWP) training programmes.* Supervisor: Distinguished Professor H Lotz-Sisitka. **KAJEE, Farhana Amod**, MEd (UKZN), in Education, in the Department of Education. Degree by thesis. Thesis: *Knowledge and knowers in Educational Leadership and Management (ELM) Master's programmes in South Africa.* Supervisor: Professor H van der Mescht. Co-supervisor: Professor C Grant.

MAGADLA, Noluthando, MEd (WSU), in Education, in the Department of Education. Degree by thesis. Thesis: *An investigation of the teaching of reading in isiXhosa in three Grade 1 classrooms in the Eastern Cape, South Africa.* Supervisor: Professor EM Mggwashu.

MAWELA, Rethabile Rejoice, MEd (Solusi), in Education, in the Department of Education. Degree by thesis. Thesis: Using reading to learn Pedagogy to enhance the English First Additional Language Teachers' classroom practice. Supervisor: Professor EM Mgqwashu.

MOYO, Mtheto Temwa, MCom (Zululand), in Education, in the Centre for Higher Education Research, Teaching and Learning. Degree by thesis. Thesis: *An analysis of the implementation of the Teaching Development Grant in the South African Higher Education Sector*. Supervisor: Professor S McKenna. Co-supervisor: Professor C Ndebele (Sefako Makgatho University).

MTOMBENI, Thabile Nokuthula, MEd (UKZN), in Education, in the Centre for Higher Education Research, Teaching and Learning. Degree by thesis. Thesis: *Knowledge practices and student access and success in general Chemistry at a large South African university.* Supervisor: Professor JE Vorster.

MUTAAYA, Sirajee Abu-Baker, MA (Educational Management) (Makerere), in Education, in the Department of Education. Degree by thesis. Thesis: *Decentralization and quality assurance in the Ugandan primary education sector.* Supervisor: Dr C Smith (UJ).

NUDELMAN, Gabrielle Reeve, MA (UCT), in Education, in the Centre for Higher Education Research, Teaching and Learning. Degree by thesis. Thesis: *A social realist study of employability development in engineering education*. Supervisor: Professor LE Quinn. Co-supervisor: Professor JE Vorster.

RAMADHAN, Maryam Khamis, MEd (Dar es Salaam), in Education, in the Department of Education. Degree by thesis. Thesis: *A critical analysis of the establishment, conceptualisation, design and curriculum component selection of Master of Education programmes at selected Tanzanian universities*. Supervisor: Professor PD Wilmot. Co-supervisor: Professor B Brown.



ROBERTSON, Sally-Ann, MEd (Rhodes), in Education, in the Department of Education. Degree by thesis. Thesis: *The place of language in supporting children's Mathematical development: Two Grade 4 teachers' use of classroom talk.* Supervisor: Professor M Graven.

SAULS, Gideon George, MPhil (UPE), in Education, in the Department of Education. Degree by thesis. Thesis: *The national skills fund and green skills: Towards a generative mechanism approach.* Supervisor: Distinguished Professor H Lotz-Sisitka.

SHILONGO, Erica, MEd (UMEÂ), in Education, in the Department of Education. Degree by thesis. Thesis: *Factors that shape learner achievement in socially disadvantaged and rural contexts: A social realist study in two rural senior secondary schools in Omusati region, Namibia.* Supervisor: Professor EM Mgqwashu.

VAN STADEN, Wilma, MSc (North-West), in Education, in the Department of Education. Degree by thesis. Thesis: *A review of climate-smart system innovations in two agricultural colleges in the North West Province of South Africa*. Supervisor: Distinguished Professor H Lotz-Sisitka. Co-supervisor: Professor RB O'Donoghue.

FACULTY OF HUMANITIES (20 PhDs)

DEGREE OF DOCTOR OF PHILOSOPHY

CHEVO, **Tafadzwa**, MSc (Sociology and Social Anthropology) (Zimbabwe), in Sociology, in the Department of Sociology. Degree by thesis. Thesis: *The construction of household livelihood strategies in urban areas: The case of Budiriro, Harare, Zimbabwe*. Supervisor: Professor K Helliker.

CHISI, Taderera Hebert, MA (Zimbabwe), in History, in the Department of History. Degree by thesis. Thesis: *Transformations in Hlengwe Ethnicity in Chiredzi, Zimbabwe, 1890 to 2014.* Supervisor: Professor E Msindo.

DAMI, Naancin Emmanuel, MA (Ahmadu Bello), in French, in the School of Languages & Literatures. Degree by thesis. Thesis: *Aspects Allocentristes de l'Humanisme dans l'Univers Romanesque de Williams Sassine*. Supervisor: Professor A Mukenge.

GOGELA, Kholisa Beatrice, MA (Social Work) (NMMU), in Political & International Studies, in the Department of Political and International Studies. Degree by thesis. Thesis: *Is multiculturalism a friend or nemesis to women in South Africa's liberal democratic constitutional state? An inquiry into women's experiences and perceptions of traditional male initiation of AmaXhosa in the Eastern Cape Province of South Africa.* Supervisor: Professor LD Vincent.

HAYWARD, Janet Mary, BSocSci (Rhodes), BAHons (WSU), in Anthropology, in the Department of Anthropology. Degree by thesis. Thesis: *"We are white": Oral tradition, documented history and molecular biology of Xhosa clans descended from non-African forebears and their expression* *of this ancestry through the idiom of ancestor religion.* Supervisor: Professor RC Palmer.

HOFFMANN, Nimi Ingeborg, MA (Rhodes), MPhil (Oxon), in Social Policy, in the Institute of Social and Economic Research. Degree by thesis. Thesis: *The knowledge commons, pan-Africanism, and epistemic inequality: A study of CODESRIA*. Supervisor: Professor Y Sayed. Cosupervisor: Professor R van Niekerk.

HUSCHKA, Denis, MA (Berlin), in Sociology, in the Department of Sociology. Degree by thesis. Thesis: *Naming in Germany in the 20th century: A sociological study of naming in times of social change, with a focus on statistical problems in empirical onomastic research*. Supervisor: Professor V Møller. Co-supervisor: Professor GG Wagner (Berlin University of Technology).

KASIMBA, Rosemary, MSc (Sociology and Social Anthropology) (Zimbabwe), in Sociology, in the Department of Sociology. Degree by thesis. Thesis: Understanding the role of social capital in enhancing community resilience to natural disasters: A case study of Muzarabani district, Zimbabwe. Supervisor: Professor M Roodt.

KAZE, **Douglas Eric**, MA (Nigeria), in English, in the Department of English. Degree by thesis. Thesis: *The environmental imagination in Arthur Nortjie's poetry.* Supervisor: Professor D Klopper.

MAAHLAMELA, Tebogo David, MA (Rhodes), in African Languages, in the School of Languages & Literatures. Degree by thesis. Thesis: *Sepedi oral poetry with reference to kiba traditional dance of South Africa*. Supervisor: Professor R Kaschula. Co-supervisor: Dr N Mazwi.

MARAWU, Sithembele, MEd (Rhodes), in African Languages, in the School of Languages & Literatures. Degree by thesis. Thesis: *Codeswitching as a pedagogical strategy in classroom settings: The case of township schools in a South African Metropolitan Municipality.* Supervisor: Professor R Kaschula. Co-supervisors: Professor D Nkomo and Professor MK Ralarala (CPUT).

MAVELA, Xolani, MA (Stell), in African Languages, in the School of Languages & Literatures. Degree by thesis. Thesis: *Uphando-nzulu lweeMpendulo eziBhaliweyo zaBafundi bamaBakala aPhezulu eMfundo kuNcwadi lwesiXhosa*. Supervisor: Professor R Kaschula. Cosupervisors: Professor NS Zulu (UKZN) and Professor MK Ralarala (CPUT).

MAVUSO, Jabulile Mary-Jane Jace, MSS (Rhodes), in Psychology, in the Department of Psychology. Degree by thesis. Thesis: Narrated experiences of the pre-termination of pregnancy counselling healthcare encounter in the Eastern Cape public health sector. Supervisor: Distinguished Professor C Macleod.

MCLEAN, Nicolene Cindy, MA (Rhodes), in History, in the Department of History. Degree by thesis. Thesis: *The rupture in the rainbow: An exploration of Joburg pride's fragmentation.* Supervisor: Professor A Kirkaldy.



MTYINGIZANA, Nontlahla Beata, MA (Wits), in Sociology, in the Department of Sociology. Degree by thesis. Thesis: *The impact of South African business on employment relations in Mozambique: A case study of Banco Austral, a subsidiary of ABSA*. Supervisor: Professor G Klerck.

NATOLOOKA, Kepha, MA (Makerere), in Political & International Studies, in the Department of Political and International Studies. Degree by thesis. Thesis: *The efficacy of multi-track diplomacy in resolving intrastate and internationalised conflicts in Africa: The case of the 2007/2008 post-election violence in Kenya*. Supervisor: Professor PH Bischoff.

NDODANA-BREEN, Bongani Brian Kenneth, in Music, in the Department of Music and Musicology. *Degree by Composition Portfolio*. Supervisor: Professor JJ Brukman.

SOMLATA, Zakhile, MA (Stell), in African Languages, in the School of Languages & Literatures. Degree by thesis. Thesis: *A critique of language policy and implementation strategies used in selected institutions of higher learning in South Africa.* Supervisor: Professor R Kaschula. Cosupervisors: Professor MK Ralarala (CPUT) and Dr E Ivala (CPUT).

WALTERS, Dennis Evelyn, BSc (Eng) (UCT), BEngHons (Pretoria), in History, in the Department of History. Degree by thesis. Thesis: *Wagon bridges of the Eastern Cape, c.1840-1900. The contribution of engineering to infrastructural development.* Supervisor: Professor G Baines.

WANNENBURG, Nicola, BAHons, MA (Rhodes), in Psychology, in the Department of Psychology. Degree by thesis. Thesis: *A psychobiographical study of Temple Grandin*. Supervisor: Professor R van Niekerk (NMMU). Co-supervisor: Professor L Wilbraham.

FACULTY OF LAW (1 PhD)

DEGREE OF DOCTOR OF PHILOSOPHY

KHAYUNDI, Francis Bulimo Mapati, LLM (Rhodes), in the Faculty of Law. Degree by thesis. Thesis: *The Kenya National Human Rights Commission and the promotion, protection and monitoring of socioeconomic rights in Kenya*. Supervisor: Professor R Krüger. Co-supervisor: Dr J Cottrell Ghai (Katiba Institute).

FACULTY OF PHARMACY (2 PhDs)

DEGREE OF DOCTOR OF PHILOSOPHY

MARIMWE, Chipiwa, BPharm (Rhodes), in Pharmacy, in the Faculty of Pharmacy. Degree by thesis. Thesis: *Development and validation of a health literacy measure for limited literacy public sector patients in South Africa*. Supervisor: Professor R Dowse.

MWILA, Chiluba, MSP (Rhodes), in Pharmaceutics, in the Faculty of Pharmacy. Degree by thesis. Thesis: *The*

development, manufacture and evaluation of sustained release gastric-resistant isoniazid and gastroretentive microporous rifampicin microspheres. Supervisor: Professor RB Walker.

FACULTY OF SCIENCE (44 PhDs)

DEGREE OF DOCTOR OF PHILOSOPHY

ACHADU, Ojodomo John, MSc (Lagos), in Chemistry, in the Department of Chemistry. Degree by thesis. Thesis: *Graphene quantum dots and their metallophthalocyanines nanoconjugates as novel photoluminescent nanosensors*. Supervisor: Distinguished Professor T Nyokong.

ADEOYO, Olusegun Richard, MSc (Ibadan), in Microbiology, in the Department of Biochemistry and Microbiology. Degree by thesis. Thesis: *Bioprospecting for amylases, cellulases and xylanases from ericoid associated fungi, their production and characterisation for the bioeconomy.* Supervisor: Professor JF Dames. Co-supervisor: Professor BI Pletschke.

ALBERTYN, Sonnica, MScAgric (Stell), in Entomology, in the Department of Zoology and Entomology. Degree by thesis. Thesis: *Thaumatotibia leucotreta* (Meyrick) (Lepidoptera: Tortricidae) *population ecology in citrus orchards: The influence of orchard age*. Supervisor: Distinguished Professor MP Hill. Co-supervisor: Dr S Moore (Citrus Research Institute).

AYENI, Ayowole, MSc (Obafemi Awolowo), in Chemistry, in the Department of Chemistry. Degree by thesis. Thesis: *Mannich base metal complexes and their thiocyanate analogues as catalysts in the oxidation of catechol.* Supervisor: Professor GM Watkins.

BELLINGAN, Terence Andrew, MSc (Rhodes), in Entomology, in the Department of Zoology and Entomology. Degree by thesis. Thesis: *The effects of native and nonnative fish on macroinvertebrate communities in selected South African rivers.* Supervisor: Professor OLF Weyl (SAIAB). Co-supervisor: Professor MH Villet.

BENTLEY, Stephen John, MSc (Rhodes), in Biotechnology, in the Biotechnology Innovation Centre. Degree by thesis. Thesis: *Biochemical characterization and small molecule modulation of the interaction between two cytosolic Hsp70s from Trypanosoma brucei and potential co-chaperones.* Supervisor: Dr A Boshoff.

BROWN, Dane Lesley, MSc (UWC), in Computer Science, in the Department of Computer Science. Degree by thesis. Thesis: *Investigating combinations of feature extraction and classification for improved image-based multimodal biometric systems at the feature level.* Supervisor: Professor KL Bradshaw. Co-supervisor: Mr J Connan.

BROWN, David Kyle, BScHons (Rhodes), in Bioinformatics, in the Department of Biochemistry and Microbiology. Degree by thesis. Thesis: *Bioinformatic tool development with a focus on structural bioinformatics and the analysis*



of genetic variation in humans. Supervisor: Professor O Tastan-Bishop.

CLAASSENS, Louw, MSc (UJ), in Marine Biology, in the Department of Zoology and Entomology. Degree by thesis. Thesis: *Population ecology of the endangered Knysna seahorse (Hippocampus capensis Boulenger, 1900) in a tidal marina, Thesen Islands, Knysna, South Africa: Implications for conservation.* Supervisor: Emeritus Professor BR Allanson (Knysna Basin Project). Cosupervisor: Professor AN Hodgson.

COCKBURN, Jessica Jane, BScHons (Rhodes), MSc (North-West), in Environmental Science, in the Department of Environmental Science. Degree by thesis. Thesis: *Stewardship and collaboration in multifunctional landscapes: A transdisciplinary enquiry.* Supervisor: Dr G Cundill (IDRC). Co-supervisors: Professor M Rouget (UKZN) and Professor SE Shackleton (UCT).

DANCKWERTS, Daniel Keith, MSc (Rhodes), in Marine Biology, in the Department of Zoology and Entomology. Degree by thesis. Thesis: *Scale-specific processes underlying the genetic population structure of seabirds in the tropical Western Indian Ocean*. Supervisor: Distinguished Professor CD McQuaid. Co-supervisor: Professor M Le Corre (Réunion).

DUBAZANE, Makhosonke Berthwell, BScHons (UKZN), MSc (Wits), in Physics, in the Department of Physics and Electronics. Degree by thesis. Thesis: *Modelling ionospheric vertical drifts over the African low latitude region*. Supervisor: Dr JB Habarulema (SANSA).

FLANAGAN, Shane Patrick, MSc (Rhodes), in Biotechnology, in the Biotechnology Innovation Centre. Degree by thesis. Thesis: *The current utility of oligonucleotide aptamers in targeting the MUC1 mucin tumour marker.* Supervisor: Professor JL Limson. Co-supervisors: Dr R Fogel and Professor A Edkins.

GALLAGHER, Sean, BScHons (Rhodes), in Botany, in the Department of Botany. Degree by thesis. Thesis: *Elevated CO*² *determines cell damage and nitrogen allocation in barley subjected to aphid herbivory.* Supervisor: Professor CEJ Botha. Co-supervisor: Dr JM Hill (DFO).

GIDAY, Nigussie Mezgebe, MSc (Rhodes), in Physics, in the Department of Physics and Electronics. Degree by thesis. Thesis: *Tomographic imaging of East African equatorial ionosphere and study of equatorial plasma bubbles*. Supervisor: Dr Z Katamzi-Joseph (SANSA). Cosupervisor: Dr LA McKinnell (SANSA).

GREY, Mashoko Stephen, MA (Dar es Salaam), in Environmental Science, in the Department of Environmental Science. Degree by thesis. Thesis: *The missing ingredient: Rethinking the drought disaster risk reduction and climate change adaption nexus in Chirumhanzu district, Zimbabwe*. Supervisor: Professor SE Shackleton.

GWATE, **Onalenna**, MSc (Midlands State), in Water Resource Science, in the Institute for Water Research. Degree by thesis. Thesis: *Modelling plant water use of the* grassland and thicket biomes in the Eastern Cape, South Africa: Towards an improved understanding of the impact of invasive alien plants on soil chemistry, biomass production and evapotranspiration. Supervisor: Dr AR Palmer (ARC). Co-supervisor: Dr SK Mantel.

HANSEN, Christel Dorothee, MSc (Rhodes), in Geography, in the Department of Geography. Degree by thesis. Thesis: *On high-altitude and high-latitude frost environments.* Supervisor: Professor KI Meiklejohn. Co-supervisor: Professor W Nel (Fort Hare).

HO, Lance St John, BScHons (Rhodes), in Biotechnology, in the Biotechnology Innovation Centre. Degree by thesis. Thesis: *Key considerations for novel aptamer generation and aptasensor platform design: A case study on human* α *-thrombin and histamine as sensor targets.* Supervisor: Dr R Fogel. Co-supervisor: Professor JL Limson.

JUKES, Michael David, MSc (Rhodes), in Microbiology, in the Department of Biochemistry and Microbiology. Degree by thesis. Thesis: *Baculovirus synergism: Investigating mixed alphabaculovirus and betabaculovirus infections in the False Codling Moth*, Thaumatotibia leucotreta, *for improved pest control*. Supervisor: Professor C Knox. Co-supervisors: Distinguished Professor MP Hill and Dr S Moore (Citrus Research Institute).

KADYE, Rose, MSc (Rhodes), in Biotechnology, in the Biotechnology Innovation Centre. Degree by thesis. Thesis: *An investigation of the correlation of mitochondrial biogenesis, mitochondrial DNA methylation, mitochondrial network topology and adipogenesis in the human adiposederived mesenchymal stromal stem cell model.* Supervisor: Dr EA Prinsloo.

KEMP, Justin Oliver Gordon, MSc (Rhodes), in Fisheries Science, in the Department of Ichthyology and Fisheries Science. Degree by thesis. Thesis: *Aspects of the nutritional physiology of the perlemoen* Haliotis midae (*L.*) and red *abalone* H. rufescens (*Swainson*). Supervisor: Professor PJ Britz. Co-supervisor: Dr P Toledo (Uni Catolica del Norte).

LOURENÇO, Carla Sofia Emídio Rodrigues, MSc (Algarve), in Marine Biology, in the Department of Zoology and Entomology. Degree by thesis. Thesis: *The role of upwelling in determining the composition, species distribution and genetic structure of intertidal communities in a time of climate change*. Supervisor: Distinguished Professor CD McQuaid. Co-supervisors: Dr K Nicastro and Dr G Zardi.

MAGGS, Jade Quinton, MSc (UKZN), in Fisheries Science, in the Department of Ichthyology and Fisheries Science. Degree by thesis. Thesis: *Movement of important fishery species in Southern Africa: Research trends, characterisation of behaviours and a case study on fishery implications*. Supervisor: Professor P Cowley (SAIAB).

MAKHATHINI, Sphesihle, MSc (UKZN), in Physics, in the Department of Physics and Electronics. Degree by thesis. Thesis: *Advanced radio interferometric simulation and data*



reduction techniques. Supervisor: Professor OM Smirnov. Co-supervisor: Professor I Haywood.

MALGAS, Samkelo, BSc (UFS), MSc (Rhodes), in Biochemistry, in the Department of Biochemistry and Microbiology. Degree by thesis. Thesis: *Formulation of an enzyme cocktail, HoloMix, using cellulolytic and xylanolytic enzyme core-sets for effective degradation of various pretreated hardwoods*. Supervisor: Professor BI Pletschke.

MATAMBA, Tshimangadzo Merline, MSc (Rhodes), in Physics, in the Department of Physics and Electronics. Degree by thesis. Thesis: *Longterm analysis of ionospheric response during geomagnetic storms in mid, low and equatorial latitudes*. Supervisor: Dr JB Habarulema (SANSA).

MATTISON, Stacey Alexandra, MSc (Rhodes), in Biochemistry, in the Department of Biochemistry and Microbiology. Degree by thesis: Thesis: Analysis of the human Hsp70-Hsp90 organising protein (HOP) genecharacterisation of the promoter and identification of a novel isoform. Supervisor: Professor A Edkins. Cosupervisor Professor GL Blatch (Victoria).

MCLEAN, Catherine Eve, MSc (Rhodes), in Mathematics, in the Department of Mathematics. Degree by thesis. Thesis: *Left-invariant optimal control problems on the engel group: Classification, stability and integration.* Supervisor: Dr C Remsing.

MOSES, **Vuyani**, MSc (Rhodes), in Bioinformatics, in the Department of Biochemistry and Microbiology. Degree by thesis. Thesis: *The investigation of type-specific features of the copper coordinating AA9 proteins and their effect on the interaction with crystalline cellulose using molecular dynamics studies*. Supervisor: Professor O Tastan- Bishop. Co-supervisor: Dr KA Lobb.

MOTARA, Yusuf Moosa, MSc (Rhodes), in Computer Science, in the Department of Computer Science. Degree by thesis. Thesis: *Preimages for SHA-1*. Supervisor: Professor BVW Irwin.

NTSEKHE, Mathe Victoria Kuena, MSc (Rhodes), in Computer Science, in the Department of Computer Science. Degree by thesis. Thesis: *Building iKhwezi, a digital platform to capture everyday indigenous knowledge for improving educational outcomes in marginalised communities.* Supervisor: Professor A Terzoli.

NUNHOKEE, Chuneeta Devi, BScHons (Mauritius), MSc (Rhodes), in Physics, in the Department of Physics and Electronics. Degree by thesis. Thesis: *Observing cosmic reionization with PAPER: polarized foreground simulations and all sky images.* Supervisor: Dr G Bernardi (SKA SA). Co-supervisor: Professor OM Smirnov.

NYIRENDA, **Angel Newton**, MSC (Rhodes), in Physics, in the Department of Physics and Electronics. Degree by thesis. Thesis: *Combined spectral and stimulated luminescence study of charge trapping and recombination processes in* α -*Al2O3:C*. Supervisor: Professor ML Chithambo. **OLAWALE**, Jacob Taiwo, MSc (Obafemi Awolowo), in Environmental Biotechnology, in the Institute for Environmental Biotechnology. Degree by thesis. Thesis: *Bacterial colonisation and degradation of geologically weathered coal and coal discard*. Supervisor: Professor AK Cowan (EBRU).

OLUWAFEMI, Kola Augustus, BScHons (Akungba), MSc (Ibadan), in Chemistry, in the Department of Chemistry. Degree by thesis. Thesis: *Exploring the potential of imines as anti-protozoan agents with focus on* Trypanasoma brucei *and* Plasmodium falciparum. Supervisor: Dr R Klein.

ORFORD, Nicola Diane, MSc (Wits), in Physics, in the Department of Physics and Electronics. Degree by thesis. Thesis: *Behaviour of quiet time ionospheric disturbances at African equatorial and midlatitude regions*. Supervisor: Dr Z Katamzi-Joseph (SANSA).

POTE, Lee, MSc (Rhodes), in Human Kinetics & Ergonomics, in the Department of Human Kinetics and Ergonomics. Degree by thesis. Thesis: *Strength and conditioning of adolescent male cricket players*. Supervisor: Professor CJ Christie.

SITUNGU, **Sivuyisiwe**, BScHons (Rhodes), in Botany, in the Department of Botany. Degree by thesis. Thesis: *An investigation of the leaf domatia-mite mutualism in South Africa: Insights from ecological studies*. Supervisor: Professor S Vetter. Co-supervisor: Professor NP Barker (Pretoria).

SKOWNO, Andrew Luke, MSc (UCT), in Botany, in the Department of Botany. Degree by thesis. Thesis: *Woody plant encroachment in arid and mesic South African savanna-grasslands: same picture, different story?* Supervisor: Professor BS Ripley. Co-supervisors: Professor W Bond (UCT) and Dr A West (UCT).

TEBITENDWA, **Sylvie Muwanga**, BSc (Makerere), MSc (UNESCOIHE, Delft), in Environmental Biotechnology, in the Institute for Environmental Biotechnology. Degree by thesis. Thesis: *Subsurface flow constructed wetlands for municipal wastewater treatment.* Supervisor: Professor AK Cowan (EBRU).

USMAN, Aminu, MSc (Usmanu Danfodiyo), in Biochemistry, in the Department of Biochemistry and Microbiology. Degree by thesis. Thesis: *Interaction of catechol O-methyl-transferase with gold and silver nanoparticles*. Supervisor: Professor B Wilhelmi. Co-supervisor: Professor CG Whiteley.

VELLEMU, Emmanuel Captain, MSc (UNAM), in Water Resource Science, in the Institute for Water Research. Degree by thesis. Thesis: *The ecological risk of acid mine drainage in a salinizing landscape*. Supervisor: Dr PK Mensah. Co-supervisors: Dr ON Odume and Dr N Griffin.

WATERWORTH, Samantha Che, MSc (Rhodes), in Microbiology, in the Department of Biochemistry and Microbiology. Degree by thesis. Thesis: *An investigation into the bacterial biosynthetic origins of bioactive natural products isolated from South African latrunculid sponges.* Supervisor: Professor RA Dorrington.



Vice-Chancellor's Book Award South Africa's 'Border War': Contested Narratives and Conflicting Memories

"It wasn't always a foregone conclusion I'd be an historian," says Professor Gary Baines. The Head of the History Department recalls how he initially enrolled at the University of Cape Town (UCT) back in the 1970s in order to do a teacher's diploma. "As far as I was concerned I would be a teacher," he says. However, after educating high school students for five (5) years in Port Elizabeth, it was his frustration at being expected to spend more time on the sports field coaching cricket and hockey than in the classroom that made him decide to pursue his interest in history and an academic career.

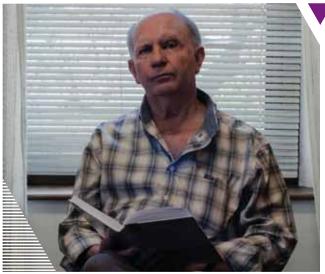


Photo: Snow Harris.

Professor Gary Baines Head of the History Department

During his secondary education teaching stint there was also the small matter of being investigated by the apartheid teaching inspectorate. "There was obviously some complaints about my politics," he recalls. While the investigation came to nothing, Baines was increasingly concerned at a lack of academic freedom and wondered whether he would find teaching at a university more stimulating. After graduating with Honours in History, he taught at what would become Nelson Mandela University where he stayed for four (4) years before joining Rhodes in 1990. Since then the rest of his academic career, as that old chestnut goes, is history.

For Baines it's history, however, that pivots on his conscription into National Military Service straight out of high school. "I went as a reluctant conscript," he says. "Out of school I wasn't yet politicised to the extent that I was opposed to military service, but I certainly didn't look forward to the institutionalised life in the military." As an English speaker Baines found the Afrikaans military ethos an alienating experience. "I'd grown up exposed to ideas where I'd begun to question the apartheid system," he says. As a result he tried to get the experience in the South African Defence Force over as quickly as possible, keeping a low profile he refused to enrol in any officer's courses. It was when the young national serviceman was stationed on the border that providence intervened. "I ended up spending three (3) months in Northern Namibia nearly getting killed in the process," he recalls. "Not because I was engaged in any combat, but rather that I overturned a Bedford and went through a windscreen!" After such an "ignominious end" to his military career and three (3) months in hospital, Baines enrolled at UCT "still strapped in bandages". It was 1976 and South African university campuses were political hotbeds after the Soweto uprising. "It was quite a hectic time, and obviously I became increasingly politicised and opposed to the military," he recalls.

Fast forward almost a decade to the infamous State of Emergency in 1984 and Baines received a military camp call up to do duty in the townships. He refused, but faced with a jail sentence and with a child on the way he compromised by agreeing to perform clerical duties in a military store issuing uniforms on Monday nights. "I'd suffered the indoctrination doing basics and my year in the military," he says. "Then I never challenged my instructors, I always felt it would only result in my being victimised. But this was the first time I took a stand."

It's the psychology of such personal experiences of being an English-speaking conscript during apartheid that Baines explores in his book, *South Africa's Border War: Contested Narratives and Conflicting Memories.* In this 274-page monograph of original research, published by Bloomsbury, he analyses ideological differences in the way that the Border War is remembered, and the struggles that continue to be waged over the meanings that can be gleaned from it. The book does not seek to present new findings about the war itself, but examines the ways in which conflicting interpretations continue to inform debates about the war.

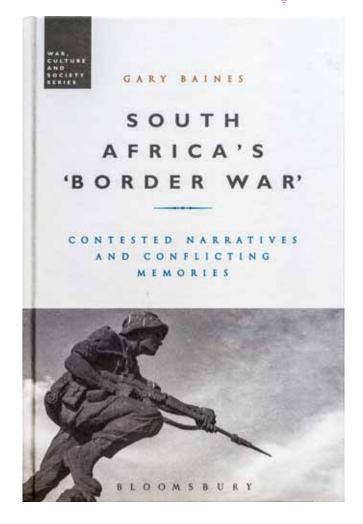
"I'm of the National Service generation, that experience becomes part of who you are, and for a long time I didn't really want to engage with that," he says. It was the publication of a several conscript memoirs written in English in the noughties that prompted a rethink on Baines' part. "There had been quite a lot of so-called *grensliteratuur* in the 80s, resistance and oppositional literature in Afrikaans," he explains. "But what got my attention was the conscript memoirs." He started reading Rick Andrews' *Buried in the Sky*, Clive Holt's *At Thy Call We Shall Not Falter* and Anthony Feinstein's *Battle Scarred*, then started to question why they were being written at that specific historical moment. "One of the first questions I implicitly was asking myself was why had there been this relative silence about the war? The experiential history had been buried. People felt uncomfortable talking about it. I think it was politically incorrect, or deemed to be politically incorrect to do so. But why should they start to engage with their experiences as national servicemen on the border 20-30 years after the war had ended?"

In *South Africa's Border War* Baines argues that wars have a legacy or afterlife because of the persistence of their effect on veterans and society long after the fighting has ended. He uses a comparative approach to analyse border war memories against the legacy of other colonial wars, such as those in Vietnam, Algeria, and Israel, and conflictual dialogue to juxtapose competing memories throughout the book. "I've always had a morbid fascination with the Vietnam War," he explains. "What a lot of the conscript memoirs were doing were relating to the Vietnam War. This seemed to be their point of departure, their template for how they constructed their own narratives. They used a lot of the similar tropes and themes; whether consciously or not, they drew on these and included it in their own narratives in terms of making sense of their own experience."

It's these narratives that inform Baines' research which straddles the fields of South African public history, culture, memory and war studies. "I'm not a military historian by any stretch of the imagination. Reading about the representation and remembrance of war got me into this whole field of memory studies," he says.

"By its very nature it's an interdisciplinary study. It hasn't really found a major cache in South African studies across disciplines; it has its roots in sociology but people genuflect to [Maurice] Halbwachs, who's deemed to be the father of the study of collective memory. Increasingly I was taken with the idea not only of how memory shapes us as individuals, but how it shapes the idea of group memories and in this case, generational memory."

For Baines the problematic was both political and personal. "I was asking myself how white English-speaking South Africans of my generation were making sense of their experience," he says. "Were they referring back to their own parents' pasts or the great wars they read about? Or were they drawing on the more immediate experience which was, in some ways, contem-



poraneous but also in some ways similar, particularly those that were involved in fighting counter-insurgency. How did they choose to remember and/ or forget about those experiences they had wearing the nutria brown of the SADF?"

It's Baines' firm intellectual engagement with a large range of archival sources, spanning the disciplines of history, memory, literature, popular culture, politics and international relations that has impressed reviewers. As one reviewer notes, the book "bears all the hallmarks of superior scholarship: profound thought and careful consideration, engagement with a wide-ranging historiography on memory and cultural studies, as well as firm intellectual engagement." Another states that "[m]any, many books on the war have been written, but few are as thoughtprovoking.... In this superb, scholarly work he indicates eloquently just how contested South Africa's past ... is." Yet another reviewer hails the book as a "thought-provoking analysis of individual and group construction and preservation".

It is such rigorous, self-reflexive critical analysis that Baines sees as a key research criteria.

"Historians need to be more self-reflective about where they're coming from. They would be better to be honest and upfront about it, rather than hide behind the holy cow of objectivity," he says. For Baines, in his book this meant foregrounding the



fact that he was a conscript and has something personal invested in his study of the border war. He favours a narrative approach to qualitative research comprising of personal interviews in order to get people to tell their own stories. Most recently this has manifested in his desire to share some of his own stories in more detail. "I'm currently writing a paper exploring the relationship between my former self as a conscript and my current self as an historian," he says. In this paper, tentatively entitled "*Confessions of a Conscript, Disclosures of an Historian*", Baines explores how some of his own experiences as a military conscript have informed his writing about the South African Defence Force.

With the spectre of retirement looming on the horizon, Baines hopes to continue his research into the field of memory studies and veteran history while on sabbatical. "I had thought of writing another book before I retire," he says. "I'm not quite sure how that's going to pan out because I seem to keep returning to this issue of veteran history in one way or the other. It could be that I might write enough on that subject to shape it into another book. But at the moment I feel like I'm writing quite a few disparate pieces." Besides "Confessions of a Conscript", he's finished an article on the manifestations and visual representations of militarisation for a book on visual culture, as well as a piece for the Oxford Research Encyclopedia on the legacies of South Africa's Apartheid Wars. He also aims to publish a paper on South Africa's diplomatic relations with and military support for Rhodesia during UDI. "I've got all these things that don't cohere into a nice, neat monograph at the moment but they're all in one way or another related to the experience of the military, militarisation and my own personal recollections of serving in the SADF. So I'm looking forward to taking a break from teaching," he says. "I still enjoy the engagement with students but I've also been acting as Head of Department for the last five and a half years! I'm tired of all the hassle of administration, how time consuming it is."

In an era of corporatisation, Baines' isn't particularly fond of the challenges that administrative rationality poses for any academic. "I'd like to see Rhodes hold onto its traditions as a quasi-liberal institution where as academics we enjoy a fair degree of autonomy in terms of teaching and researching what we like, enjoy and think is valuable," he says. "What I've valued about Rhodes is that my predecessor, Paul Maylam, always gave me autonomy to teach what I like. I was employed here as an Africanist in the first instance, but I kind of reinvented myself and virtually all my teaching now is in world history: American, German, Soviet and Japanese, [often] relating to war, memorialisation and representation," he adds. "I've been able to develop these interests and steer them in new directions as I've developed my own new interests in cultural literary studies and in memory studies. So, I like to think I've afforded my own colleagues that same opportunity while I've been HoD."

- Miles Keylock

Vice-Chancellor's Distinguished Senior Research Award

"What role can African languages play in knowledge societies? What is the role of our languages in transforming our society? Are we able to transform our society and create a society that is questioning what is happening in terms of the fabric that makes us what we are?" As Chair in the "Intellectualisation of African Languages, Multilingualism and Education," Professor Russell Kaschula pulls no punches about the political significance of his research project's mandate to facilitate the growth of African languages scholarship and the promotion of isiXhosa at Rhodes University.



Photo: Snow Harris.

Professor Russell Kaschula African Languages Studies & SARChI Chair in the School of Languages & Literatures

Professor Kaschula argues that until a more mutually inclusive environment for languages to co-exist in the academy is created, then meaningful transformation is improbable. "On a continent like Africa it's not likely we're really ever going to take part in the fourth industrial revolution if we're going to do it only through the exoglossic languages," he says. "We don't believe that there can be development on the continent, whether it be educational, economic or in any high domain like medicine or a science, without embracing African languages." It's this interface between agency and activism in society that Kaschula addresses in his most recent book, *The Transformative Power of Language: From Postcolonial to Knowledge Society in Africa* to be published by Cambridge University Press.

"We're hoping to trigger some kind of 'postcolonial', dare I say, response to the fourth industrial revolution through this book," he says. In the interdisciplinary study, Kaschula and a team of scholars question how African languages can work inclusively alongside other world and emerging languages to harness technology and through that technology take part in the fourth industrial revolution, and in that process empower people. "One individual can't have expertise in all these different fields, so it is a cross-pollination of various disciplines: history, ICT, graphic design, law, anthropology, journalism and so on, to try and see how we can conceptualise the role of African languages in a future postcolonial Africa, reimagining the future possibilities from our own perspectives" he explains.

For Kaschula creating a more mutually inclusive environment for languages to co-exist in the academy is not necessarily about diminishing the status of English though. "We have to acknowledge the role of English as a global language alongside the debate on how we empower other languages," he says. "That's why we talk about mutually inclusive linguistic environments, rather than exclusive ones. I believe that putting the minority languages alongside the majority languages is the way forward."

It's such a straight-talking sensitivity to the complexities of these debates that has earned Kaschula an international reputation as one of Africa's foremost scholars on African languages, sociolinguistics, and second language teaching and learning. Over the past three decades he has edited, authored and co-authored a remarkable volume of work published in accredited scholarly journals which span two primary research areas: first, linguistic and applied linguistic matters in African Language Studies, and second, African Language literary studies. In addition, the intellectual calibre of his scholarly reflections in English on writing and publishing in and about African languages, language practices in African language speaking communities, and multilingualism in co-authored books such as Multilingual Education for Africa: Concepts and Practices published (Routledge-UNISA), and Multilingualism and Intercultural Communication: A South African Perspective (Wits University Press), have contributed significantly to opening African language studies to a national and international audience.

It's a career-long commitment to opening up interdisciplinary access to other languages and their knowledge systems, in order to create a mutually inclusive academic environment



where people can share ideas, that informs the transformative vision of Kaschula's research.

"There's a lot of work that we need to do both as universities and individuals, collectively to get our society to be inclusive," he says. "If we bring language back into the centre, in terms of transforming our institutions of education, we then take away this gatekeeping process of English and we make it more mutually inclusive," he adds. "Fixating on English as the medium of instruction is problematic for me in a transformed South African institute of higher education. If we have to ask ourselves in education what is our role, then our role is to create some sense of better cognition and understanding amongst our students. We've got to find creative ways of allowing students to either improve their English along the way, translanguage, or even be examined in their mother tongue."

Kaschula emphasises that translanguaging or multilingualism is the key to unlocking epistemological access to all students, not merely a privileged English-speaking elite. "It's a movement away from seeing one language as a medium of instruction and a way to create knowledge, and a way to understand and to have cognition around a certain subject," he explains. "[We] understand concepts in the classroom better through a myriad of languages and not just one language. We don't grow up with one language in Africa, we generally grow up multilingually with three, four, five or ten languages all operating at the same time - that's what we should embrace from an educational point of view."

He acknowledges that any call to implement multilingual pedagogical policies within the academy currently faces several challenges. "At the moment there's no university bold enough to move away from an English-only approach, so that's difficult in a university where language policies actually state that English is the language of instruction," he says. "What's been happening in South Africa in the last two years is very sad because it's moving us on a purely monolingual policy route. We see this through the decision to use English-only as the language of record in the courts, we see it in the Free State case, the UNISA case - there's no mention of African languages. It's simply replacing one exoglossic colonial language, if you like, with another that is English. There's no talk about how to empower indigenous languages and how to work with multilingualism and translanguaging in our policy."

For Kaschula, one possible solution to this conundrum lies in revising the constitution in order to shut down any language implementation policy loopholes that permit universities to sidestep multilingualism.

"If we were able to revise the constitution we should look at Section 6 much more critically in terms of what it is we want to do now to create a better knowledge-based society that has a better understanding of mathematics and science," he says. He points to the success of a pioneering project in the Eastern Cape where schools are teaching students mathematics in isiXhosa. "It's simple, you think best in a language you understand best which is ordinarily your mother tongue, or the language you've been most exposed to," he says. Kaschula does identify a potential pitfall in tertiary educational institutions though. "At the moment, even if we educated a child from Grade R to Grade 12 in isiXhosa, is there a university that would be ready to teach mathematics in a truly postcolonial way? The answer to that would have to be 'no'. So what, these students must now go back to being taught in English at university?"

For Kaschula, the problematic pivots on the lack of political will to implement multilingualism in higher education. "I'm hoping at Rhodes that when we revise our policy, which we are, we can think about these issues in a much more serious way because "if you look at English and Afrikaans speakers they are the ones privileged from the cradle to the grave. They are the ones that were privileged under apartheid and are still privileged today. So it really is a postcolonial debate that needs to be had, and I believe underpinning that would be language because that's how we communicate."

Despite such a lack of political will to implement multilingual pedagogical policies, Kaschula nonetheless remains positive about the possibility of meaningful transformation through the intellectualisation of African languages.

A large part of this can be attributed to the impressive number of Masters and doctoral graduates coming out the African Languages Studies Section. At the April 2017 graduation ceremonies, Professor Kaschula graduated six (6) PhD candidates, one of only two (2) supervisors in the history of Rhodes to have achieved such a record. There are an impressive twenty-three (23) doctorates currently registered in African Languages in 2018. "We manage to graduate pretty much the most doctorates in the university, across all the different departments," he smiles. "So I think it's just a wonderful experience to see young people coming through the system, taking up positions, getting doctorates. It seems unstoppable now, it's like a tsunami. We get students from all over Africa and South Africa wanting to register and who are registered for Masters and PhD."

For Kaschula the groundswell of successful Postgraduates is driven by the fact that students are beginning to question the pivotal role played by language in decolonising themselves and creating new ways of thinking. "Multilingualism is about nurturing that inquisitive sort of gene in us to find out things about our society," he says. "It's about asking, 'Can I write this thesis in isiXhosa?' It's about saying, 'Hey, this is a space where knowledge can be created in a language other than English or even in English, it doesn't matter. In this way my culture, my language becomes empowering to me, and in that space I recreate not only myself, I recreate new knowledges and I influence a whole new generation of students."

- Miles Keylock



Vice-Chancellor's Distinguished Research Award

Vice-Chancellor Dr Sizwe Mabizela has often written and said that, for Rhodes University, research, teaching and community engagement seek to be alive to the social and economic challenges of the local, national, African and international contexts, and that the university's research aims "to extend the frontiers of knowledge and to also inform initiatives that promote equity, justice and economic and social development." Dr Sally Matthews is one such scholar-teacher who personifies this vision.



Photo: Snow Harris.

Dr Sally Matthews Senior Lecturer in the Department of Political & International Studies

A Senior Lecturer in the Department of Political and International Studies, Matthews has published in leading journals nationally, such as *Politikon, Transformation, Africanus*, and *Theoria*, as well as in international journals including the *Journal of Asian and African Studies, Politics, African Identities, Africa Development*, and *Third World Quarterly*. Besides serving as the reviewer of articles and manuscripts for a wide range of noted journals as well as for UKZN Press and SUN Press, she currently serves on the editorial board of the *Journal of Contemporary African Studies* (JCAS) and of *Studies in Social Justice*. She has also contributed chapters to books.

It's this consistent research output that has impressed her peer reviewers who have variously described Matthews as a "talented, up-and-coming scholar, hard-working and conscientious", a researcher who exudes "tact and exceptional analytical research skills", and one whose work exhibits "outstanding quality in relation to peers". Over the past decade her research has focussed on development, identity, and race issues in Africa, and more particularly South Africa. She has also earned a respected reputation for publishing on complex issues of development and privilege in ways that are both empirically solid and theoretically sophisticated.

"I just dabble so much in so many different areas, so I don't really *know* what I see as my field," she smiles. "I haven't really stuck with one thing, so I think the advice for those who want to be successful researchers tends to be: find your area and then stick to it because then you become known as the expert in your area." Point taken. The path to a prolific research career is usually paved by a PhD. Not for Matthews though. "Typically you take what you did for your PhD and then you keep on doing that, but maybe I just get bored too easily?" she says. "What is nice about being a Rhodes academic though is that if something interests you, you are free to go and research that."

It's such academic freedom that has permitted Matthews to do research on varied topics ranging from "taboo" subjects such as privilege, racism and identity politics to the role of NGOs in South Africa. While her subject matter has covered a relatively wide disciplinary scope, her common thread is a concern for social justice in South Africa and Africa more widely. "I can see what's sort of bringing them together, but it's not obvious," she says. "They're getting published in very different places and I'm conversing with very different people, but that's not *really* what you're supposed to do so I don't advise anyone to do that".

Significantly, it is her primary passion for teaching that informs Matthews' research focus on social justice. Known as a dedicated teacher and a noted mentor of Postgraduate students, she has supervised or co-supervised eleven (11) Masters to successful graduation, and is currently supervising three (3) PhD candidates.

Vice-Chancellor's Distinguished Research Award | Dr Sally Matthews





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Photo: Department of Political and International Studies.

"It's a funny thing because I've always thought of myself more as a teacher than a researcher," she says. She cites the underwhelming experience of studying a Bachelor of Arts as motivation for her own passion for teaching. "My own undergraduate experience was a bit disappointing," she says. "I thought it was going to be very exciting and very challenging. I had an idea of university being about intense intellectual conversations all the time. It wasn't. It was about learning textbooks off by heart. Sometimes it's assumed that the weaker students do a Bachelor of Arts, so it's pitched down and that can be very frustrating."

While she stresses the importance of being taught by academics who are passionate and knowledgeable about their subject, Matthews also recognises some of the pedagogical challenges faced by the postcolonial academy.

"In our department we teach such big classes of three hundred and fifty (350) students in first year who are diverse in so many different ways," she says. "So we have to think about how to reach them - that is difficult and can be quite frustrating for us as academics."

For Matthews teaching-led research and research-led teaching should be two sides of the same strategic coin for any academic. "I'm doing a lot of research on my teaching, so maybe that's a way of bringing the two sides together: I'm teaching but I'm writing about it as well," she says. "What a researcher does is identify some kind of a problem, then thinks it through, and then tries to find ways to say something on that problem or unearth what might be going on there," she adds. "But often these same brilliant researchers ignore the classroom problematic: [they] should use their skills to work out what's not working in class or exams or teaching."

It's this pedagogical problematic in higher education which Matthews has interrogated through papers, and a co-edited book on education and transformation in South African higher education, *Being at Home: Race, Institutional Culture and Transformation at South African Higher Education Institutions,* (UKZN Press, 2015). The book has been influential across disciplines in the national debate on transformation in higher education. "I think we're having to rethink our teaching methods because the traditional lecture-tutorial format isn't working," she explains. "I think we should use the classroom space more effectively as a more interactive space. So we're thinking through different methods because there's so much more we can do online. A lot of the standard delivery of me talking and explaining something can actually just be done through online videos and things like that. It needn't happen in the classroom."

While this might sound like the death knell for some teachers terrified by the prospect of being made redundant by digital technology, Matthews makes a valid point about notions of knowledge transmission and learning enabling. "I've been teaching and researching how to rethink what happens in the classroom," she says. She argues that a successful classroom pivots on "knowledge contestation" among peer discussion groups. As a result she's been exploring the possibilities of using the classroom as a space for peer interaction. "If there's a diversity of views in your peer group then you have to listen, defend or adjust your views depending on others' views," she explains.

Unsurprisingly, feedback from students has been positive. "They like it, but whether it's assisting them to better understand and grapple with the material is harder to measure," she cautions. Does such a move away from passive listening towards peer interaction actually help students to become more open-minded and better able to engage and shift their views? The results are not all that clearcut. "Sometimes what we do find in the department-it worries me a little bit when students get to postgrad is that especially ideologically they all have the same views," she says. "They're quite 'lefty' social justice oriented views, which might be views that I share, but I don't know whether they've developed that view on their own as much as just conformed to the view that they think we as lecturers, or their most dominant peers hold."

For Matthews, facilitating a pedagogical space that enables rigorous critical thinking also requires embracing a call to decolonise the curriculum.

"One of the things that I'm working on both as a researcher and a teacher is trying to rethink how we study and how we talk about Africa," she says. "One of the big problems with scholarly writing on Africa is that it's been people outside of Africa who have been writing about Africa, and even when it's African scholars it's often African scholars schooled outside of Africa responding to a conversation that began outside of Africa and reflects these western interests." It's the continent's specific socio-political context that Matthews aims to get her students to interrogate when teaching African political economy. "What thinkers like Achille Mbembe and others are arguing is that we need to have conversations that are stimulated from within, that are African-based," she says. "This doesn't mean we're not conversing with those outside, but we're initiating those



conversations and they're being driven by concerns that arise from Africa."

Matthews cautions her students against any crude, uncritical understandings of these conversations though. "Sometimes some students will want to say that all knowledge produced by white people outside the continent is necessarily Eurocentric and ought not to be engaged with, and all knowledge produced by African or black scholars is good and accurate and doesn't need to be challenged," she says.

"One approach some students like is to want to purify African discourses of external influences. But the real question is what is 'external' and what is 'internal'? Africa is in the world. It's been brought into a global economic order. There's also a global knowledge order and we are part of that."

It's her commitment to critically interrogate this global knowledge order that led one referee to sum up the personal influence of Matthews' writing as follows: "Her incisive and searching mind never allows me ... to get away with any wishful thinking, or bias, and I trust her excellent sense and insight to bring me back to earth." thinking africa series thinking africa series the serie

- Miles Keylock



Vice-Chancellor's Distinguished Research Award

"I'm very honoured to be nominated," says Ferdi Botha. "It was a big surprise. But knowing that what you do actually gets seen means a lot." The Associate Professor may be a shy, retiring fellow, but at 32 years-old he's already earned a reputation as one of the Department of Economics and Economic History's brightest young research talents.



Photo: Snow Harris.

Associate Professor Ferdi Botha Senior Lecturer in the Department of Economics and Economic History

His publication rate has been acknowledged as very high for the discipline and for his career stage, clocking in at almost three times the average for researchers in Economics. Since 2010, he has published twenty-two (22) accredited journal articles, three book chapters, seven articles in peer-reviewed working paper series, and also presented thirteen (13) papers at national and international conferences. These are impressive statistics. What does he attribute such an outstanding research output to? "I've had a lot of support from the university and the department," he replies. Humility and gratitude are well and good, but his prolific publication rate also makes Botha an invaluable asset to the university given the bounteous government subsidies he's brought into the Rhodes coffers.

In an era of increasing academic corporatisation and administrative rationalisation, surely as a young academic he feels under constant pressure to tick those peer-reviewed journal boxes? "I've had a bit of a different journey when it comes to publications," he says. "Most people do their PhD first and then their publications start. But I started doing publications before I even registered for my PhD, when I was in Honours." Interestingly, it was confusion over what exactly he should write his PhD on that prompted Botha to start to hone his publication skills. "While I was figuring that out for a period of three or four years I thought I might as well keep building a profile by publishing whatever I could," he says.

By the time he started his PhD he had already published around twelve (12) papers. Small wonder that Botha's peer reviewers have described him as "an exceptionally talented and prolific researcher," and praised his "dedication, work ethic, and determination to make his mark in academia." Botha smiles shyly at the compliments. Having earned a reputation as someone who operates according to strict deadlines clearly he is something of a research fanatic. "I suppose in that sense it is a bit unconventional," he says. "I see myself as kind of an introvert. So I definitely favour the research part of being an academic."

Given the fact that he has graduated fourteen (14) Masters students to date, he clearly doesn't find it too challenging to juggle the demands of teaching with those of his research. "Teaching is emotionally draining in the long run. It feels like you put on a switch the moment you walk into the lecture venue," he says. "You sort of have to have a different personality in a way, or at least be more outspoken or engaging. Whereas that's not naturally who I am."

Sure, he may not yet be in the same celebrity political economist league as academic and former Greek finance minister Yanis Varoufakis, but Botha is also happy to share his research beyond the ivory-towered walls of the academy. While his publications have appeared in high impact factor international journals such as Social Indicators Research and the Journal of Happiness Studies, he has also been invited to discuss some of his research findings on national radio stations such as SAFM and Radio 702. "I've been trying to do more research that is 'academic' focused in order to illustrate examples to students in lectures," he says "but also more 'engaged' research that focuses on relevance to somebody else, written in everyday language in online publications such as The Conversation. I do feel a lot of the stuff that we do isn't practically implemented. A lot - maybe most - of it is just for academic purposes." Can and should we implement these research findings in practice?

Botha argues that any academic theory should have a practical application in order to benefit society. "I'd definitely say I have



Photo: Sarah Wilken.

more of an applied than a theoretical approach," he says. "To be honest, if you ask me, 'am I Keynesian, am I Marxist?' I'll say 'no, I am nothing.' I don't know if I should be, but which school of thought I'm now in isn't really important. I suppose, partly, it gets reflected in the stuff I've published. I like to do a lot of stuff, a bit of everything....By saying I'm only going to write papers that support this view or that view is much too limited. I think you're missing the point. I think you should be much more open-minded."

"So I use the theory, but I like to use the data sets available and apply it to see what is the case exactly in South Africa. A lot of stuff I did for my PhD was on family relationships, family functioning and how your economic status impacts on family relationships and so on," he says.

"So getting into a journal is nice but in the South African context this research needs to reach a broader population. It's important to see that things like wellbeing matter. What does it mean for us practically? Is what is currently government policy consistent with what these results say?"

Why would an Associate Professor in Economics want to focus his research on the field of subjective well-being and quality of life studies, you might well ask? "When people think of economics the first thing that comes to mind is the 'macro' things you see on the news like interest and exchange rate analysis, but personally, for me that's sort of boring," Botha chuckles. "I don't personally always believe that looking at the determinants of interest rates or analysing the exchange rate is going to have that big of an impact on [people]. Okay, it does indirectly. It's fine to say, 'well the economy grew by 3%' but that's absolutely meaningless!"

Botha prefers to study a far more pragmatic problem: how does the socio-economic status of families affect their wellbeing and how people relate to each other within families?

"How does it *really* affect people? I think that's very important, that's the core of human wellness: your living conditions and your ultimate well-being. If that's not important then I don't know, to me that's what the focus should be on," he says. "I want to do something that makes a difference in society. I suppose it's an intrinsic desire to see that what you do at least has the potential to somehow have a positive impact on somebody at some point, you know?"

It's precisely Botha's desire to make a meaningful difference in society that manifests in an almost forensically pathological approach to his quantitative research. "Working with huge data sets definitely requires attention to detail," he says. "With survey analysis, for example, you need to really know the data and whether there are any issues with collection. You also definitely need some intuition - you can't just always accept the data that is given there. It's happened before where I can't just figure out what's going on with the data, so it forces you to think a bit outside the box."

In an academic terrain where the qualitative researcher's 'insider' perspective and 'rich' data gathering techniques have become almost hegemonic go-to chants it's refreshing to hear Botha championing the merits of good old-fashioned quantitative data collection. "I think it's a special kind of person who finds these things interesting," he smiles. "If you go to a micro-

passionate people get about things that other people would just think are so boring. But I think to just take qualitative [research] as the truth is limp sometimes. I think by analysing the data, using an econometric method gets to tell you something different than what the qualitative stuff would," he says. "Sometimes there's really important stories that come out from that. Sometimes you get surprising results, especially when you start looking at 'subjective *vs*. objective quality of life', for example. People say, 'oh I feel bad'. But if you look at it objectively are they really as bad off as they say? No, they're not. But if you don't get the quantitative side, you can't make those comparisons."

An obsessive compulsion with data mining aside, Botha does confess that his decision to switch from a Masters in Economics to a Masters in Applied Econometrics helped him to focus his career path. "I actually started off doing a B.Com Law with the idea of being an advocate, but in my second year I knew this is not what I wanted to do," he recalls. "So then I decided I'd finish the law degree but do Honours in Economics and eventually I ended up doing Masters in Applied Econometrics! In hindsight it's the best decision I could've made. It made it possible for me to do more quantitative work such as crosssection panel econometrics and more survey stuff," he adds. "And in South Africa there's a really big gap in terms of people who can do quantitative work. So that definitely makes you a lot more employable."

Having successfully carved out a career for himself in academia, what does the future hold for the young Associate Professor? "It's taken me a while to recover from PhD actually!" he chuckles. "So no, while I don't have too many long-term goals at the moment, I do want to move a little bit away from the macroeconomics and specialise more in the applied micros while doing social indicators work and behavioural economics. I'd also like to learn a lot more advanced econometric methods," he adds. "Apart from saying there's a relationship between say, subjective well-being and socio-economic status or happiness and family functioning, I really want to be able to say *this* thing causes *that*. But to do that you really need to sharpen your skills a lot."

For Botha this means continuing to publish his research into subjective well-being and quality of life studies, in addition to fine-tuning his understanding of how economics, sociology and psychology interact in South Africa.

"Economics isn't really money, it's people, it's decisions and it's behaviours, so it's very much sociology and psychology as well," he says, highlighting the value of interdisciplinary research.

"You know, economics can work with stats departments, mathematics, psychology, journalism, sociology, the environmental sciences and many more. So I think there could be a lot more cross-departmental collaboration and there should be a willingness to fund work that would focus on different disciplines and try to bring together different disciplines and viewpoints with the aim of producing some piece of work that would ultimately affect the lives of people. That's the kind of research that I want to do, so that hopefully at some stage I can somehow see that I've made a difference in people's lives and their living standards."

- Miles Keylock



African Languages

"What's the point of writing in an African language when no one can read it? How can you do this? Who's going to read this? How was it examined?" Dr Hleze Kunju shakes his head. The African languages scholar who penned Rhodes University's first isiXhosa PhD thesis is frustrated by those academic sceptics who fail to understand the significance of him writing in his mother tongue.



Photo: Snow Harris.

Dr Hleze Kunju African Languages Scholar

When the aspiring young scholar from rural Mqanduli in the Eastern Cape enrolled at Rhodes University back in 2005 he experienced a massive culture shock. "One of the reasons I didn't want to move out of the province was because I wanted a place that was familiar, especially in terms of the language. I thought 'Rhodes, it's only four hours away from home, so it should be fine'," he recalls. "But when I got here I felt like I was on another planet! There was hardly any isiXhosa on campus at the time. I was like, 'what's going on?'"

Kunju recounts his frustration at often being unable to understand what was being taught in drama, music, politics and sociology lectures. "I was struggling in those departments and that started bothering me a lot," he says. "If I was studying somewhere out of the country or in Jo'burg or Cape Town, I'd say 'okay, let me run home'. But I had nowhere else to run to. So I had to either sink, or try and swim." For Kunju this meant majoring in drama and music where, despite floundering in theory he was able to pass by excelling in the practical examinations. "That let me run to African Languages, at least," he grins. "But when I got there, even then I was taught in English!" He pauses for effect. "Yes, isiXhosa was taught in English. You wrote everything in English, especially your Postgraduate Honours thesis and Masters thesis was written in English. It was then I thought, 'no man this is really wrong'."

It was tutoring students in the African Languages Department who shared his frustrations that provided Kunju with the initial motivation to write his doctoral thesis in isiXhosa. "I'd been struggling in English so I thought maybe I can write in my own language, that's what I know best," he says. A turning point for him came in 2014 when Rhodes University's language committee - of which Kunju was a member - sanctioned a new language policy that permitted students to write in their mother tongue. "The language policy was there before it was renewed in 2014," he points out, emphasising the countless "vague allowances" made for students to write in African languages. "In our country, we've got the most beautiful accommodating policies," he says. "Starting from the constitution to language policies, all the government departments have their own policies. So as usual when a document is produced to promote the use of African language it's brilliantly done, but when it comes to action nothing happens!"

Kunju's sentiments echo those of his colleague in the African Languages Department, Professor Russell Kaschula who has been vocal about what he terms the apparent "lack of political will" when it comes to universities implementing language policies. "I don't think anyone expected it," he says. "However, it was around the time of 'Rhodes Must Fall' and decolonisation debates, and there were lots of arguments that we cannot use African languages in academia."

It was these arguments that Kunju began to contest when he started writing his PhD in isiXhosa. Entitled *IsiXhosa ultimo Iwabantu abangesonininzi eZimbabwe: Ukuphila nokulondolozwa kwaso* (IsiXhosa as a minority language in Zimbabwe: survival and maintenance), his thesis explores the sociolinguistic and historical background of the amaXhosa living in Zimbabwe and how the language survived there over the centuries.

"I always say it was like doing two PhDs at once: a translation PhD and then the real PhD!" he says about some of the research challenges he faced. "People would say, 'How are you going to do this? Where are the research books? Where is the terminology?' And it was true, there was nothing written about them," he recalls. "But I thought it'd be such a great thing to have the first document written about them in their own language,



Dr Hleze Kunju. Photo: Rhodes University: Communications & Advancement Division.

and that document is the first thesis to be written in isiXhosa at Rhodes University - the university named after the guy who originally took these people to Zimbabwe!"

Kunju's underlying reasons to focus on the "survival and maintenance" of isiXhosa speak volumes. "You know, people say the language is dying so there's not even a point of bringing it into academia. People here go to private schools where they are isiXhosa mother tongue speakers, but they actually learn it as a second or even third language in other schools. So what's the point of bringing it in when it's not even being used?"

Given South Africa's aforementioned language implementation policies, surely such conservative argument has no place in an academy dealing with the challenges of decolonisation? "This argument about isiXhosa *dying* is being taught right here!" he exclaims. "In Zimbabwe it's been spoken for over 118 years and it's taught in schools. It's being preserved. It's being maintained. It's still developing. So my thesis was also sort of a way to say that if people in Zimbabwe can do it when they don't have a single book of isiXhosa, then why can't we do it when we've got all these resources and isiXhosa departments all over the country?"

As the first thesis at Rhodes to be written in isiXhosa, it was also important for Kunju to address calls to decolonise the curriculum in a meaningful way by fostering epistemological access to isiXhosa students, not merely an English-speaking elite. "The problem is that we have universities in Africa, not African universities," he says. "*Ngugi wa Thiong'o* researched this years ago and proved that mother tongue based education is better than what we're doing. The whole continent has got the same issue. It's about the use of African languages: with more use of mother tongue African languages we reach more people, we make the space more open."

Kunju points to the fact that his PhD remains one of the most downloaded dissertations in the Rhodes Library as evidence of the fact that "it is possible to write academically in isiXhosa". He regularly receives emails from students enquiring how they might write their own PhDs in isiXhosa. "People have been motivated by it, a lot of people contact me saying 'I didn't know I could do this.' There are also Xhosa people in Zimbabwe, Zambia and Tanzania who can access this research," he says. "It's important that students realise realise that isiXhosa can do what other languages can do."

By way of explanation he cites the example of maskandi pioneer Nkunz' Emdaka whom he invited to Rhodes for a series of seminars in ethnomusicology and public lectures, even though he only speaks isiXhosa. "It works perfectly fine, you know? We can do this, there are students interested in doing research about him, and of course that research should be in isiXhosa, a language that he can access." For Kunju, doing English language research on such 'organic intellectuals' fails to bring their voices into the conversation. "We need to hear their voices, rather than us pretending to be experts in their fields," he says.

It is such a pedagogical move towards mother tongue based education that he sees as part of a broader vision to provide students with real academic agency. "I'd be very happy when we have a first PhD or Masters written in isiXhosa from other departments: maths, law, education, psychology, sociology, pharmacy - where people don't expect something like this to happen," he says. It's not as improbable as one might imagine either. "I'm working on a science dictionary now: the terminology, everything is there, we just need to start doing it," he says. "Of course, it would mean that someone from African Languages would have to co-supervise."

For Kunju, interdepartmental and interdisciplinary collaboration are essential in order to decolonise the curriculum.

"As university departments we should work together on language and transformation," he says explaining the need for a language centre where disciplines could pool their resources and knowledge. "A student from journalism who wants to write in isiXhosa or an English lecturer who needs isiXhosa material could both go to the language centre and have material available translated into both languages," he explains.

In the meantime, what is important for Kunju is to continue to advocate for the use of African languages in academia through his numerous research projects. "If we are working on the decolonisation project we can't go to conferences and merely still try to find new ways to define what decolonisation is. We must report back on what we are doing," he says. "I like to write about stuff that's happening, what I'm involved in, my work - what it's *doing*, what I'm lacking, where I can improve it, what it does." It's for this reason that Kunju collaborated with fellow scholars from the African Language Department on the collection of essays *Music*, *literature and multilingualism in the East Cape Opera Company*: He's also currently researching the pedagogical use of isiXhosa relating to the work of Nkunz' Emdaka.

Additionally, he's working on a paper on how his students in the Masters in Creative Writing program are grappling with new ways of writing character and plot which might not be accepted in the education system. "When I was writing my thesis I realised that the reason why I was able to write [it] was because when I was growing up I read a lot of isiXhosa literature," he explains. "Where I get how to express myself, bring ideas and arguments came from literature. So for me creative writing and academia work together, and language is the thread that brings all these things together." Kunju is clearly committed to working in an interdisciplinary space, where teaching and research meet and greet. But after twelve years of lobbying for the use of African languages in the academy, does he ever get depressed at the slow pace of change?

"There are moments like that, when my fellow brothers and sisters think that I'm wasting my time. When they say: 'What are you doing? We actually don't want that, we want to learn in English!" he sighs. "The decolonisation thing is not something new. It's been spoken about for years and years. My fear is that when my children get here one day they have to deal with the same problems that I deal with, and then they ask 'But you were here, what did you do?' If nothing else happens I'd like them to see what we did. So I've decided I'm going to do as much as I can with people listening and learning, or not. I will just do whatever it takes."

- Miles Keylock



Education

There's an unmistakable buzz in the air when meeting Emmanuel Mgqwashu in his office, upstairs in the Education Department. The bespectacled Associate Professor is animated, avuncular and unapologetically articulate. As Head of Department and Deputy Dean of the Faculty of Education he pulls no punches about the political significance of his extensive research work in the fields of English Language Teaching, Literacy Development and Literary Studies.



Photo: Snow Harris

Associate Professor Emmanuel Mggwashu

Deputy Dean: Education Faculty & Head of Department: Education

"What does 'decolonising the curriculum' actually mean?" he asks in a provocatively entitled essay "Universities can't decolonise the curriculum without defining it first" published in *The Conversation* in 2016. Here he argues the urgent need for the academy to develop shared, nuanced understandings of the meaning of both "curriculum" and "decolonisation" in order to facilitate change.

For Mgqwashu such understandings begin by distinguishing between notions of transformation and decolonisation. "It's a rather provocative perspective," he says. "Everyone talks transformation. For me, 'transformation' is basically that: changing the form, not the substance. If I put water in a rectangular shape the water will look rectangular. It's still the same water, it's just the container that has changed." The container here is, of course, the curriculum. "I think education as a field tends to be viewed, at least from the perspective of the outsiders, as something that is an entirely professional practice: about the classrooms, about transmitting knowledge," he says. "My concern with that view is that in the context of South Africa, education shouldn't be about *transmitting knowledge*, education should be about *enabling learning*."

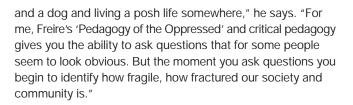
Mgqwashu believes that focusing on an understanding of the curriculum as both context and praxis - rather than mere product - is the key to enabling this learning process and aligns well with his own definition of "decolonising the curriculum".

"Before I claim to be engaging with my students I need to fully appreciate the context," he explains. "When I say 'context' I am not talking just about the lecture hall. I am talking about the communities students come from, their languages, cultures, genders. I am talking about their world views which are always filtered through their cultural and linguistic identity. I need to know who I'm standing in front of."

For Mgqwashu such a contextual approach to teaching opens the door for universities to critique how the curriculum - and therefore education - often reproduces unequal social relations in the classroom.

"If we stand in the classroom we think we're transmitting knowledge," he says. "We're not, we're actually reproducing the social order. We're reproducing identities of 'successful', 'unsuccessful' and 'average' learners if we're not asking questions about the cultural capital that each of our students brings."

In order to assess and access such cultural capital, Mgqwashu employs a critical pedagogy and focus on praxis informed by Brazilian educator Paulo Freire and British sociologist Basil Bernard Bernstein's pedagogic theory, as well as Frantz Fanon and Antonio Gramsci's ideas on the role of organic intellectuals in society. "There is much more in education than just pursuing a comfortable life. It's not about getting a qualification, a spouse



In the lecture hall these theoretical influences manifest in a deceptively simple pedagogical ice-breaker for his students. "One of the things I normally do in my lectures, especially at the beginning of the term, is to set an assignment called 'Who am I?'" he explains. "My philosophy excites them to say 'oh man, so it's possible to speak about my grandmother? It's possible for me to speak about what my uncle used to do when answering a question on the philosophy or sociology or psychology of education?' It's a formal assignment for formal assessment but what it does for me is construct, in a very interesting way, who is in my lecture hall."

Such a contextual-praxis approach provides the lecturer with useful pedagogical insights into how to construct and develop curriculum content that allows epistemological access to all students. "It's exciting to mark my students' assignments because it's not a chorus!" he chuckles. "I wasn't born in the 1980s or 1990s or 2000s, so there is something that this generation is going to teach me. I do not want to come and impose my world of the 1960s and 1970s on them. It's about giving students agency - that is actually a critical thing in terms of us learning."

All of Mgqwashu's work - whether it's teaching, supervision, research or writing - is focused on providing students with such epistemological agency.

"Critical pedagogy is one fundamental theoretical philosophical orientation that drives what I do," he reiterates. "Epistemological access is, in my view, a result of negotiation in terms of the nature of knowledge. I can only negotiate knowledge once I make explicit what constitutes knowing. When we transmit knowledge we often ignore that knowledge has a history, certain conventions that the members of that discourse or knowledge community already possess. I believe enabling learning should begin there. If I transmit knowledge without making explicit what constitutes the principles of generating such knowledge in the first place, all I'm doing is basically generating parrots. There's no possibility for extending the boundaries of that knowledge if we do not make explicit the rules of those games."

It is precisely the rules of the educational game that Mgqwashu seeks to interrogate in his research on access and inclusion to higher education. He currently heads up a National Research Foundation project called *Learning to Read, Reading to Learn, Learning to Write: Literacy Development for Secondary Schooling* which aims to contribute to debates concerning undoing classroom practices that favour the elite and marginalise the majority. At the 2018 International Systemic Functional Linguistics conference in America he presented a talk on the three-year project he did with his PhD students which followed learners from Nombulelo High School in Joza township, Grahamstown on their English literacy journey from Grade 10 to Grade 12.

"These are youngsters, some of whom have had to parent their own siblings and some of whom live in sheds," he says. "So the fact that of those thirty-four (34) learners nine (9) are at university means the impact is beyond my expectation." For Mggwashu the point of the research project is simple: to illustrate the problematic of measuring the quality of an education system through students from privileged homes. It also speaks to his concurrent research work on the significance of rurality, the lived-experience and African ways of generating knowledge in the tertiary educational space. It's a project that involves three South African universities including Fort Hare, Rhodes and the University of Johannesburg, as well as three British universities. "What is rural in the UK is actually the suburbs in South Africa!" he laughs. "But the concept of rurality in South Africa is emerging in very diverse ways. There seems to be a closeness to a sense of rural identity with [students] at Fort Hare compared to those at Rhodes or UJ. The desire to learn in their languages came out very strongly. It's because language and culture are two sides of the same coin."

It is Mgqwashu's own rural upbringing that fuels his dedication to language teaching and literacy development. "I was raised by my mother who was a domestic worker," he says, recounting how, as a child, he listened to tales of how she had to leave school to work at age sixteen (16) to provide for her siblings. Mgqwashu also recalls his own confusion upon entering university. "You know, when I arrived at the former University of Durban-Westville I tell you, for the first day I waited for the bell to ring. I was expecting 'a principal' to address us at assembly! So I made it a personal vow to make it easier for people who share my background to succeed at university."

For Mgqwashu this vow included "deliberately" majoring in English when he did his teaching degree. It also meant insisting on being able to critique how English departments in postcolonial contexts reconfigured themselves for his doctoral thesis. "You know, with my PhD I had to have five supervisors? My passion was so real they couldn't identify with it and tried to shortchange me," he explains. "But I stood by what I wanted to do. What was bugging me from the first day I entered into university was that if we're studying dropout rates or why students take longer to graduate, why is it always black students? Is it because they're stupid? Or is it because English is not their home language?"

Given government's language implementation policies, why is the move towards mother tongue based education in South African universities so slow? Mgqwashu's response is as straighttalking as ever. "The challenge is you'll have to either have academics willing to learn other languages or retrench them.

But is someone willing to put resources to realise that?"

The question of resources is undoubtedly complex. Is Mgqwashu concerned about the ongoing corporatisation of the university through monetisation of research and Postgraduate throughput? "In principle I don't like corporatisation, but in reality do we have any chance to escape it?" he shrugs. "Colleagues don't like the idea. But how many people are keeping Rhodes afloat in terms of research productivity? It's a handful. Imagine if each academic published one paper. We probably wouldn't be having the extent of the financial difficulties we have," he says, as pragmatic as ever. "Being an academic is such a comfortable job, let's face it. The point is we're used to not being told to produce. Literally, the people who are carrying Rhodes are mainly the chairs and then a few academics here and there. Academics need more support and encouragement from academic departments to produce research articles. There is thus an urgent need to support all the endeavours from senior leadership."

Therein lies the rub. Where does the Postgraduate mandate to generate new knowledge come from, if not from those academics in the ideal position to generate it? Mgqwashu's forthright reply packs a powerful moral and ethical punch. "Being an academic means you publish, you generate new knowledge. It means you graduate the future generation of academics. It means you contribute to the knowledge economy of the country. Negotiated annual Personal Development Plan with each academic member of staff at departmental level become crucial in this regard. The question then is whether or not such negotiations occur across various academic departments, consistently, yearly".

It's this passionate commitment to fostering the knowledge economy of the country through uncompromising academic research and innovative teaching methods that Mgqwashu shares with his students.

"I say to students when they want to do a PhD: you've been a teacher for 'x' number of years, surely there's something that is bugging you? I want to hear that. I'm trying to ensure that the work of students who graduate through my hands is going to speak even when they are no longer there."

Given the fact that he recently supervised seven (7) PhD (three (3) graduating) and nine (9) Masters students (three (3) graduating), as well as fulfilling his duties as Head of Department and Deputy Dean of Education, it's unsurprising that Mgqwashu doesn't envisage getting involved in new, too big to manage research projects. "There's a degree of exhaustion with knowledge creation and supervision," he confides. "It's hard to supervise. I tend to choose, deliberately with no regrets, a type of student that no other academic wants to supervise." He tells the tale of two of his PhD students who took eleven



Photo: Snow Harris

(11) and seven (7) years to graduate, respectively. "It's exhausting to supervise somebody who struggles with the language and the intellectual disposition, you know that high level of thinking? But I've learned the art of how to do it given the fact that I come from there," he grins.

"I see myself as leaving a legacy of scholarly pursuit and passion for scholarship with the students that I am supervising now. Once I see them graduate, I always think I am going to call it a day. Then I take the next group on. It's been like that for at least nine (9) years now".

This doesn't mean that at 40-something this dedicated researcher-teacher is going to be retiring from academia anytime soon though. "I started lecturing in 1996 as a graduate assistant. I'm at a point now where I'm beginning to wonder whether it is not time for me to contribute to higher education in a different way," he muses. For Mgqwashu the challenge now is to channel his energy and passion into creating what he terms "healthy spaces" for students and academics alike. "The roles I intend to play at Rhodes, if I do get an opportunity, are roles that will multiply immensely a sense of belonging for all. Agency in how the university engages with 21st century challenges in a postcolonial space that is still grappling with the unenviable legacies of legislated discrimination and oppression is first price for me. The time I still have within the academy is probably just enough for this dream".

- Miles Keylock



P-Rated Researcher in Linguistics

For P-rated researcher Dr William Bennett, one of the biggest challenges the field of linguistics faces is the problem of language extinction. "There's all these grim forecasts that most of the world's languages are dying," he says. "There's a lovely graph I saw somewhere about what percentage of birds and plants species are dying. It's like 4% of birds and 8% of plants are on the endangered species list, and then 90% of languages. That's staggering!"



Photo: Snow Harris.

Dr William Bennett P-Rated Researcher 2017 NRF Awards Senior Research Associate of the Department of English Language and Linguistics at Rhodes University

He may only be in his 30s, but the Assistant Professor in Linguistics at the University of Calgary in Canada and Research Associate at Rhodes University's Department of Language and Linguistics, boasts an impressively focused research portfolio that spans work on the interaction between phonetics, phonology and morphology, as well as under-studied African languages and endangered language description and documentation. It was for such significant studies that he received the prestigious "P" rating for young researchers from the National Research Foundation in 2017.

Bennett's research calling came early on in his academic career, as early as the third term of his first year at university when he enrolled in an Introduction to Linguistics course. "My very first linguistics course that I took was from someone who had just come back from Malawi and she was doing field work on language loss and decay," he recalls. "She was trying to document this language which only about two thousand (2000) people speak. It hadn't been well studied by academics and I just thought that was the coolest thing in the world!" He grins before rhapsodising further about the genesis of his passion for linguistic research.

"It didn't feel like work," he says about the voracious textbook reading regime he embarked on during the following summer vacation. "In this one book about language change over time there was this epilogue about how the world's languages are dying and how every linguist should go and do something," he says. "And I thought 'there's something I can contribute to'. I thought 'even if I can't stop these languages from dying at least we can record them and then we'll know something about people and their stories'. That's when I decided to do a PhD. That was the moment where the purpose of academia and education clicked for me!"

This purpose included extending his doctoral thesis research on Dissimilation, Consonant Harmony, and Surface Correspondence into phonological theory, particularly on crosslinguistic phonological typology, and on the description of Defaka and Nkoroo, two endangered Ijoid languages spoken in the Niger Delta. "I thought, 'yes, documenting languages in Africa, that's why I am here!'"

While Bennett's research is driven by his scientific desire to document the linguistically diverse languages of the African continent, he acknowledges that this desire is equally informed by the lack of contemporary academic interest in the field. This he attributes to the legacy of colonialism.

"You have these in-depth studies that were done maybe in the 1800s or 1920s," he says pointing to Wilhelm Bleek's canonical linguistic studies of the Nama languages that still have currency within certain academic circles. "There's a lot of old research and articles that describe these as languages on the cusp of extinction. In the 1860s you find this German guy, Wilhelm Bleek in the Cape who identifies all these different dialects and [argues] that the Kora dialect is basically dead," he explains. "Then fifty (50) years later in the 1920 this other guy writes a beautiful, in-depth phonetic description of Nama and [suggests] the language is just as nearly dead." For Bennett such studies are profoundly problematic. Firstly, because most of this research was done by "old white guys, their daughters and their sistersin-law": "Most of what we know about !xam comes from Bleek's daughter Dorothea did with Lucy Lloyd. And that's it!" Secondly, because they are "foreigner perspectives" that involve a sense of projection of decline and fall onto indigenous groups. "A grammar of this language came out in 2017," he says. "So how can it be on the cusp of extinction for one hundred and fifty (150) years?"

For Bennett, it's both a scientific and ethical imperative to address the absence of endangered African language documentation and description in the South African academy.

"I'd like to see a greater diversity of languages represented in the theoretical literature," he says. "There are people out there who have done excellent work but so much of it is unstudied compared to the scope of French, Italian, Spanish or Swahili even. It's not work being produced by people from here. So if we can shift that that'll be good."

It is this imperative that led to Bennett taking up the position of Senior Research Associate of the Department of English Language and Linguistics at Rhodes University. "I feel like I'm better at doing research than I am at teaching," he says. "But at the same time when I first came to South Africa I noticed there was all these students who wanted to study topics related to linguistics in English. That seemed like a waste. South African English is interesting in its own right but this is such a linguistically diverse place. I was seeing a real clear lack of local students from here getting interested in the languages from here. So I really wanted to help nudge more people to contribute to what we know about the linguistics of these languages."

For Bennett this begins by inspiring young up and coming South African academics to get interested in not just the big picture question of language policy and politics but of the actual "nuts and bolts" of language documentation and description. "One of the things I enjoy most about my work is the diversity of it. It's not the same from day to day," he grins. Whether it's fieldwork data collection on different dialect variations in Xhosa in the Eastern Cape, qualitative research about how sounds pattern in a language or lab based experiments to understand different types of linguistic knowledge in the fields of phonology and phonetics, Bennett's passion is driven by a fundamental scientific focus. "I'm interested in how language works, I always have been. I'm interested in it for its own sake," he says. "Why is this language different from this other one? It's kind of a stupidly simple question, but I want to document languages and there's a lot of languages that we don't know enough about. What that means in practice is you could spend a day collecting data about Xhosa and find something new that hasn't been written about before. That's kind of really cool on the one hand. But also a shame on the other hand. Why don't we already know these things?"

For Bennett, the shift in the linguistics department at Rhodes from being very English-centric to being much more focused on studying African languages is significant. "I can imagine a young black student comes to Rhodes from maybe the former Transkei who speaks Xhosa and starts learning linguistics and every example they see is from English," he says. "On a subconscious level I can imagine that is discouraging or devaluing. But if you turn that on its head then the [linguistic] knowledge they have that's not necessarily from formal education is really worthwhile and more interesting than English."

It's such 'organic intellectual' knowledge that Bennett hopes will begin to bear fruit in the academy. "We're still waiting for the first great Xhosa syntactician," he says.

"But I look at this country and I see so much potential for great insights to be found and picked and cultivated. I want to see these young academics not being intimidated and coming up with the wherewithal to do these things. What we need is more homegrown South African scholars working on the indigenous languages of South Africa. This is a very fruitful place to be doing this kind of work."

While he is optimistic about the future of the field of linguistics, Bennett remains a pragmatist when it comes to navigating the challenges of administrative rationality and corporatisation that the university currently faces. "Basically I try to go about my life ignoring these pressures," he chuckles when asked how he navigates the pressure placed on postgraduate researchers to publish endless journal articles in order to fill the university coffers. "I'm in a really strange place because I consider myself a scientist, but I'm in a department that's in the humanities," he adds. When pressed Bennett does however, acknowledge that corporatisation does pose challenges. "This university, in particular, has done a good job of fighting off that," he says. "In the other university I am affiliated with the Dean comes and gives this forty-five (45) minute speech about this new centre for entrepreneurial thinking, the whole focus is basically on creating people to work in industries. That's not what a university is. I hope that really can't be what a university in South Africa is about. It's about intellectual centres of a different sort. A university is about creating new knowledge. It really should be that simple."

It is this restless research impulse to generate new knowledge that prompted Bennett to embark recently on a project to document and describe the Khoisan language widely spoken in the northern Cape before Afrikaans. "I've wanted to be working on these languages for a long time because they're among the most unique languages out there. They're really clearly not related to other languages in other places," he says. "The idea was to go out and see if we can find the old oumas, oupas and tannies and ooms that still remember these languages." It was somewhere west of Kimberley that Bennett and his research team hit linguistic gold. "We might have found a language that was previously unknown to linguists. It's too soon to tell for sure, but that's kind of really cool, right?" Bennett grins, explaining his encounter with two such old oumas, Elsie and Francine who speak a language they call Hottentotstaal, or Hottenstaal for short. Aside from being problematic, that name typically refers to Nama languages specifically. "This language is not Nama." What is fascinating for Bennett is that this language has very little in common with Nama. Instead, it has words similar to N|uu - a critically endangered language originally spoken by the original inhabitants of the Kalahari Gemsbok Park - and |xam, a language that's been described as extinct for ages. |xam is the lanaguage of the official motto of South Africa "!ke e: !xarra llke". It's also known pretty much just from the Bleek & Lloyd collection of field notes - and it seems like they did all that work in the 1870s.

"What is it a language can be? What is it a language can't be? How can we capture and record all of this knowledge that's important for science and important to the people who speak these languages in the amount of time that we actually have left?" asks Bennett. "They should have a right to have their story told and to have their heritage passed on. There's a sense that maybe this is the last window of opportunity to do that."

- Miles Keylock



Amongst those honoured at the National Research Foundation Gala Awards held in Bloemfontein on the evening of 14 September 2017 was Dr William Bennett of the Department of English Language and Linguistics at Rhodes University. Mrs Mpho Letlape (right), NRF Board Member; Dr Peter Clayton (centre) and Dr Beverley Damonse (left), NRF Group Executive: Science Engagement and Corporate Relations. Dr Clayton accepts NRF P-Rating award on behalf of Dr Bennett.

Photo: Rhodes University Communications & Advancement Division.



The History of Rhodes University

It's a rare privilege conversing with Paul Maylam in a quiet corner of the Cory Library. Not only is the Distinguished Professor Emeritus in Rhodes University's Department of History an impeccably articulate academic, but the scope and sensitivity of his knowledge of the history of Rhodes University is simply awe-inspiring. It is this history of the iconic Eastern Cape educational institution that Maylam researched, with funding support from a grant from the Andrew W. Mellon Foundation, and documents in his fascinating book, *Rhodes University, 1904-2016: An Intellectual, Political and Cultural History*.



Photo: Snow Harris.

Distinguished Professor Emeritus Paul Maylam Department of History

The product of more than four (4) years of extensive research and writing, the study charts the significant academic, cultural and social shifts that occurred at the university since its inception in 1904. There are chapters focusing on its founding as an imperial university, infrastructural development of the campus, the move from complicity and opposition towards desegregation and protest in the apartheid era, as well as the contemporary transformation imperative. In between Maylam also unpacks academic life in the early years of the institution, several significant sporting achievements and the changing patterns of student life and culture.

"I set out to write a critical account," says Maylam, citing the encouragement he received from former Vice-Chancellor Saleem Badat. This meant uncovering and recounting "some of the more shabby episodes" in the university's history rather than delivering a celebratory, sanitised institutional history. These include critical accounts of "some key turning points and watersheds" detailing episodes of apartheid acquiescence and gender discrimination at the institution, racist incidents on campus in the 1980s and a critique of the university's transformation agenda in the context of the contemporary #FeesMustFall movement.

There's also a fascinating account of the infamous 'Field case' of the 1940s, where an academic dispute in the Music Department ended in a lecturer suing the university for defamation that almost bankrupted the institution.

"I have this very ambivalent view of the institution," says Maylam, recalling his own experiences studying and teaching at Rhodes. "I was a student here from 1967 to 1970 and there was this sort of political acquiescence in apartheid. It was a rather sterile cultural life with a lot of partying and major interest in sport, so I was concerned to draw that out." One particularly insightful quotation in the book from erstwhile student newspaper reporter Guy Butler illustrates the pervasive apathy of student culture at the time: "Rhodes is in many respects no better than a sheep camp.... The average Rhodian is ignorant of life.... He is a purblind idiot, peregrinating aimlessly. His eyes have no perspective because they seldom look further than his nose, or at the outside, the distance from the ½ seats to the Scope screen" (*Rhodeo*, 1939).

"I can identify quite strongly with what Guy Butler was saying, there was quite a long tail of mediocre students, the mediocrity was always there," recalls Maylam. "But what I also found at Rhodes in my student days and teaching was a small group of really engaged, intellectually active, energetic, interested students, and those are the ones who were very gratifying... So those are some of the ambiguities that I try to draw out, and the ambiguities reflect my own experience of the institution."

As an historian Maylam foregrounds that while his study is a critical account of the history of Rhodes, as a former student and teacher it is filtered through a personal lens. "This is a story told subjectively, the emphases and chosen themes are mine," he says. He sees the focus of the book as being more than "an

exercise in self-flagellation", emphasising that "there is also a lot to celebrate in the history of the university."

One important emphasis for Maylam is on the inspirational teaching culture he encountered at Rhodes in the late 1960s. "It did a lot for me as a student, it really did. I came out here from England, and had no idea whatsoever of becoming an academic," he recalls. "My great love in England was cricket. I used to play a lot of cricket, but I gave up cricket and started studying and found it took me different places. 1968 to 1970 were quite important years politically and globally for students in many different ways, culturally, morally, intellectually. Those were three very key, formative years in my own life. I was taught very well and got interested."

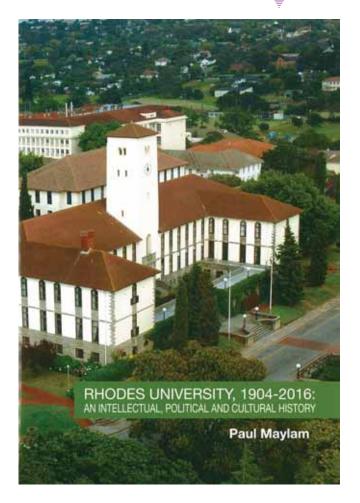
Here he cites the influence of Winnie Maxwell, then chair of the history department, on his own academic career. "You know, I often reflect on what was inspirational about her," he says. "I'm not sure she would be a great teacher now. She was a strange person, quite conservative, but there was a certain spontaneity to her lectures-they weren't over-prepared. She would chain smoke and walk into a lecture with a few notes scribbled on the back of an envelope and just talk. She came up with great ideas. She was a teacher, she wasn't a researcher and her students benefited from her teaching in their undergraduate years."

For Maylam, an over-emphasis on research at the expense of teaching is one of the challenges faced by any academic in the contemporary university.

"There's this huge emphasis on the production of PhDs, research and research outputs," he says. "I think that's a bit problematic because many senior academics now concentrate on supervising writing and they shift the undergraduate teaching towards casuals, which I think is something of a pity because the strength of Rhodes has been its undergraduate teaching." Here he points to the example of Professor Daantjie Oosthuizen who inspired countless philosophy students during his tenure at Rhodes. "People were inspired by him, but he didn't publish much. He used to say to students who came in with questions wanting answers, you should come in with some information and ideas and go out with *questions*. That was an important way of approaching teaching."

Maylam's pedagogical insights speak volumes. "In my experience first year teaching is the most difficult," he says. "You've got a wide range of abilities in the class. Some people can barely speak English, some are better at the conceptualisation of history, and some very bright people need to be stimulated. You've got to reach all these people. It's very difficult for an experienced teacher to do that and even more difficult for an inexperienced teacher. So I think that being an academic is increasingly more difficult, demanding and very tough."

While he argues that teaching should be a vocation for any academic, Maylam does acknowledge that in the contemporary



knowledge economy this may no longer necessarily be true, particularly given the university's reliance on state funding. When universities are ranked worldwide it's mainly on the number of research outputs and funds they raise, and not on the quality of their undergraduate teaching staff. "The funding models do tend towards rewarding research outputs. So there's been a shift towards more PhD graduates, more articles and more books because that's what universities get funded for," he nods. "For every PhD graduate within three years the government will give something towards their subsidy. Each article earns a subsidy, each book - if it's approved, not a textbook - earns a subsidy." Maylam admits that he finds being coaxed into fitting into any such postgraduate research production line problematic. "I think there's a lot of articles being churned out that no one's going to read-except perhaps the reviewer and one or two specialists in the field," he pauses with a wry smile. "There's an overproduction of mediocre research which gets rewarded."

For Maylam it's the ethical responsibility of every academic to not neglect undergraduate teaching, particularly given the current calls to decolonise the curriculum. "I'm sure for a lot of students these are your key years, when you are exposed to new ideas," he says. "So I think there are two issues here: the style of teaching and the content of courses." Self-confessedly technophobic, Maylam prefers a good old-fashioned lecturing approach, rather than powerpoint presentations. "The dual challenge in a lecture for me is to make the students listen and the challenge of the students is to want to listen," he chuckles. "So I feel that dynamic is rather important, rather than me just putting stuff up on a screen."

What is equally important, of course, is curating curriculum content that addresses the call for decolonisation. "It's quite easy to decolonise *content* in a subject like history, politics or sociology. If you look at the department calendar, I think there are ten semester courses in history and eight of them have an African focus," he says. "I find the word 'decolonisation' is used a bit loosely, so I prefer to ask two questions: what are the possibilities for decolonisation and what are the limits to decolonisation? I don't think that the notion is explored in those terms. But the whole notion of decolonisation needs to be unpacked. What does it mean? Can you actually decolonise if the medium of instruction is English? For me that's absolutely fundamental."

For Maylam any solution to answering such questions should avoid getting bogged down in endless debates over the academic validity of Eurocentric or Afrocentric epistemologies. "I think what's so important in university education is exposing students to a diversity of readings and meanings, so that through that exposure students develop their own line of critical thinking," he says. "It may be an old-fashioned liberal view but I'll never depart from that."

It's such an old-fashioned pedagogical commitment to new knowledge generation that fuelled Maylam's commitment to academic freedom during his tenure as head of the history department. "I always wanted to encourage my colleagues to teach what really interested them," he says. "I remember one time we had a course which a colleague of mine was particularly interested in, which was the history of rock music. Now *that* raised a few eyebrows in the faculty. Is this history?" he chuckles. "I know my old professor Winnie Maxwell would be turning in her grave if she knew I'd permitted this, but that's the best way to teach!"

While Maylam may be navigating his retirement years, as his fascinating account of the history of Rhodes University shows, he's lost none of his passion for the discipline of history. "I would hope that this book might open up a few avenues for research," he says. "I think there is scope for writing histories of departments. I think journalism has an interesting history, I think fine art has an interesting and controversial history too, in many ways. There are also histories in article form of zoology and chemistry which have been published. So yes, I think there is scope for further research."

Don't expect Maylam to do be doing this research though. After five decades in the institution, he is musing on the idea of branching beyond the ivory-towered walls of academic writing for his possible next book project. "I tried to make this book readable, so anything I write in the future has got to be readable," he says. "When you're an academic you think: 'I've just got to get this publication out, even though only twenty people are going to read it, I've got to get it out and onto my CV!' I don't need to do that anymore. Anything I write I've got to enjoy reading and researching. It may not be academic, I don't know, I'd like to write again, but it's got to be something that enthuses me," he concludes. "I'm quite interested in nonfiction crime. I'd like to write a biography, that'd be something, but quite fun to do."

- Miles Keylock

DEPARTMENT REPORT INDEX

RHODES UNIVERSITY RESEARCH REPORT 2017

DEPARTMENTAL INDEX

Photo: Rhodes University Communications & Advancement Divisi

(CHERTL) Centre for Higher Education Research, Teaching and Learning

Alongside its various offerings of formal and informal teaching and learning related activities, CHERTL continues to contribute research to the field of higher education studies. This field has taken on a particular pertinence in the so-called 'knowledge economy' era of massification of higher education where questions arise as to the purpose of the university. CHERTL's contribution is not limited to accredited publications but extends to popular press deliberations and to the fostering of critical conversations about higher education issues through their various formal Postgraduate offerings. Significant 2017 research contributions are detailed here.



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CHERTL PhD scholars having fun at Professor Sioux McKenna's Inaugural Lecture, Unmasking the Doctorate. Photo: CHERTL.

Postgraduates / Graduations

PhD graduations

- Gabi De Bie: Analysis of a biomedical curriculum using Legitimation Code Theory: exploring integrative knowledgebuilding in the rehabilitative health professions.
- Catherine O'Shea: Understanding the reading practices of Fort Hare students.
- Joseph Chidindi: Discursive constructions of quality assurance: The case of the Zimbabwe Council for Higher Education.
- Gitanjali Mistri: A social realist analysis of participation in academic professional development for the integration of digital technologies in higher education.

Postgraduate Diploma in Higher Education (PGDip (HE))

At the 2017 graduation ceremony thirty seven (37) graduated from this programme, seventeen (17) with distinction. The PGDip (HE) offers a broad introduction to the higher education sector with a particular focus on teaching and learning.

Distinguished Visitors / International Visits

In March 2017, Professor Brenda Leibowitz, Chair of Teaching

and Learning Studies at University of Johannesburg presented a seminar on social justice in higher education. Professor Leibowitz has since passed away and will be sadly missed in the academic development community and beyond. She contributed to the CHERTL PhD programme in a number of ways over the years, including by giving seminars at our 'Doc Weeks' and in her co-supervision of PhD scholars, such as Gita Mistri.

Also at the March 2017 'Doc Week', Professor Ronelle Carolissen from Stellenbosch University gave a seminar on social justice in higher education research. Together Professors Carolissen and Leibowitz also ran a workshop on academic publication in which they shared their experiences as journal editors, reviewers and authors.

In October 2017, Professor Susan Van Schalkwyk from Stellenbosch University gave a seminar in which she outlined the kinds of third spaces in which most academic development work takes place. Professor Gina Wisker from the University of Brighton also joined us in October where she ran a workshop on academic writing prior to giving the keynote at our PhD conference.

V

Significant Research Aligned Events

In March 2017, Professor Sioux McKenna gave her inaugural address with the title 'Unmasking the Doctorate'. In this address, Professor McKenna urged us to build doctoral outputs in this country in ways that genuinely contribute to the public good, rather than meeting numeric targets which fail to engage with concerns about quality and significance. The event was very well attended and was followed with a wonderful celebration with music and dance.

In July 2017, editors from "The Conversation" Caroline Southey and Thabo Leshilo, ran a workshop on how to communicate academic findings to the general public. This workshop was attended by over eighty (80) participants and there is clearly a need for more of such events. Also in July, Garry Rosenberg ran a workshop on open access publishing. Dr Rosenberg has extensive knowledge of academic publishing and was able to provide guidance to those wanting to publish in ways that ensured broad accessibility to all.



Books/Chapters/Monographs

Badat, S.

Badat, S. (2017) The Idea of Higher Education as an Instrument for Social Mobility and Societal Transformation: A Critique of Nelson Mandela. In: Soudien, C. (ed.). *Nelson Mandela: Comparative Perspectives of his Significance for Education.* Rotterdam, The Netherlands: Sense Publishers. p.125-136. ISBN: 9789463009065.

Boughey, C.

Boughey, C., van den Heuvel, H. and Wels, H. (2017) Listening To Our Contexts. In: McKenna, S., Clarence-Fincham, J., Boughey, C., Wels, H. and van den Heuvel, H. (eds.). *Strengthening Postgraduate Supervision.* Stellenbosch: SUN PRESS. p.7-19. ISBN: 9781928357315.

Clarence, S.

Clarence, S. (2017) A relational approach to building knowledge about academic writing: facilitating and reflecting on peer writing tutorials. In: Clarence, S. and Dison, L. (eds.). *Writing Centres in Higher Education: Working in and across the disciplines.* Stellenbosch: SUN PRESS. p.49-66. ISBN: 9781928357544.

Clarence, **S**. and Dison, L. (ed.) (2017) *Writing Centres in Higher Education: Working in and across the disciplines.* Stellenbosch: SUN PRESS. ISBN: 9781928357544.

Maton, K.

Maton, K. and Doran, Y.J. (2017) Systemic functional linguistics and code theory. In: Bartlett, T. and O'Grady, G. (eds.). *The Routledge Handbook of Systemic Functional Linguistics*. United Kingdom: Taylor and Francis. p.605-618. ISBN: 9781315413884.

McKenna, S. and Clarence-Fincham, J.

McKenna, S. and Clarence-Fincham, J. (2017) Preface. In: McKenna, S., Clarence-Fincham, J., Boughey, C., Wels, H. and van den Heuvel, H. (eds.). *Strengthening Postgraduate Supervision.* Stellenbosch: SUN PRESS. p.1-6. ISBN: 9781928357315.

McKenna, S., Clarence-Fincham, J. and Boughey, C. McKenna, S., Clarence-Fincham, J., Boughey, C., Wels, H. and van In October 2017, CHERTL co-hosted a PhD conference with the Department of Education. Twenty-seven (27) PhD scholars made presentations on their research following an open keynote by Professor Gina Wisker. There was also a panel discussion about the influence of their PhDs on their work by three (3) Rhodes University graduates, Dr J Lupele, Dr L M Masehela, and Dr J Nyambe. This very inspiring session showed how the PhD is often the springboard for future research opportunities and contributions. As usual, the PhD conference included a social event that was enjoyed by all.



Professor Jo-Anne Vorster, Head of Department

den Heuvel, H. (ed.) (2017) *Strengthening Postgraduate Supervision.* Stellenbosch: SUN PRESS. ISBN: 9781928357315.

Quinn, L. and Vorster, J.

Leibowitz, B., Bozalek, V., Garraway, J., Herman, N., Jawitz, J., Muhuro, P., Ndebele, C., **Quinn, L.**, Van Schalkwyk, S., **Vorster, J.** and Winberg, C. (2017) A collaboration between eighteen researchers across eight universities. In: *Learning to Teach in Higher Education in South Africa: An investigation into the influences of institutional context on the professional learning of academics in their role as teachers.* Pretoria: Council on Higher Education (CHE). p.1-120. ISBN: 9780994711106.

Quinn, L. and **Vorster, J.** (2017) Connected disciplinary responses to the call to decolonise curricula in South African higher education. In: Carnell, B. and Fung, D. (eds.). *Developing the Higher Education Curriculum: Research-based Education in Practice.* London: UCLPress. p.131-144. ISBN: 9781787350892.



Professor Sioux McKenna's Inaugural Lecture, Unmasking the Doctorate. Photo: CHERTL.



Graduation - Proud moment for PGDip and PhD graduates and supervisors. Photo: CHERTL.

Vorster, J. and Quinn, L.

Vorster, J. and Quinn, L. (2017) Re-Framing Academic Staff Development. In: Kinchin, I.M. and Winstone, N.E. (eds.). *Pedagogic Frailty and Resilience in the University*. Rotterdam, The Netherlands: Sense Publishers. p.109-121. ISBN: 9789463009836.

Peer Reviewed Subsidy-Earning Journal Research Publications

Clarence, S. and McKenna, S.

Clarence, **S**. and **McKenna**, **S**. (2017) Developing academic literacies through understanding the nature of disciplinary knowledge. *London Review of Education*. 15 (1). p.38-48.

Ellery, K.

Ellery, K. (2017) Framing of transitional pedagogic practices in the sciences: enabling access. *Teaching in Higher Education.* 22 (8). p.908-924.

Ellery, K. (2017) A Code Theory Perspective on Science Access: Clashes and Conflicts. *South African Journal of Higher Education.* 31 (3). p.82-98.

Hlengwa, A. and McKenna, S.

Hlengwa, A. and McKenna, S. (2017) Dangers of generic pedagogical panaceas: implementing service-learning differently in diverse disciplines. *Journal of Education*. 67 (2017). p.129-148.

McKenna, S.

Behari-Leak, K. and **McKenna**, **S.** (2017) Generic gold standard or contextualised public good? Teaching excellence awards in post-colonial South Africa. *Teaching in Higher Education*. 22 (4). p.408-422.

Skead, M.

Skead, M. (2017) What's next? Experiences of a formal course for academic developers. *Higher Education Research & Development*. 2017 (2017). p.1-14.

Vorster, J. and Quinn, L.

Vorster, J. and Quinn, L. (2017) The "Decolonial Turn": What Does it Mean for Academic Staff Development? *Education as Change.* 21 (1). p.31-49.

Peer-reviewed Proceedings

Giloi, S.

Giloi, S. The Benefits of Incorporating a Decolonised Gaze for Design Education. *14th National Design Education Conference: #Decolonise! Design educators reflecting on the call for the decolonisation of education.* Freedom Park, Pretoria. South Africa. September 2017.

Research Papers Presented at Academic/Scientific Conferences (Nonpeer-reviewed Proceedings)

Ellery, K.

Ellery, K. Knower(s) in science: Enabling access. *Second International Legitimation Code Theory Conference*. University of Sydney, Sydney. Australia. July 2017.

McKenna, S.

McKenna, S. Social exclusion and inequality: LCT in South African higher education studies. *Second International Legitimation Code Theory Conference.* University of Sydney, Sydney. Australia. July 2017.

Quinn, L.

Quinn, L. Assessment for cumulative knowledge-building for professional practice in higher education. *Second International Legitimation Code Theory Conference.* University of Sydney, Sydney. Australia. July 2017.

Quinn, L. and Vorster, J.

Quinn, L. and Vorster, J. Disciplinary responses to the call to decolonise curricula in South African higher education. *Inaugural National Higher Education Conference of the Black Management Forum.* Rhodes University. South Africa. March 2017.

Quinn, L. and Vorster, J.

Quinn, L. and **Vorster, J.** Decolonising curricula through making connections. *Connecting Higher Education. International perspectives on research-based education.* University College London. London. June 2017.









Photo: CHERTL

Professor Sioux McKenna with Rhodes University Vice-Chancellor Dr Sizwe Mabizela, at Professor McKenna's Inaugural Lecture, Unmasking the Doctorate. Photo: CHERTL





Graduation - CHERTL celebratory dancing at the graduation party. Photo: CHERTL.

Quinn, L. and Vorster, J.

Quinn, L. and Vorster, J. Decolonising curricula through making connections. HELTASA 2017. Durban University of Technology. November 2017.

Quinn, L and Vorster J.

Leibowitz, B., Quinn, L., Vorster, J. and Muhuro, P. Learning to teach in higher education: Formal and informal learning. 10th International Conference on Researching Work and Learning. Rhodes University. December 2017.

Vorster, J.

Vorster, J. Academic development: Autonomy pathways towards gaining legitimacy. Second International Legitimation Code Theory Conference. University of Sydney, Sydney. Australia. July 2017.

Vorster, J. and Quinn, L.

Vorster, J. and Quinn L. Reframing academic staff development. HELTASA 2017. Durban University of Technology. November 2017.

Tshuma, N.

Tshuma, N. and Krauss, K.E.M. Towards using critical reflection to interrogate the oppressive effects of educational technology use in South African higher education. African Conference on Information Systems & Technology (ACIST 2017). University of Cape Town, Cape Town. South Africa. July 2017.



Community Engagement Division

Community engagement is an important way for universities to operate as institutions which work for the public good by partnering with community based organisations, and broader society to tackle issues of local importance in a unified way. By making university assets available through community-engaged research and learning programs, and harnessing the assets available in local communities, we can work to overcome some of the major challenges faced by society today.

Community engagement is also a crucial way to transform individuals who are involved, changing people's ways of being and perceiving each other and the world around them, undermining biases and prejudices, and cultivating criticality, reflexivity and civic values.

At the heart of community engagement is a complex interplay between the theoretical and the practical. Rhodes University has emerged as a national leading engaged university, housing volunteerism, service-learning and engaged research projects which highlight and underpin a unique philosophy of community engagement, bringing theory and practise together.

This philosophy underpins a number of world-class engaged learning and research programmes across all university faculties and departments, and in 2017 we recognised the outstanding achievements of Professor Jacqueline Akhurst, from the Department of Psychology, who was awarded the Vice Chancellor's Distinguished Award for Community Engagement. In her work, Professor Akhurst critically links the theory and practice of engagement as she responds to the call for a decolonized curriculum, with a shift toward transformational and democratic knowledge creation in psychology through engagement. In forming mutually beneficial partnerships across Makana, Professor Akhurst has practiced deep listening and social responsiveness, developing teaching and research programmes that focus on sustainability.

As the emerging discipline of the Scholarship of engagement continues to gain traction globally, the Rhodes University Community Engagement Division (RUCE) has established itself as a national leader, attracting seven (7) transdisciplinary masters and doctoral students into the division.

Dr Paphitis and Ms Kim Weaver guest-edited a special issue of the *Journal for New Generation Sciences*, focussed on community engagement, with notable contributions to the issue from across the country.

International Visits

Ms Hornby and Dr Paphitis travelled to Norway and Scotland as part of the Erasmus+ funded Common Good First Project, where they presented work from RUCE on digital storytelling in higher education and communities at University College Southeast Norway and the Glasgow Caledonian University.

Significant Research Aligned Events

RUCE entered into a new partnership with the Durban University of Technology to host the third annual Community Engaged Learning Symposium. Drawing on the research project hosted by Dr Paphitis at RUCE on epistemic justice, the thematic focus for the Symposium was Community Engagement: Towards Social and Epistemic Justice.

Eleven (11) RUCE staff and Postgraduate students presented their research at the conference, showing that Rhodes is one of the leading Universities in both engaged research and the scholarship of engagement - bringing together truly transdisciplinary teams to tackle issues of local importance collectively and in participatory ways.

Dr Sharli Anne Paphitis, Senior Lecturer



Ms Diana Hornby, Head of Department

Community Engagement Division



PUBLICATIONS



Members of RUCE presenting work on digital storytelling for colleagues at University College Southeast Norway. Photo: Community Engagement.

Concerts, Exhibitions, Performances, Workshops, Events

Bobo, B.

Bobo, **B**. Participant. People Assessing Their Health (PATH) Programme. *People Assessing Their Health (PATH) Programme: Using Asset Based Community Development (ABCD)*. Rhodes University, Grahamstown. South Africa. 3 - 7 April 2017.

Bobo, B., Talbot, A.L.P., Mesani, T., Hornby, D., Nkwinti, N. and Carlos Bezerra, J.

Bobo, B., Talbot, A.L.P., Mesani, T., Hornby, D., Nkwinti, N. and Carlos Bezerra, J. Participant. Monitoring & Evaluation and Learning Workshop. *Monitoring & Evaluation and Learning Workshop.* Joza Location, Grahamstown. South Africa. 19 April 2017.

Carlos Bezerra, J.

Carlos Bezerra, J. Participant. Research dissemination - How can we disseminate our research, and why should we engage in dissemination activities? *Research dissemination - How can we disseminate our research, and why should we engage in dissemination activities*? Environmental Learning Research Centre, Grahamstown. South Africa. 7 September 2017.

Talbot, A.L.P. and Mesani, T.

Talbot, A.L.P. and Mesani, T. Participant. Every Word Counts: Training the Trainer workshop. *Wordworks Workshop*. iTec, East London. South Africa. 12 - 14 October 2017.

Peer Reviewed Subsidy-Earning Journal Research Publications

Bobo, B.

Bobo, **B**. (2017) A Participant-Focused Sociological Analysis of Beedz, a Grahamstown Skills Training Project for Women, Using a Third World Feminist Perspective. *Journal for New Generation Sciences*. 15 (1). p.36-50.

Kumalo, S.H.

Kumalo, S.H. (2017) Problematising Development in Sustainability:

Epistemic Justice through an African Ethic. *Southern African Journal* of *Environmental Education*. 33 (2017). p.14-24.

Paphitis, S.

Kelland, L., Paphitis, S. and Macleod, C. (2017) A contemporary phenomenology of menstruation: Understanding the body in situation and as situation in public health interventions to address menstruation-related challenges. *Women's Studies International Forum.* 63 (2017). p.33-41.

Paphitis, S. and Pearse, N.J. (2017) Developing and Implementing a Service-learning Course into an MBA Programme: Critical Perspective from Students. *Journal for New Generation Sciences*. 15 (1). p.140-156.

Paphitis, S. (2017) The possibility of addressing epistemic injustice through engaged research practice: reflections on a menstruation related critical health education project in South Africa. *Critical Public Health.* 2017 (2017). p.1-10.

Research Papers Presented at Academic/Scientific Conferences (Non-peer-reviewed Proceedings)

Bobo, B.

Bobo, **B**. A reflective multiple case study approach to understanding partner relationships within the context of community engagement at Rhodes University. *Rhodes University Postgraduate Inter-disciplinary Conference*. Rhodes University, Grahamstown. South Africa. September 2017.

Bobo, B. "Bathi xa besibiza sizi partners" Community Engagement at Rhodes University and the Siyakhana@Makana programme. *Rhodes University and Durban University of Technology Community Engagement Symposium.* Durban University of Technology, Durban. South Africa. May 2017.

Carlos Bezerra, J.

Deponselle, K.N., Rouillard, T.K. and **Carlos Bezerra, J.** Living in a protected area: Sense of Place of residents in Knysna, South Africa. *Garden Route Interface Meeting.* Pine Lake Marina, Sedgefield. South Africa. September 2017.

Rouillard, T.K., Deponselle, K.N. and Carlos Bezerra, J. Sense of Place of tourists in the Knysna area: A case study from South Africa. *Garden Route Interface Meeting.* Pine Lake Marina, Sedgefield. South Africa. September 2017.

Carlos Bezerra, J. Mapping heritage in the Eastern Cape: A participatory approach in a land claim context. *Community Engagement: Towards Social And Epistemic Justice*. Durban University of Technology, Durban. South Africa. May 2017.

Carlos Bezerra, J. Ideals vs. Reality: Grappling with the Nitty-Gritty of Knowledge co-production processes in Science Society Partnerships. *Resilience for Development Colloquium.* Sunnyside Park Hotel, Johannesburg. South Africa. May 2017.

Carlos Bezerra, J. Sense of Place in the Tsitsikamma: cultural ecosystem services and their role in biodiversity conservation. *Garden Route Interface Meeting.* Pine Lake Marina, Sedgefield. South Africa. September 2017.

Hornby, D.

Srinivas, S.C., Duxbury, T., Marara, P., Limson, J., Manhanzva, R., Pearse, N.J., Davy, J., Mzizi, T., Tandlich, R. and Hornby, D. Women-centered health promotion for health care challenges. *Asia-Pacific University Engagement Network Conference*. Penang. Malaysia. April 2017.

Kumalo, S.H.

Kumalo, S.H. Arrested by Marginality: Mimesis and Epistemic

Community Engagement Division





RUCE staff and students at the Community Engaged Learning Symposium in Durban. Photo: Community Engagement.

Impositions. *4th Annual International Conference of the Centre for Phenomenology in South Africa: Justice and the Other.* Fort Hare, East London. South Africa. March 2017.

Kumalo, S.H. The Impossibility of Separable Categories - Revealing Banalities of Public Death in the #MustFall movement. *5th South African Education Research Association Conference: Education in an Era of Decolonisation and Transformation.* NMU, Port Elizabeth. South Africa. January 2017.

Kumalo, S.H. Izibongo, Inkumbulo Nokuqukethwe Kwigama: Negotiating Social Meanings of Identity. *The Contemporary Language, Logic and Metaphysics Conference: African and Western Approaches.* WITS, Johannesburg. South Africa. August 2017.

Kumalo, **S.H.** Decentring the Subject: Education and an Ethical Commitment to a Social Epistemology. *Community engagement conference: Towards Social and Epistemic Justice*. DUT, Durban. South Africa. May 2017.

Kumalo, S.H. Exigencies for Democracy in the University: Rupturing the Disquiets of Whiteness/Normativity. *Democratic Violence: Power, Legitimacy and Injustice in Higher Education.* Rhodes University, Grahamstown. South Africa. March 2017.

Kumalo, **S.H.** Thokoza Ngwenyama! Language, Dominant Western Epistemologies and Modes of Being. *Philosophical Society of Southern Africa.* Rhodes University, Grahamstown. South Africa. January 2017.

Mesani, T.

Mesani, T. Parents taking charge: Rhodes University employees comanaging literacy and educational development programmes. *RU/DUT Community Engagement Conference*. Durban University of Technology, Durban. South Africa. May 2017.

Nqowana, T. and Paphitis, S.

Nqowana, T., Paphitis, S., Tandlich, R. and Luyt, C.D. A communitybased water monitoring, treatment and disaster management program in Grahamstown using the improved Hydrogen Sulphide test kit. *Community Engagement: Towards Social and Epistemic Justice*. DUT, Durban. South Africa. May 2017.

Paphitis, S.

Paphitis, S. A response to Freter and Maj on Non-human animals and forced displacement. *Philosophy Wild Coast Symposium*. Crawfords Lodge, Chintsa. South Africa. October 2017.

Paphitis, S. Community Engagement from the perspective of an emerging academic. *Community Engagement Conference: An engaged university in the 21st century.* University of Limpopo, Polokwane. South Africa. October 2017.

Paphitis, S. The possibility of addressing epistemic injustice through engaged research practice. *Community Engagement: Towards Social and Epistemic Justice*. DUT, Durban. South Africa. May 2017.

Paphitis, S. The second Apartheid of Knowledge. *Democratic Violence: Power, Legitimacy and Injustice in Higher Education.* Rhodes University, Grahamstown. South Africa. March 2017.

Pretorius, K.T.

Pretorius, K.T. Narrative as Belief Motivation: A Pragmatist Account. *Postgraduate Philosophy Association Conference*. UWC, Cape Town. South Africa. July 2017.

Pretorius, K.T. A Pragmatist Approach to Epistemic Injustice. *Community Engagement: Towards Social and Epistemic Justice*. DUT, Durban. South Africa. May 2017.

Ralekhetla, M.M.

Ralekhetla, M.M. Enhancing adaptive planning process by increasing epistemic justice for integrated water resource management. *Postgraduate conference: Sustainability for tomorrow.* Rhodes University, Grahamstown. South Africa. October 2017.

Ralekhetla, M.M. Enhancing adaptive planning process by increasing epistemic justice for integrated water resource management. *Community engagement conference: Towards Social and Epistemic Justice.* DUT, Durban. South Africa. May 2017.

Talbot, A.L.P.

Talbot, A.L.P. Child-participation in knowledge production through the campaigns of the St. Mary's DCC (Development and Care Center) Cub Scout Pack Children as agents of change. *RU/DUT Community Engagement Symposium*. DUT, Durban. South Africa. June 2017.

Talbot, A.L.P. Participant. Brightest Young Minds. *Africa's top 100 social innovators.* Raddison Blu, Johannesburg. South Africa. September 2017.

Thondhlana, M.M.

Thondhlana, M.M. Education for change: changing education? *Rhodes University Education Faculty, CHERTL and ELRC Conference.* Rhodes University, Grahamstown. South Africa. October 2017.



Library Services

During 2017 the Rhodes University Library (RUL) continued to be guided by a revised Strategic Plan (2013-2019), which takes into cognisance the trends and developments impacting academic libraries with specific reference to the librarian's role in research, undergraduate student success, information literacy, new roles and competencies for librarians, and the library as place within the academic context.

The following strategic focus areas were still considered appropriate:

- Positioning the Library in the intellectual midst of the University community.
- Dynamic user services.
- Staff development.
- Technology and innovation.
- Transformation.
- Risk Management.

For the purposes of this report the activities relating to the following strategic priorities impacting research is highlighted:

- 1. Promote the Library' values of service, scholarship, respect, and the provision of diverse resources, and stimulating places as a foundation for University life.
- Provide access to appropriate, authoritative and relevant resources and services at the point of need and in the users' environment.
- 3. Strengthen existing delivery services (physical, electronic and digital), while integrating new technologies, tools and services for information discovery and delivery.

Physical Library & Usage

- 4 Libraries Main, Law, Sound and Cory Library
- Supports SAIAB and ILAM
- 1200 study spaces
- 213 computers for students
- 57 computers for staff
- 10 000 m² space
- Certifying of documents 2 483 transactions
- Library visits:
 - Occupancy Statistics: 172 117
 - Gate count: 550 252

Information Resources & Usage Budget

- Information Resources R 20 666 074
- Books & Monographs: R500 310
- Journals: R2 605 439
- Databases: R17 560 325

Collections

- Monographs in stock: 222 219 including
- 2 799 new books
- e-Books: 11 012
- Journals Individual titles: 145
- Journals via Databases: 37 000
- Repository (including ILAM & Cory digital collections): 16 522 items

Usage

- Circulation: 63 397 Loans (books & other materials)
- Inter-library loans:
 - 722 supplied to other institutions
 - 406 items received
- Database usage:
 - 7 152 285 total database use
 - 705 521 full-text articles downloads

Social Media/Web 2.0

Research visibility was enhanced via discoverability and retweets by followers who include students, academic staff, professional & research organisations, publishers & journal editors, journalists & media organisations, academic libraries and individuals.

- https://www.facebook.com/RhodesUniversityLibrary (2019 followers)
- https://twitter.com/RhodesResearch (1000 followers)
- https://twitter.com/RhodesLibrary (1250 followers)
- 4. Champion open access (OA), open publishing and scholarly communication
- The RU Open Access Policy was adopted by Senate in 2017.
- Open Access Week was observed during 2nd -6th October 2017.

5. Implement scholarly communications

Recognising the importance of collaboration to ensure scholarly communications is consolidated within Rhodes University, Ms. Debbie Martindale, Librarian: Scholarly Communications, has



established working relations with the Research Office, CHERTL and the Centre for Postgraduate Studies.

- 6. Investigate tools and initiatives to enhance access to information resources and the visibility of RU research
- RUL hosted its first Research Week, 8th-12th May 2017 with the theme *In Support of Emerging African Academics & Researchers*. The aim of the Research Week is to raise awareness of how the Library supports research and research visibility, and to strengthen its partnership with the Research Office, Centre for Postgraduate Studies, researchers and Postgraduate students. The programme imaged the personal research roadmap for emerging researchers. Many of the researcher audience attended most, if not all, the sessions. It was encouraging to see the interaction between presenters, speakers and researchers. Our attendance register shows that of the over 150 researchers who attended the event, most came from the Chemistry Department and the School of Languages.
- As a National Research Foundation (NRF) requirement, the RUL continues to advocate for the registration and optimal use of ORCID (Open Researcher and Contributor Identification) among researchers and Postgraduate students. ORCID is the ideal platform to:
 - Connect the individual researcher's various research identifiers and research (peer-reviewed and non-peerreviewed) output into a single, permanent and unique identifier,
 - b. Connect the researcher to Rhodes University, the NRF and publishers;
 - c. Reflect Rhodes University research output and the theses supervision activities undertaken by individual researchers.
- Rhodes Digital Commons continues to be a priority project. This is in alignment with the Open Access Policy of Rhodes University and the NRF Open Access Statement (2015) and ORCID Mandate (2017). Progress in 2017 was frustratingly slow (17 articles were uploaded) due to the need to develop article, book, book chapter and conference templates. It is hoped the resolutions discussed in December 2017 will enable the facilitation of greater volume of research deposits onto the institutional repository.

- Postgraduate and Research Support

a. Several training initiatives to individuals and groups included:

Use of **ZOTERO** to 15 students attached to SARCHi Chair Professor Ruth Simbao:

23rd May, 8th June, 26th July: **ORCID** training for SAIAB librarian Maditaba Meltaf;

6th June: Postgraduate Orientation;

9th June: Journalism and Media Studies Postgraduate group;

8th June and 12th June: Proposal writing;

28th June: Copyright with specific reference to images and art etc. with Rachel Baasch;

20th July: Journalism and Media Studies group; 20th July: Priscilla Boshoff.

- b. ORCID Faculty Conversations: Humanities 14th July, Humanities & Education 21st July, Commerce & Law 28th July, Science & Pharmacy 29th July, Science & Pharmacy 22nd August.
- c. 1st August 2017: Elsevier Scopus Workshop by Lucia Schoombee.
- d. Research Committee: meetings attended on 12th April and 19th May.
- e. Presentation on "Raising Research Visibility" Postgraduate Conference, 30th September.

Publications

Cory Library remains engaged in scholarship and publishing activities. It managed the publication of the following:

- No. 16 in the Graham's Town Series, viz. Dr Sandra Rowoldt-Shell's *Protean Paradox: George Edward Cory Negotiating Life and South African History*, Rhodes University, 2017.
- Dr Shell's *Protean Paradox* was received with much acclaim at its launch in Cory Library on 25 October 2017. Dr Shell has been appointed Senior Research Associate in Cory Library for 2017-2020.

Cory Library assisted the Institute of Social and Economic Research (ISER) at Rhodes University with the preparation of Dr Minsie Duka's manuscript - *Matthew Goniwe on a South African Frontier - A Community History of an African Revolutionary*, which was published in November 2017.

 Sharma, S., Menze, V. *et al.* Antimicrobial Resistance: Identifying the Major Conflicts of Interest and Way Forward. *Indian Journal of Pharmacy Practice*. August 2017.

Conferences/Presentations / Engagements

- Martindale, D. "The Library's strategic plan to supportraising the visibility of institutional research", SEALS Standards Workshop, 19 June;
- Naicker, L. "Open Access Policy" SEALS Standards Workshop, 19 June;
- Van der Walt, W. "Harvesting & Deep Linking". SEALS Standards Workshop, 19 June;
- Van der Walt, W. "Submission, access and exposure management". SEALS Standards Workshop, 19 June;
- ORCID organization membership task team video conference with Matthew Buys (ORCID Director EMEA) with Larshan Naicker, Wynand van der Walt, David Sieborger, Natalie Ripley, Gareth Dampies, Patricia Jacob, 02 June;
- Martindale, D. ORCID training for NMU librarians, Marina Ward, Deidre Gerber, 6 July;
- VITAL Content Strategy with the Digital Team, 14 July [internal];

Library Services



- Clarke, R. Introducing the RUL Web, 7 August [internal];
- Martindale, D. "Enhancing the visibility of you and your research". Interdisciplinary Postgraduate conference. Rhodes University, 30 September;
- Satgoor, U. "Libraries as Desired Spaces". Facilitated LIASA Pre-conference workshop. 02 October;
- Satgoor, U. LIASA Professional Body Recognition: Considerations, Implications & Implementation. LIASA 18th Annual Conference, 03-06 October;
- Still-Drewett, F. "The value and role of Twitter for Scholarly _ Communication and general communication with users". 18th Annual LIASA Conference - 03-06 October;
- D Martindale. ORCID SA Workshop, Benoni, Gauteng, 24 October 2017;
- Radebe, K & Clarke, R. "Rhodes Digital Commons: experiences with Vital". Innovative User Group Southern Africa (IUG-SA) Conference, 8-9 Nov.

IBRARY INFOGRAPHIC

Human Resources

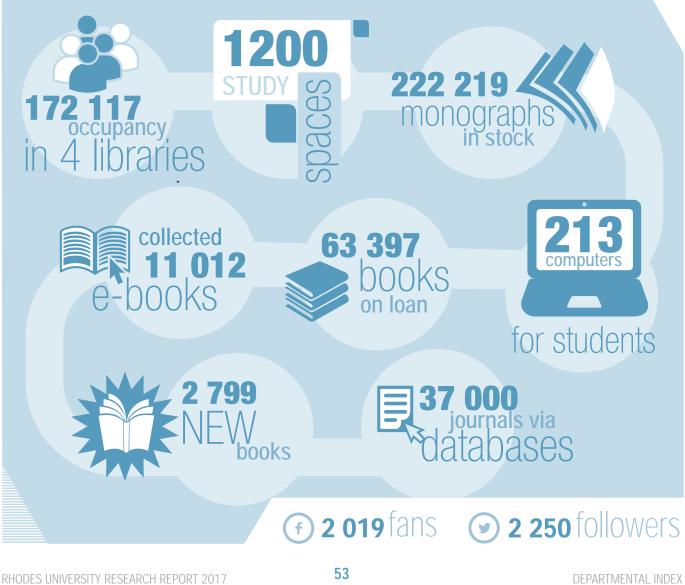
Total Staff complement - 43 staff members.

Formal studies

D Martindale (M.IT, UP); F Still-Drewett (MLIS, UCT); I Kretzmann (PGDipLIS, UNISA); K Yona & T Mamani (B.Inf, UNISA); K Radebe (MLIS, UCT); B Stoltz (MLIS, UKZN); M Mpokela, L Ntaka and S Gule (B.Inf Hons, UKZN).



Ms Ujala Satgoor, Director: Library Services





The Department of Accounting continued to contribute to the throughput of Postgraduate students in the field of taxation, with further publications in that field.



Dr Ferdinand Schneider receiving the prize for the best thesis from the South African Institute of Professional Accountants (SAIPA) Chief Executive, Mr Bongani Coka. Photo: Department of Accounting.

Postgraduates / Graduations

At the graduation ceremony in April 2017, seven (7) Masters' Degrees in Commerce (Taxation) and two (2) PhD degrees were awarded to graduates supervised by Professor E (Lilla) Stack. One of the PhD graduates, Dr FD Schneider, was awarded the South African Institute of Professional Accountants (SAIPA) prize for the best PhD thesis in taxation in South Africa for 2017 at the SAIPA "Top Achievers Awards" ceremony.

Significant Research Aligned Events

Professor Lilla Stack contributed three (3) chapters to a reference work on research, entitled *Economic and Management Research* published by Oxford University Press.

Associate Professor Jackie Arendse published eight (8) chapters in *Silke on Tax Administration*, a peer-reviewed guide to the administrative provisions of taxation legislation in South Africa. Professor Arendse is the managing author of the book,

which is published by LexisNexis. Widely used by professionals, academics and students, it explains the investigation and audit powers of SARS, provides guidance on taxpayers' rights relating to taxation, and incorporates commentary and interpretation on a range of legislative items.



Associate Professor Jackie Arendse, Head of Department

Department of Accounting



PUBLICATIONS

Books/Chapters/Monographs

Arendse, J.A.

Arendse, J.A. (2017) Chapter 4: Registration, returns, assessments and records. In: *Silke on Tax Administration*. 9th Ed. South Africa: Lexis Nexis (Pty) Ltd. p.4.1-4.61. ISBN: 9780409059366.

Arendse, J.A. (2017) Chapter 5: Dispute resolution. In: *Silke on Tax Administration*. 9th Ed. South Africa: Lexis Nexis (Pty) Ltd. p.5.1-5.72. ISBN: 9780409059366.

Arendse, J.A. (2017) Chapter 6: Advance rulings. In: *Silke on Tax Administration*. 9th Ed. South Africa: Lexis Nexis (Pty) Ltd. p.6.1-6.38. ISBN: 9780409059366.

Arendse, J.A. (2017) Chapter 7: Administrative penalties. In: Silke on Tax Administration. 9th Ed. South Africa: Lexis Nexis (Pty) Ltd. p.7.1-7.73. ISBN: 9780409059366.

Arendse, J.A. (2017) Chapter 8: Audit, investigation, search, seizure and access to information. In: *Silke on Tax Administration*. 9th Ed. South Africa: Lexis Nexis (Pty) Ltd. p.8.1-8.53. ISBN: 9780409059366.

Arendse, J.A. (2017) Chapter 9: Payment of taxes, refunds and SARS' collection powers. In: *Silke on Tax Administration*. 9th Ed. South Africa: Lexis Nexis (Pty) Ltd. p.9.1-9.91. ISBN: 9780409059366.

Arendse, J.A. (2017) Chapter 10: Registration, returns, assessments and records. In: *Silke on Tax Administration*. 9th Ed. South Africa: Lexis Nexis (Pty) Ltd. p.10.1-10.16. ISBN: 9780409059366.

Arendse, J.A. (2017) Chapter 11: Miscellaneous provisions. In: *Silke* on *Tax Administration*. 9th Ed. South Africa: Lexis Nexis (Pty) Ltd. p.11.1-11.39. ISBN: 9780409059366.

Stack, E.

Stack, E. (2017) Research Reporting. In: Venter, P., Van Zyl, D., Janse Van Rensburg, W., Joubert, P., Pellissier, R. and Stack, E. (eds.). *Economic and Management Research*. South Africa: Oxford University Press. p.214-236. ISBN: 9780199049301.

Stack, E. (2017) Writing a Research Proposal. In: Venter, P., Van Zyl, D., Janse Van Rensburg, W., Joubert, P., Pellissier, R. and Stack, E. (eds.). *Economic and Management Research*. South Africa: Oxford University Press. p.186-213. ISBN: 9780199049301.

Stack, E. (2017) The Literature Survey. In: Venter, P., Van Zyl, D., Janse Van Rensburg, W., Joubert, P., Pellissier, R. and Stack, E. (eds.). *Economic and Management Research*. South Africa: Oxford University Press. p.52-71. ISBN: 9780199049301.



The Department of Anthropology had an exciting year with staff members engaging in number of interesting research projects. The topics spanned across marine and ecological issues to urbanization and urban greening and childhood experiences of natural environments by rural AIDS orphans. Various research was undertaken in South Africa's Eastern Cape and KwaZulu-Natal provinces, Tanzania, and the Pacific Islands.



Dr Anne Lemahieu, Postdoctoral Research Fellow, conducting fieldwork on human perceptions of encironmental and climatic chance in SW Madagascar. Photo: Shankar Aswani.

Professor Aswani is currently involved in a number of national and international research projects. He is a member of Team South Africa and Team Western Indian Ocean in the Global Learning for Local Solutions: Reducing Vulnerability of Marinedependent Coastal Communities (GULLS) Belmont-Forum funded program. He is also a co-PI of the Resilience of Pacific Island Coral Reef Social-Ecological Systems in Times of Global Change (REPICORE) project at the Leibniz Center for Tropical Marine Ecology-ZMT at Bremen University, Germany. He is also a co-PI on a UK funded SOLCISTE project which received funding to the value of R144-million and focuses on ocean sciences and the collapse of two (2) key fisheries in South African and East African waters that support more than sixty (60) million people.

Associate Professor Michelle Cocks together with Professor Charlie Shackleton continued to lead their multidisciplinary research project entitled *A Place to Belong* that aims to unpack how urban nature(s) can assist and facilitate processes of belonging and well-being. Funding from the National Research Foundation (NRF) Competitive Rated Research Program supported three (3) masters students during the course of 2017: two (2) from the Department of Environment Science and one (1) from the Anthropology Department. Two (2) Anthropology honours students received funding to carry out their research under the umbrella of the project.

Dr Patti Henderson continued working on publications related to her HIV/AIDS orphans and environmental issues. While in Germany on an exchange programme at the University of Westfalia she worked on a journal article on the South African artist Mary Sibande.

Janet Hayward and Shabnam worked towards completing their research for their PhD studies, entitled: "We are white": Oral tradition, documented history and molecular biology of Xhosa clans descended from non-African forebears and their expression of this ancestry through the idiom of ancestor religion; Behind the Veil: HIV/AIDS in the Muslim Community of Durban, South Africa., respectively.

Significant Research Aligned Events

Professor Aswani's projects in Africa are significant because they aim to understand coastal vulnerability of African



communities living near "hotspots", or ocean regions that are experiencing changing climatic conditions further compounding social tensions within vulnerable communities. Areas identified as hotspots represent laboratories for observing change and developing adaptation options and management strategies.

Professor Aswani's project in the Pacific Islands aims to combine social and natural sciences to develop an integrated assessment towards a more holistic understanding of coupled social-ecological systems. This research is providing important and much-needed information to develop strategies to strengthen the resilience and sustainable use of Pacific Island coral reef systems.

The funding received for research in Tanzania will contribute to knowledge generation around socio-ecological systems in the region and feed into developing regional models of fisheries sustainability in Tanzania. The funding received from the Sandisa Imbewu (Rhodes University) and NRF has allowed him to also focus on local marine and coastal research.

In May 2017 Associate Professor Cocks together with Professor Shackleton hosted a workshop entitled A Place to Belong. Participants invited to the workshop included both local and international colleagues working in urban-environmental related research viz. Dr Henrik Ernston - History of Science, Technology and Environment; Leizel Williams-Bruinders - Department of Geosciences, Nelson Mandela University; Professor Anton de Wit - Department of Geosciences, Nelson Mandela University and Professor Sarel Cilliers - Department of Botany, North West University. Masters and honours students on the Urban Realities research team also attended.

The main objective of the workshop was to share research approaches and findings. Opportunities for collaboration between invited participants were explored. An international workshop is being planned for 2019. Amanda Manyani, MSc student on the research team, presented her research findings at the World Urban Parks (WUP) & Institute of Environment and Recreational Management (IERM) Congress held in Illovo from the 11-13th September 2017.

Dr Patti Henderson delivered a seminar on Mary Sibande's work at the University of Westfalia, Munster. She was also invited by the Fine Arts Department at the University of KwaZulu-Natal to present her research on Gregory Maqoma, a local renowned choreographer. Her research on the two (2) artists form part of a group of four (4) local artists she is working on in relation to theories of becoming and possibility. Once complete this set of four (4) articles will form the basis of a short book contributing to the field of Politics of Performance that Dr Henderson teaches in the Anthropology Department.



Associate Professor Michelle Cocks, Head of Department

Students investigating the types of green spaces urban residents

have access to in Aloevale, Queenstown.







Urban Realties workshop held in Grahamstown Photo: Michelle Cocks.

RHODES UNIVERSITY RESEARCH REPORT 2017



PUBLICATIONS

Books/Chapters/Monographs

Benessaiah, N. and Calis, I.

Benessaiah, N. and Calis, I. (2016) African trysts: Re-imagining the Saharan divide. In: Boswell, R. and Nyamnjoh, F. (eds.). *Postcolonial African Anthropologies*. Cape Town: HSRC Press. p.177-194. ISBN: 9780796925695.

Bernard, P.S.

Bernard, P.S. (2017) Suspending disbelief and experiencing the extraordinary: How radical participation may facilitate an understanding of aquatic snakes and fish-tailed beings in southern Africa. In: Hurn, S. (ed.). *Anthropology and Cryptozoology: Exploring encounters with mysterious creatures.* New York: Routledge: Taylor and Francis. p.139-156. ISBN: 9781409466758.

De Wet, C.J.

De Wet, C.J. (2016) Research, knowledge and power: A case study of interaction between an anthropologist and a 'community' over three decades. In: Boswell, R. and Nyamnjoh, F. (eds.). *Postcolonial African Anthropologies*. Cape Town: HSRC Press. p.69-85. ISBN: 9780796925695.

Henderson, P.C.

Henderson, P.C. (2016) Mapping journeys through landscape: Phenomenological explorations of environment amongst rural AIDS orphans. In: Boswell, R. and Nyamnjoh, F. (eds.). *Postcolonial African Anthropologies*. Cape Town: HSRC Press. p.86-111. ISBN: 9780796925695.

Owen, J.

Owen, J. (2016) Humanising the Congolese 'Other': Love, research and reflexivity in Muizenberg, South Africa. In: Boswell, R. and Nyamnjoh, F. (eds.). *Postcolonial African Anthropologies*. Cape Town: HSRC Press. p.34-68. ISBN: 9780796925695.

Pattenden, O.

Pattenden, O. (2017) Schooling in Post-Apartheid South Africa:



SW Madagascar Women with a daily catch of octopus, which is an important seafood staple in the region. Photo: Shankar Aswani.

Hopes, Struggles, and Contested Responsibilities. In: Stambach, A. and Hall, K.D. (eds.). *Anthropological Perspectives on Student Futures: Youth and the Politics of Possibilities*. USA: Palgrave Macmillan. p.85-102. ISBN: 9781137547859.

Peer Reviewed Subsidy-Earning Journal Research Publications

Aswani, S.

Rohe, J.R., **Aswani, S.**, Schluter, A. and Ferse, S.C.A. (2017) Multiple Drivers of Local (Non-) Compliance in Community-Based Marine Resource Management: Case Studies from the South Pacific. *Frontiers in Marine Science*. 4 (172). p.1-14.

Aswani, S. (2017) Customary management as TURFs: social challenges and opportunities. *Bulletin of Marine Science*. 93 (1). p.3-12.

Bova, C.S., Halse, S.J., Aswani, S. and Potts, W.M. (2017) Assessing a social norms approach for improving recreational fisheries compliance. *Fisheries Management and Ecology*. 24. p.117-125.

Aswani, S., Albert, S. and Love, M. (2017) One size does not fit all: Critical insights for effective community-based resource management in Melanesia. *Marine Policy.* 81. p.381-391.

Aswani, S., Basurto, X., Ferse, S., Glaser, M., Campbell, L., Cinner, J.E., Dalton, T., Jenkins, L.D., Miller, M.L., Pollnac, R., Vaccaro, I. and Christie, P. (2017) Marine resource management and conservation in the Anthropocene. *Environmental Conservation*. p.1-11.

Ensor, J.E., Abernethy, K.E., Hoddy, E.T., **Aswani, S.**, Albert, S., Vaccaro, I., Benedict, J.J. and Beare, D.J. (2017) Variation in perception of environmental change in nine Solomon Islands communities: implications for securing fairness in community-based adaptation. *Regional Environmental Change*. p.1-13.

Benessaiah, N.

Dominguez, P. and **Benessaiah**, N. (2017) Multi-agentive transformations of rural livelihoods in mountain ICCAs: The case of the decline of community-based management of natural resources in the Mesioui agdals (Morocco). *Quaternary International*. 437. p.165-175.

> Children from Okhahlamba imitating the anthropologist and enacting a scene of adult male conviviality. Photo: Patti Henderson.





Calis, I.

Calis, I. (2017) Routine and rupture: The everyday workings of abyssal (dis)order in the Palestinian food basket. *American Ethnologist*. 44 (1). p.65-76.

Cocks, M.

Cocks, **M.**, **Vetter**, **S.** and Wiersum, K.F. (2017) From universal to local: perspectives on cultural landscape heritage in South Africa. *International Journal of Heritage Studies*. p.1-18.

Ngade, I.

Ngade, I., Singer, M., Marcus, O. and Hasemann, J. (2017) Implications of Changing Attitudes towards Game Meat Consumption at the Time of Ebola in Limbe, Cameroon. *Human Organization*. 76 (1). p.45-58.

Shaik, S.

Shaik, S. (2017) HIV/AIDS and Muslims in South Africa: The 'Untouchable' Disease. *Alternation: Interdisciplinary Journal for the Study of the Arts and Humanities in Southern Africa (Formerly International Journal for the Study of Southern African Literature and Languages*). 24 (1). p.314-335.

Research Papers Presented at Academic/Scientific Conferences (Non-peer-reviewed Proceedings)

Aswani, S.

Aswani, S. Invited discussant at the "Indigenous community engagement and MPAs: Chile and International case studies" workshop. Pew Fellows in Marine Conservation, Puerto Varas, Chile, October 2017.

Aswani, S. Invited papers presented at the University de la Laguna (ULL) entitled "Las poblaciones humanas y los océanos: aportaciones desde una visión interdisciplinar y aplicada de las ciencias sociales" and "Retos para la adaptación de la gestión consuetudinaria: la protección de los ecosistemas costeros y las formas de vida tradicionales en África". Tenerife, Spain, June 2017.

Aswani, S. Invited paper presented at the Benguela Current Commission workshop entitled "Understanding the role of People in Ecosystem Management and Health Monitoring". Department of Environmental Affairs, Cape Town, March 2017.

Aswani, S. Keynote speaker at the Fifth International Conference on Climate Services (ICCS5) of the international Climate Service Partnership (CSP) for a paper entitled "Global Impoverishment of Indigenous Knowledge and Implications for Innovation." Cape Town, South Africa, Feb-March, 2017.

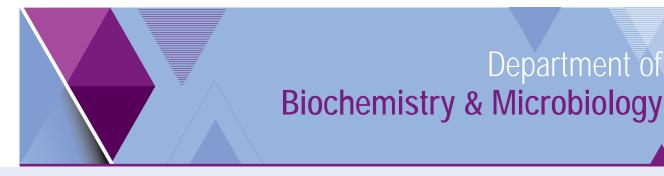
Cocks, M.L.

Manyani, A., Shackleton, C.M. and Cocks, M. How do urban dwellers identify with natural elements within urban green spaces in the Eastern Cape? *IERM Convention: People & Green Spaces* not known, Johannesburg. South Africa. September 2017.

Cocks, M.L. Decolonization of Nature in towns and cities of South Africa: incorporation of biocultural values. *Urban Green Infrastructure* - *Connecting People and Nature for Sustainable Cities. GreenSurge Conference.* Skodsborg Kurhotel, Malmo. Sweden. September 2017.

Cocks, M.L. and Njwambe, T.A.

Cocks, M.L., **Njwambe, T.A.** and **Vetter, S.** Misread landscape: the contribution of rural landscapes to people's sense of identity and belonging. *Land Ownership, Governance and Sustainability Colloquium.* Hunterstoun Centre, Hogsback. South Africa. October 2017.



The Department of Biochemistry and Microbiology had an excellent research year. The two (2) National Research Foundation (NRF) SARChI Chairs, the Research Unit in Bioinformatics, the Biomedical Biotechnology Research Unit, the Medical Research Council (MRC) University Flagship Drug Discovery Programme, the Enzyme Science and Technology Programme and the Mycorrhizal Research group form a formidable group of talented academics and student scientists, who continue to produce high quality research.



Postgraduates / Graduations

A total of twenty-three (23) Honours, eleven (11) Master's and eight (8) PhD students graduated from the department this year.

PhD candidate, Ms Natasha Boel was invited to co-author a book chapter with Professor Edkins on her PhD research and gave an oral presentation at the Gordon Research Seminar on Fibronectin, Integrins & Related Molecules (GRS) in Ventura, California.

PhD candidate, Ms Stacey Mattison, conducted a research visit to the laboratory of Professor Didier Picard at University of Geneva as part of a Swiss-South Africa collaboration grant between Professor Edkins and his group. During the visit, Ms Mattison received training in immune-histochemical analysis of tumour samples and was able to transfer this technology

Taking water samples at the meltwater pool near Vassdalen. Photo: Department of Biochemistry and Microbiology.

to Professor Edkins' laboratory at the end of the visit. During this visit, Ms Mattison also presented her PhD research at the 8th International Congress on Stress Response in Biology and Medicine held in Turku, Finland.

PhD candidates, Laura Dingle and William Samson conducted a research visit in December 2017 to India as part of a South Africa-India NRF collaboration grant between Professor Edkins (Rhodes) and Professor Arindam Bhattacharyya (Calcutta). During this time, the students presented their research and interacted with Postgraduates at Calcutta and Kalyani Universities in West Bengal.

PhD graduate and member of the Marine Natural Products group, Samantha Waterworth visited Dr Jason Kwan's laboratory in the School of Pharmacy, University of Wisconsin at Madison, Wisconsin (USA) in June. Dr Waterworth worked with members of the Kwan group to develop a metagenomic



sequence analysis pipeline for the elucidation of secondary metabolite biosynthetic pathways in marine sponges.

In July, Dr Xavier Siwe-Noundou and Mr Jarmo Kalinski presented their data at the annual meeting of the American Society of Pharmacognosy in Portland, Oregon (USA). They then spent a month as visiting researchers in the laboratory of Professor Kerry McPhail at the Oregon State University in Corvallis Oregon (USA) where they received specialized training in Nuclear Magnetic Resonance Spectroscopy and Mass Spectrometry applications for marine natural products research.

Distinguished Visitors / International Visits

Professor Greg Blatch, Pro-Vice Chancellor of Research at Notre Dame University (Australia) and Visiting Professor, visited and interacted with academics and Postgraduates in BioBRU and the department.

Professor Arindam Bhattacharyya of University of Calcutta visited his collaborators in BioBRU in May 2017.

Former members of the Rhodes University Department of Microbiology, Professor Frank Robb, and Dr Susan Robb of the Institute of Marine and Environmental Technology, Baltimore, Maryland, (USA) visited the Department in September. Professor Robb interacted with members of the Marine natural Products Research group and presented a research seminar entitled "A working model of a novel ancestral protein folding machine".

Significant Research Aligned Events

Professor Adrienne Edkins was successful in securing funding from German Academic Exchange Service (DAAD) to recruit up to fifteen (15) PhD students from sub-Saharan African countries to complete their PhDs in Biochemistry and Microbiology at Rhodes University over the next three (3) years. This funding will cement Rhodes University as a leader in Africa and enhance its role in supporting development of research capacity in Africa.

Dr Brendan Wilhelmi attended the orientation meeting in Bonn, Germany to represent the department at the launch of this funding.

Professor Edkins gave a public lecture in recognition of the VC Distinguished Research Medal awarded to her in 2015. Professor Edkins was nominated as a Member of Academy of Science of South Africa (ASSAf), and in association with ASSAf, she hosted Nobel Prize Laureate Professor Michael Levitt at Rhodes University. Professor Levitt interacted with Postgraduate students and gave a public lecture on his research to the Grahamstown community.

Professor Brett Pletschke and a Dr Samkelo Malgas, attended and presented their research findings at the 39th Symposium on Biotechnology for Fuels and Chemicals in San Francisco in the USA, May 1-4, 2017. Their work focused on the bioconversion of softwoods into fuels and chemical for the bio-economy. Brett Pletschke also contributed to a review in the International Energy Agency (IEA) Bioenergy Task 39 December 2017 Newsletter, which was entitled: "Perspectives on Biofuels in Sub-Saharan Africa", which summarises the current state of biofuel technology on the African continent.

Dr Gwynneth Matcher undertook an expedition with Rhodes University colleagues to Western Dronning Maud (Jutulsessen and Ahlmanriggen) to collect water, soil and lichen samples as part of an Antarctic microbial ecology study.

Professor Dorrington led a successful proposal to establish a SARChI-led Community of Practice in Marine Science. The Community of Practice brings together a transdisciplinary, multi-institutional team of eighteen (18) senior researchers, including six (6) SARChI Chairs, all actively engaged in research in the Eastern Cape, with the aim of developing a regional marine spatial plan for Algoa Bay.

The "Algoa Bay Project" will develop the first marine spatial plan in South Africa, and feed directly into the process for developing a national Marine Spatial Plan that underpins the development of our Blue Economy. The Marine Natural Products Research team has also been received a grant from the Gordon and Betty Moore Foundation (USA) for molecular ecology research on South African marine stromatolites. The project ("How Microbes Use Chemistry to Form Ecosystems in Layered Living Rock") is a collaboration with researchers from Oregon State University, the University of California at San Diego and the University of Wisconsin at Madison that will run through to the end of 2020.



Dr Brendan Wilhelmi, Head of Department



PUBLICATIONS

Books/Chapters/Monographs

Dames, J.F.

Valentine, A.J., Kleinert, A., Thuynsma, R., Chimphango, S., **Dames**, **J.F.** and Benedito, V.A. (2017) Physiology and Spatio-temporal Relations of Nutrient Acquisition by Roots and Root Symbionts. In: Canovas, F.M., Luttge, U. and Matyssek, R. (eds.). *Progress in Botany 78*. New York: Springer. p.167-233. ISBN: 9783319494890.

Distinguished Visitors

Pletschke, B.I. and Soltermann, A.

Brett Pletschke hosted **Arnaldo Soltermann**, from the University of Rio Cuarte, Argentina, in January 2017.

Tastan Bishop, O. and Atilgan, C.

O Tastan Bishop and **C Atilgan**. Sabanci University, Istanbul, Turkey. Collaboration, research and workshop. August 2017.

Edkins, A.L. and Bhattacharyya, A.

Edkins, A.L. and Bhattacharyya, A. Rhodes University, Grahamstown, RSA. Research collaboration and postgraduate training. May 2017.

Edkins, A.L. and Blatch, G. L.

Edkins, A.L. and Blatch, G. L. Rhodes University, Grahamstown, RSA. Research collaboration and postgraduate training. December 2017.

Edkins, A.L. and Levitt, M.

Edkins, A.L. and Levitt, M. Rhodes University, Grahamstown, RSA. Community engagement and public engagement with science. December 2017.

Knox, C.M., Szewczyk, B. and Rabalski, L.

Szewczyk, **B**. and **Rabalski**, **L**. University of Gdansk and Medical University of Gdansk, Gdansk, Poland. Collaboration, genomics workshop and research. June-July 2017.

International Visits

Knox, C.M. and Jukes, M.D.

Knox, C.M. and M Jukes. University of Gdansk and Medical University of Gdansk, Gdansk, Poland. Collaboration, student exchange and research. June-July 2017.

Peer Reviewed Subsidy-Earning Journal Research Publications

Adeoyo, O.R., Pletschke, B.I. and Dames, J.F.

Adeoyo, O.R., Pletschke, B.I. and Dames, J.F. (2017) Improved endoglucanase production and mycelial biomass of some ericoid fungi. *AMB Express.* 7 (15). p.1-8.

Blatch, G.L.

Daniyan, M.O. and Blatch, G.L. (2017) Plasmodial Hsp40s: New Avenues for Antimalarial Drug Discovery. *Current Pharmaceutical Design.* 23 (30). p.4555-4570.

Boel, N., Edkins, A.L., Isaacs, M. and Hoppe, H.C. Mbaba, M., Mabhula, A.N., Boel, N., Edkins, A.L., Isaacs, M., Hoppe, H.C. and Khanye, S.D. (2017) Ferrocenyl and organic novobiocin derivatives: Synthesis and their *in vitro* biological activity. *Journal of Inorganic Biochemistry.* 172 (2017). p.88-93.

Brooks, M.

Ismail, M., Compton, S.G. and Brooks, M. (2017) Interaction between temperature and water nutrient levels on the fitness of *Eccritotarsus* catarinensis (Hemiptera: Miridae), a biological control agent for water hyacinth. *Biological Control.* 106 (2017). p.83-88.

Zhang, R.H., Li, Z.G., Liu, X.D., Wang, B.C., Zhou, G.L., Huang, X.X., Lin, C.F., Wang, A.H. and **Brooks**, **M**. (2017) Immobilization and bioavailability of heavy metals in greenhouse soils amended with rice straw-derived biochar. *Ecological Engineering*. 98 (1). p.183-188.

Members of the marine natural products research team collecting samples at a coastal stromatolite field near Port Elizabeth. Photo: Department of Biochemistry and Microbiology.



Brown, D.K. and Tastan Bishop, O.

Brown, D.K. and **Tastan Bishop, O.** (2017) HUMA: A platform for the analysis of genetic variation in humans. *Human Mutation*. (2017). p.1-11.

Mulder, N.J., Adebiyi, E., Adebiyi, M., Adeyemi, S., Ahmed, A., Akanle, B., **Brown, D.K.**, Armstrong, D.L., Alibi, M., **Tastan Bishop, O.** and *et al.* (2017) Development of Bioinformatics Infrastructure for Genomics Research. *Global Heart.* 12 (2). p.91-98.

Brown, **D.K**. and **Tastan Bishop**, **O**. (2017) Role of Structural Bioinformatics in Drug Discovery by Computational SNP Analysis: Analyzing Variation at the Protein Level. *Global Heart*. 12 (2). p.151-161.

Brown, D.K., Penkler, D.L., Sheik Amamuddy, O., Ross, C. and Tastan Bishop, O.

Brown, D.K., Penkler, D.L., Sheik Amamuddy, O., Ross, C., Atilgan, A.R., Atilgan, C. and Tastan Bishop, O. (2017) MD-TASK: a software suite for analyzing molecular dynamics trajectories. *Bioinformatics*. 33 (17). p.2768-2771.

Brown, D.K., Sheik Amamuddy, O. and Tastan Bishop, O.

Brown, D.K., Sheik Amamuddy, O. and Tastan Bishop, O. (2017) Structure-Based Analysis of Single Nucleotide Variants in the Renin-Angiotensinogen Complex. *Global Heart.* 12 (2). p.121-132.

Dames, J.F.

Coombes, C.A., Hill, M.P., Moore, S.D. and **Dames, J.F.** (2017) Potential of entomopathogenic fungal isolates for control of the soildwelling life stages of *Thaumatotibia leucotreta* Meyrick (Lepidoptera: Tortricidae) in citrus. *African Entomology.* 25 (1). p.235-238.

De La Mare, J.A. and Edkins, A.L.

Dziwornu, G.A., Caira , M.R., **De La Mare, J.A.**, **Edkins, A.L.**, Bolton, J.J., Beukes, D.R. and Sunassee, S.N. (2017) Isolation, Characterization and Antiproliferative Activity of New Metabolites from the South African Endemic Red Algal Species *Laurencia Alfredensis*. *Molecules*. 22 (2017). p.1-16.

De La Mare, J.A., Jurgens, T. and Edkins, A.L.

De La Mare, J.A., Jurgens, T. and Edkins, A.L. (2017) Extracellular Hsp90 and TGFB regulate adhesion, migration and anchorage independent growth in a paired colon cancer cell line model. *BMC Cancer.* 17 (202). p.1-16.

Dhanani, K.C.H., Samson, W.J. and Edkins, A.L.

Dhanani, K.C.H., Samson, W.J. and Edkins, A.L. (2017) Fibronectin is a stress responsive gene regulated by HSF1 in response to geldanamycin. *Scientific Reports*. 7 (17617). p.1-13.

Dorrington, R.A.

Ansorge, I.J., **Skelton, P.H.**, Bekker, A., de Bruyn, P.J.N., Butterworth, D., Cilliers, P., Cowan, D.A., **Dorrington, R.A.**, **Froneman, P.W.**, **Meiklejohn, I.** and *et al.* (2017) Exploring South Africa's southern frontier: A 20-year vision for polar research through the South African National Antarctic Programme. *South African Journal of Science.* 113 (5/6). p.1-7.

Edkins, A.L. and Blatch, G.L.

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Members of the marine natural products research team collecting samples at a coastal stromatolite field near Port Elizabeth. Photo: Department of Biochemistry and Microbiology.



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Sigauke, L.T., Dorrington, R.A. and Lobb, K.A. Interrogation of the Solution Dynamics of Eukaryotic Initiation Factor 5A by Coupling Simulation Dynamics with NMR Observables. 2017 International Conference on Bioinformatics Research and Applications (ICBRA 2017). Barcelona. Spain. December 2017.

Research Papers Presented at Academic/Scientific Conferences (Non-peer-reviewed Proceedings)

Boel, N.M.E., Hunter M.C., and Edkins, A.L.

Boel, N.M.E., Hunter M.C., and **Edkins, A.L.** Investigating the role of Hsp90 and LRP1 in FN matrix dynamics and its implications in cancer cell migration. *Gordon Research Seminar on Fibronectin, Integrins & Related Molecules (GRS).* Ventura, California, USA, 28 - 29 Jan 2017.

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Boel, N.M.E., Hunter M.C., and **Edkins, A.L.** Investigating the mechanism of fibronectin turnover: identifying a role for LRP1 and Hsp90. *Gordon Research Conference on Fibronectin, Integrins & Related Molecules.* Ventura, California, USA. 29 January - 03 February 2017.

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Dames, J.F., Koch, S. and Sekgota, W.M. Conservation Agriculture - Are mycorrhizal fungi also conserved? *9th International Conference on Mycorrhiza*. Clarion Congress Hotel, Prague. Czech Republic. August 2017.

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Mattison, S.A., Hoft, M.A., Blatch, G.L., and Edkins, A.L. Mattison, S.A., Hoft, M.A., Blatch, G.L., and Edkins, A.L. Identification of a novel isoform of Hsp70/Hsp90 Organising Protein (HOP) targeted to the extracellular environment of cancer cells. *The 8th International* *Congress on Stress Response in Biology and Medicine*. Turku, Finland. 13-17 August 2017.

Van Der Merwe, M., Jukes, M.D., Rabalski, L., Opoku-Debrah, J.K., Knox, C., Hill, M.P., Moore, S.D. and Szewczyk, S. Genetic stability of the *Cryptophlebia leucotreta* granulovirus (CrleGV-SA), after 15 years of commercial use as a biopesticide. *Proceedings of the 16th Meeting of the IOBC-WPRS Working Group: Microbial and Nematode Control of Invertebrate Pests*. Tiblisi. Georgia. June 2017.

van der Merwe, M., Knox, C.M., Hill, M.P., and Moore, S.D., 2017. Yeast-virus synergism for improving the efficacy of the *Cryptophlebia leucotreta* granulovirus. Oral presentation at the 3rd Department of Zoology and Entomology Annual Post Graduate Research Symposium held at Rhodes University, Grahamstown, South Africa. 26 - 27 October.

Jukes, M.D., Rabalski, L., Knox, C.M., Hill, M.P., Moore, S.D. and Szewczyk, B., 2017. Baculovirus synergy: mixed Alphabaculovirus and Betabaculovirus infections for the control of *Thaumatotibia leucotreta* in South Africa. Oral presentation at the 3rd Department of Zoology and Entomology Annual Post Graduate Research Symposium held at Rhodes University, Grahamstown, South Africa. 26 - 27 October.

Malgas, S. and Pletschke, B.I.

Malgas, S., Chandra, R., Van Dyk, S., Saddler, J.J. and Pletschke, B.I. Enzyme cocktail inhibition: Inhibitory effects of individual pretreatment by-products and wash liquors from hardwoods on HoloMix, a holocellulolytic enzyme core-set. *39th Symposium on Biotechnology for Fuels and Chemicals*. San Francisco Marriott Marquis, San Francisco. USA. January 2017.

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Mkile, Z. and Dames, J.F.

Mkile, Z., Dames, J.F., Maqubela, M.P. and Howieson, J. The effects of mycorrhizas on N and P concentrations in grasses, legumes and soil treated with different levels of phosphorus. *15th International Symposium of Soil and Plant Analysis*. Grand Metropark Hotel, Nanjing. China. May 2017.

Biotechnology & the Biotechnology Innovation Centre (RUBIC)

The Rhodes University Biotechnology Innovation Centre built on previous strengths and collaborations to further entrench itself as a leader in biotechnology in South Africa and Africa as a whole. The Centres' founding pillars; Educate, Innovate and Communicate were highlighted through outstanding contributions in research, teaching and learning praxis and science communication. Beyond the academic staff, the students who drove initiatives to translate research for economic and societal benefit also exemplified this.



MSc student Priscilla Keche (right) demonstrates the use of a cellphone based application to assist healthcare workers in interpreting colour changes of urine strip tests. The test is being developed by computer science Masters student JC Bailey as part of part of a UNICEF collaboration with RUBIC. Photo: RUBIC.

Postgraduates / Graduations

RUBIC hosted thirty (30) Honours, Masters and PhD students in 2017. The Centre graduated ten (10) Honours (including one (1) Joint with the Department of Physics & Electronics), four (4) Masters (including one (1) distinction) and one (1) Doctoral candidate sat the graduation ceremony in April 2017.

Technology Transfer and Innovation

Awards

RUBIC launched two (2) new prototypes at the Innovation Bridge Technology Matchmaking and Showcasing Event - an initiative of the Department of Science and Technology (DST) in 2017.

Two (2) MSc students, **Mr Lucas Lotter** and **Mr Charles Faul**, under the supervision of **Professor Janice Limson**, **Dr Ronen Fogel** and **Dr Earl Prinsloo**, beat over three hundred (300) prototypes at the event to win the coveted Best Prototype Award for FieldLab, a lab in a box for on-site medical diagnostics. FieldLab continued its winning spree with a halfa-million rand first prize in the Innovation Hub's GAP-Biosciences national awards in November 2017.

The second prototyope, Amyoli, showcased by Masters Biotechnology graduate Aphiwe Mfuku, received positive attention for his portable prototype, which removes bacteria and metals from water on-site. **Mr Aphiwe Mfuku** is also RUBIC's first entrepreneur in residence. Working with Professor Limson and Dr Fogel he was awarded a seed funding grant from the Technology Innovation Agency (TIA) for the further development of his nanofibre based prototype for water treatment. Mr Mfuku was also funded through a generous grant awarded by the Brenley Trust, United Kingdom.

Unicef Innovation Laboratory

In its second year, research in the UNICEF funded Innovation Laboratory led by Professor Limson and Dr Fogel continued



its work in the generation of novel aptamers for diagnostic and therapeutic applications. Novel aptamers linked with HIV monitoring developed by Tamika Fellows have been earmarked for patenting, while prototype development for a new diagnostic for discriminating between different species of malaria (Kelly Anne Frith and Martin Ogunmolasuyi) showed great promise. Research in development of new cellphone based applications in collaboration with James Connan (Rhodes University, Department of Computer Science) also continued apace.

Distinguished Visitors / International Visits

Ms Tanya Accone, Senior Adviser on Innovation at UNICEF visited RUBIC in July 2017 to further the collaborative partnership between RUBIC and the UNICEF Global Innovation Centre established in 2016. Ms Accone also presented the 8th Annual PD Rose Biotechnology Lecture titled "Unleash your Inner Innovator".

Professor Janice Limson was invited to speak at the *Responsible Research and Innovation (RRI): Coming to Grips with a Contentious Concept* conference at the Center for Interdisciplinary Research in Bielefeld, Germany in April 2017.

Significant Research Aligned Events

Collaborations established in previous years with Distinguished **Professor Tebello Nyokong** (DST/MIntek Nanotechnology Innovation Centre - Sensors), **Dr Bonga Zuma** (Goadex Pty Ltd), and Professor Addmore Shonhai (University of Venda) resulted in the publication of six (6) peer-reviewed journal articles.

Dr Aileen Boshoff, further established herself as one of the leading researchers in *Trypanosome* molecular biology and drug discovery in South Africa through a collaborative research project with Dr Robert Kezyers at Victoria University of Wellington in New Zealand.

The Prinsloo Lab (**Dr Earl Prinsloo**) received a three (3) year Self-Initiated Research grant from the South African Medical Research Council toward the development of a low cost additive manufacturing solution (bioprinter) for tissue engineering in order to develop *in vitro* disease models. Further to this Dr Prinsloo opened a dedicated space for additive manufacturing, the RUBIC MakerLab, which has been utilised for research and teaching & learning. Notably, **Dr Ronen Fogel** integrated the use of 3D printing in the Third Year Microbiology curriculum for development of acetic acid bioreactors.

Internationally, Professor Janice Limson served as Track coordinator for the Chemical, Electrochemical and Gas Sensors symposium of the Annual IEEE Sensors meeting held in Glasgow in October 2017. She was also invited to serve as the Co-Chair (along with old Rhodian Professor Ken Ozoemena) of the upcoming 70th International Society of Electrochemistry Meeting, which will be held in 2019 in South Africa for the first time.

Science Engagement Research

Professor Janice Limson led several science engagement initiatives in 2017. These served as a platform to research the beneficial role that engaging the public in research activities may have on Postgraduate science students learning and the potential impact on the design of innovative prototypes stemming from her scientific research.

Science engagement events included Speed Date a Scientist held during Scifest Africa in March 2017, the GADRA Mobile Science Lab initiative (an extensive science engagement programme involving thirty (30) Postgraduates in science teaching at local schools) as well as hosting multimedia science engagement courses for Postgraduate students in collaboration with Dr Alette Schoon, Steven Lang, Gillian Rennie and Professor Harry Dugmore of Journalism and Media Studies. Working with the Rhodes Business School and Dr Tshidi Mohapeloa she explored the learning outcomes of Postgraduate science and business students collaborating on technology innovation projects.

In November 2017, Professor Limson was invited to address science communicators from Department of Science & Technology/National Research Foundation on new approaches in science engagement.



Dr Earl Prinsloo, Head of Department



Professor Janice Limson, Director

Department of Biotechnology and the Biotechnology Innovation Centre (RUBIC)





RUBIC researcher Aphiwe Mfuku (far right) and Professor Limson (second from right) describe the benefits of Amyoli to Minister Pandor (third from right). Amyoli is a nanofibre based water treatment prototype exhibited by Mfuku at the 2017 Innovation Bridge event in Midrand. Photo: RUBIC.

PUBLICATIONS

Peer Reviewed Subsidy-Earning Journal Research Publications

Bentley, S.J. and Boshoff, A.

Bentley, S.J. and Boshoff, A. (2017) Hsp70/J-protein machinery from *Glossina morsitans morsitans*, vector of African trypanosomiasis. *PLoS One.* 12 (9). p.1-26.

Kruid, J., Fogel, R. and Limson, J.

Kruid, J., Fogel, R. and Limson, J. (2017) Quantitative methylene blue decolourisation assays as rapid screening tools for assessing the efficiency of catalytic reactions. *Chemosphere*. 175 (2017). p.247-252.

Prinsloo, E.

Zininga, T., Pooe, O.J., Makhado, P.B., Ramatsui, L., **Prinsloo, E.**, Achilonu, I., Dirr, H. and Shonhai, A. (2017) Polymyxin B inhibits the chaperone activity of *Plasmodium falciparum* Hsp70. *Cell Stress and Chaperones* (2017). p.1-9.

Oluwole, D.O., Prinsloo, E. and **Nyokong, T.** (2017) Photophysical behavior and photodynamic therapy activity of conjugates of zinc monocarboxyphenoxy phthalocyanine with human serum albumin and chitosan. *Spectrochimica Acta Part A - Molecular and Biomolecular Spectroscopy.* 173 (2017). p.292-300.

Olawode, E.O., Tandlich, R., Prinsloo, E., Isaacs, M., Hoppe, H.C., Seldon, R., Warner, D., Steenkamp, V., and Kaye, P.T. (2016) Synthesis and biological evaluation of (E)-cinnamic acid, (E)-2-styrylthiazole and (E)-2-[2-(naphthalen-1-yl)vinyl]thiazole derivatives. *Arkivoc*. (2016). p.284-296.

Zuma, B.M.

Nondlazi, S., Ngqwala, N.P., Zuma, B.M. and Tandlich, R. (2017) Investigating the viability and performance of the pilot scale fly ash/lime filter tower for onsite greywater treatment. *Desalination and Water Treatment*. 91 (2017). p.349-364.

Research Papers Presented at Academic/Scientific Conferences (Non-peer-reviewed Proceedings)

Angala, A.N.

Tandlich, R., Angala, A.N., Vhiriri, E.P., Ngqwala, N.P. and Srinivas, S.C. Disaster vulnerability assessment for the Kingdom of Bhutan's population. *2nd Multi/Interdisciplinary Research Conference*. University of Namibia, Windhoek. Namibia. July 2017.

Chifunda, E.

Chifunda, E., Ngqwala, N.P. and Tandlich, R. Hazards from microbial contamination in a rural area of South Africa. *ADAPT Think tank*. Gavin Reilly Postgraduate Village, Grahamstown. South Africa. May 2017.

Frith, K.A.

Chirenda, T.G., Tandlich, R., Srinivas, S.C., Frith, K.A. and Nnamani, C.U. Legislation, Vulnerability and Disaster Risk Management of Waterborne Diseases in Zimbabwe. *2017 Annual TIEMS conference*. Ukraine Hotel, Kyiv. Ukraine. December 2017.

Honiball, J.R., Fanucci, S. and Prinsloo, E.

Honiball, J.R., Fanucci, S. and Prinsloo, E. A low cost bioprinter for alginate-based hydrogel microextrusion. *2nd International Conference on Tissue Engineering and Regenerative Medicine (ICTERM) and the launch of African Tissue Engineering and Regenerative Medicine Internal Society (ATERMIS): The future of regenerative medicine in Africa.* Vaal University of Technology, Vanderbijlpark, Boulevard. South Africa. July 2017.

Kadye, R., Houseman, P.S. and Prinsloo, E.

Kadye, R., Houseman, P.S. and Prinsloo, E. Effect of adipogenesis on mitochondrial health and networks. *2nd International Conference of Tissue Engineering and Regenerative Medicine (ICTERM) and the Launch of African Tissue Engineering and Regenerative Medicine International Society (ARERMIS).* Vaal University of Technology, Vanderbijlpark, Boulevard. South Africa. July 2017.

Prinsloo, E.

Jackson, S., **Prinsloo**, E., Beukes, N. and Frost, C. (2017) Designing a cell culture model to study the effects of ER stress involved in the pathogenesis of type 2 diabetes IDF 2017 Congress. Abu Dhabi, United Arab Emirates. December 2017.

Managa, M., Britton, J., Prinsloo, E. and Nyokong, T. Poster Presentation. The effect of pluronic silica nanoparticles on the photophysical properties and photodynamic therapy activity of mono substituted metallated porphyrin. *7th Annual DST/Mintek Nanotechnology Innovation Centre (NIC) Workshop.* Medical Research Council of South Africa (MRC), Cape Town. South Africa. 25 - 26 January 2017. Limson, J.

Srinivas, S.C., Duxbury, T., Marara, P., Limson, J., Manhanzva, R., Pearse, N.J., Davy, J., Mzizi, T., Tandlich, R. and Hornby, D. Women-centered health promotion for health care challenges. *Asia-Pacific University Engagement Network Conference*. Penang. Malaysia. April 2017.

Limson, J. Fostering innovation and technology transfer in biotechnology: exploring engagement between researchers and the public. *Responsible Research and Innovation (RRI): Coming to Grips with a Contentious Concept.* Center for Interdisciplinary Research, Bielefeld. Germany. April 2017.



The Botany Department continued to consolidate its research focus on evolution, ecology and global change. The department welcomed Dr Rose Prevec, as an Honorary Research Associate in 2017. Rose is a palaeobotanist based at the Albany Museum.



Professor Julie Coetzee did fieldwork on invasive aquatic plants with Dr Alejandro Sosa from FUEDEI in Buenos Aires, and Dr Iris Stiers from the Vreije Universiteit Brussels. Photo: Department of Botany.

The flagship Rhodes University Elevated CO₂ Facility (RUECF) was a hub of research activity and collaboration with South African and international collaborators. Brad Ripley hosted several Department of Science and Technology (DST) site visits to discuss long-term core funding of the facility. He secured funding from the SA Grains Trust, Applied Centre for Climate and Earth Systems Science (ACCESS) and South African National Antartic Programme (SANAP) for work related to the effects of climate change and elevated CO₂ on natural vegetation and crop plants. He visited sub-Antarctic Marion Island in April 2017 to continue research on the effects of increasing temperatures on invasive exotic grasses on the island.

Susi Vetter continued research on bush encroachments and its feedbacks on her herbaceous layer and herbivory. During her sabbatical in the first half of the year, she did field work on the effect of bush density on utilisation by wild and domestic grazers in Manyeleti Game Reserve and the communal rangelands of Welverdiend in Mpumalanga with her Postgraduate and Honours students. As part of her work on the social and cultural values of biodiversity, she was invited to participate in a Swedish (SIDA)-funded workshop on Ecosystem Services and Human Wellbeing in Johannesburg. This led to a collaborative writing effort with colleagues from Sweden, the United Kingdom and South Africa to write a synthesis paper on the reciprocal relationship between ecosystem services and human wellbeing, which was also the focus of a session at the PECS 2017 conference in Oaxaca, Mexico, where she presented her work in November 2017.

Julie Coetzee's research continues to focus on the invasion biology and biological control of aquatic invasive species. New projects are targeting invaders such as the yellow flag Iris, *Iris pseudacorus*, the Mexican waterlily, *Nymphaea mexicana* and pickerelweed, *Pontederia cordata*, all new emergent aquatic invaders threatening South Africa's waterbodies. The year culminated with the launch of the Centre for Biological Control, where Julie is a Deputy Director, and the Aquatic Weeds Programme Manager. Government dignitaries, research collaborators from research institutes and other universities, as well as members of the Rhodes community, attended the launch.

In 2017, Craig Peter worked on the critically endangered Gauteng orchid, *Brachcorythis conica transvaalensis* and was able to show that the plants in the last known population are being pollinated and setting fruit, highlighting the importance





Professor Julie Coetzee with Dr Alejandro Sosa, FUEDEi, Buenos Aires. Photo: Department of Botany.

of efforts to save the population from imminent development. He presented these findings at the 22nd World Orchid Conference in Ecuador. He also attended the second WOSA (Wild Orchids South Africa) conference in Dullstroom and Indigenous Bulbs Association of South Africa, Bulbs and Corms Symposium in Worcester. He received funding to continue the digitizing of specimens in the Schonland Herbarium.

Tracey Nowell continued to establish her research programme on the evolutionary relationships within the genus *Cotyledon*. She did field work throughout the Eastern and Western Cape provinces to collect material for molecular analyses and to conduct pollination experiments. She was elected onto the scientific committee of the Thicket Forum.

Tony Dold continued collaboration with Alicante University (Spain) on South African Hyacinthaceae. This research resulted in the description of a new genus from southern Africa, *Austronea* (Asparagaceae, Scilloideae), including the description of six new species. Tony continued with the editing of Mary Pocock's travel diaries documenting her expedition into Angola in 1925 with a view to publishing a book.

Postgraduates / Graduations

The Botany Department was home to two (2) Honours, nine (9) MSc and eight (8) PhD students. Aviwe Matiwane, PhD student, was a national finalist in the FameLab competition with a presentation of her PhD work on plant fossils.

Distinguished Visitors / International Visits

Julie Coetzee hosted Dr Andreas Hussner from the Institute of Botany, Heinrich-Heine-University, Düsseldorf, Germany for six (6) weeks, from late January. They investigated the effect of elevated CO₂ on submerged aquatic plants, at the RUECF. Their results have recently been submitted to the journal Aquatic Botany.

Julie also hosted Dr Iris Stiers from the University of Brussels, Belgium, in November, as part of a collaborative project investigating options for biological control of *Iris pseudacorus*, the European wetland Iris, which has become highly invasive in South African waterbodies. At the same time, she also hosted Dr Alejandro Sosa from the Fundación Para El Estudio De Especies Invasivas (FUEDEi), Argentina, as part of a National Research Foundation (NRF) South Africa/Argentina collaborative project, looking at biological control synergies between South Africa and Argentina.

Brad Ripley hosted Dr Caroline Lehmann from the University of Edinburgh, who conducted research in the effect of elevated CO₂ on nitrogen fixation in acacia seedlings, as part of ongoing research on the effects of global change on land cover change, including woody encroachment.

Significant Research Aligned Events

Brad Ripley hosted a Li-Cor infrared workshop on advanced techniques in analysing gas exchange in crops and other plants. The fully funded workshop was facilitated by experts from the USA and attended by researchers and Postgraduate students from Rhodes University and the University of Fort Hare.

Susi Vetter and Brad Ripley hosted a research workshop on "Bush encroachment: Processes and feedbacks" to synthesize collaborative research on this topic. Academic colleagues and Postgraduate students attended the workshop from Rhodes University, University of the Witwatersrand, University of Stellenbosch and the University of Pretoria.



Professor Susanne Vetter, Head of Department

Department of Botany



Other Publications

Coetzee, J.A.

Hill, M.P. and Coetzee, J.A. (2017) Biological Control of Waterhyacinth Restores Ecosystem Functioning to an Impoundment in South Africa. Van Driesche, R.G. and Reardon, R.C. (eds.). *Supressing Over-Abundant Invasive Plants and Insects in Natural Areas by Use of Their Specialised Natural Enemies*. USA: USDA: United States Department of Agriculture.

Peer Reviewed Non-Subsidy-Earning Journal Research Publications

Clark, V.R.

Clark, V.R., Magee, A.R. and Barker, N.P. (2017) Mzansi's Mystery Mountain Hemlocks: Insights from the Cape Midlands Escarpment. *Veld and Flora*. (2017). p.154-157.

Clark, V.R., Timberlake, J.R., Hyde, M.A., Mapaura, A., Coates Palgrave, M., Wursten, B.T., Ballings, P., Burrows, J.E., Linder, H.P., Mcgregor, G., Chapano, C., Plowes, D.C.H., Childes, S.L., Dondeyne, S., Muller, T. and Barker, N.P. (2017) A First Comprehensive Account of Floristic Diversity and Endemism on the Nyanga Massif, Manica Highlands (Zimbabwe-Mozambique). *Kirkia*. 19 (1). p.1-53.

Peer Reviewed Subsidy-Earning Journal Research Publications

Barker, N.P.

Mmonwa, K.L., Teske, P.R., McQuaid, C.D. and Barker, N.P. (2017) Evolution of foraging behaviour: Deep intra-generic genetic divergence between territorial and non-territorial southern African patellid limpets. *Molecular Phyogenetics and Evolution*. 117 (2017). p.95-101.

Bonnevie, B.T.

Connan, M., Bonnevie, B.T., Hagen, C., van der Lingen, C.D. and McQuaid, C.D. (2017) Diet specialization in a colonial seabird studied using three complementary dietary techniques: Effects of intrinsic and extrinsic factors. *Marine Biology*. 164 (171). p.1-10.

Botha, C.E.J. and Gallagher, S.

Botha, C.E.J., Sacranie, S., Gallagher, S. and Hill, J.M. (2017) Russian wheat aphids: Breakfast, lunch, and supper. Feasting on small grains in South Africa. *South African Journal of Botany*. 109 (2017). p.154-173.

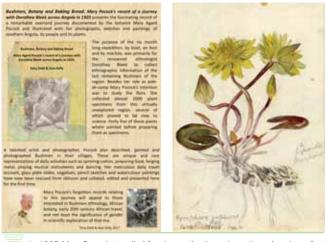
Clark, V.R.

Magee, A.R. and **Clark, V.R.** (2017) Mzansi's mountain hemlocks: The identities of Hilliard and Burtt's Conium species 3 and 4 (Apiaceae) and a revised key for the genus in sub-Saharan Africa. *South African Journal of Botany.* 108 (2017). p.243-247.

Coetzee, J.A.

Jones, R.W., Hill, J.M., Coetzee, J.A. and Hill, M.P. (2017) The contributions of biological control to reduced plant size and biomass of water hyacinth populations. *Hydrobiologia*. (2017). p.1-12.

Coetzee, J.A., Hill, M.P., Ruiz-Tellez, T., Starfinger, U. and Brunel, S. (2017) Monographs on invasive plants in Europe No 2: *Eichhornia crassipes* (Mart.) Solms. *Botany Letters*. 164 (4). p.303-326.



In 1925 Mary Pocock travelled for six months through southern Angola on foot and by boat photographing, painting and collecting plants. Tony Dold and Jean Kelly are compiling and editing Pocock's forgotten records towards a book entitled *Bushmen, Botany & Baking Bread*. This painting of *Nymphaea sulphurea* was done near Mule on the 22nd May 1925. Photo: Department of Botany.

Weaver, K.N., Hill, J.M., Martin, G.D., Paterson, I.D., Coetzee, J.A. and Hill, M.P. (2017) Community Entomology: Insects, Science and Society. *Journal for New Generation Sciences*. 15 (1). p.176-186.

Martin, G.D., Coetzee, J.A. and Compton, S.G. (2017) Plantherbivore-parasitoid interactions in an experimental freshwater tritrophic system: higher trophic levels modify competitive interactions between invasive macrophytes. *Hydrobiologia*. (2017). p.1-12.

Kwong, R.M., Broadhurst, L.M., Keener, B.R., **Coetzee**, J.A., Knerr, N. and **Martin**, G.D. (2017) Genetic analysis of native and introduced populations of the aquatic weed *Sagittaria platyphylla* - Implications for biological control in Australia and South Africa. *Biological Control*. 112 (2017). p.10-19.

Martin, G.D., Hill, M.P., Coetzee, J.A., Weaver, K.N. and Hill, J.M. (2017) Synergies between research organisations and the wider community in enhancing weed biological control in South Africa. *Biocontrol.* (2017). p.1-11.

Jones, R.W., Hill, J.M., Coetzee, J.A., Avery, T.S., Weyl, O.L.F. and Hill, M.P. (2017) The abundance of an invasive freshwater snail *Tarebia* granifera (Lamarck, 1822) in the Nseleni River, South Africa. *African Journal of Aquatic Science*. 42 (1). p.75-81.

Hill, M.P. and Coetzee, J.A. (2017) The biological control of aquatic weeds in South Africa: Current status and future challenges. *Bothalia*. 47 (2). p.1-12.

Owen, C.A., **Coetzee, J.A.**, van Noort, S. and Austin, A.D. (2017) Assessing the morphological and physiological adaptations of the parasitoid wasp *Echthrodesis lamorali* for survival in an intertidal environment. *Physiological Entomology*. 42 (2017). p.173-180.

Cotiyane, P.

Cotiyane, **P**., Adams, J. and Rajkaran, A. (2017) Key factors that drive phytoplankton biomass and community composition in the urbanised Nahoon Estuary, South Africa. *African Journal of Aquatic Science*. 42 (3). p.245-257.

Dold, A.P.

Sholto-Douglas, C.C., Shackleton, C.M., Ruwanza, S. and Dold, A.P. (2017) The Effects of Expansive Shrubs on Plant Species Richness and Soils in Semi-arid Communal Lands, South Africa. *Land Degradation & Development*. 28 (2017). p.2191-2206.

Gallagher, S. and Botha, C.E.J.

Gallagher, S., Hill, J.M., Murugan, N. and Botha, C.E.J. (2017) A



moderate elevation in [CO₂] results in potential hypervirulence on SABBIErica. *South African Journal of Botany*. (2017). p.1-17.

Kaehler, S.

Ramshaw, B.C., Pakhomov, E.A., Markel, R.W. and **Kaehler, S.** (2017) Quantifying spatial and temporal variations in phytoplankton and kelp isotopic signatures to estimate the distribution of kelp-derived detritus off the west coast of Vancouver Island, Canada. *Limnology and Oceanography.* 67 (2017). p.2133-2153.

Leslie, T.D. and Rajkaran, A.

Leslie, T.D., James, N.C., Potts, W.M. and Rajkaran, A. (2017) The relationship between habitat complexity and nursery provision for an estuarine-dependent fish species in a permanently open South African Estuary. *Estuarine Coastal and Shelf Science*. 198 (2017). p.183-192.

Lombardi, G.C. and Peter, C.I.

Lombardi, G.C., Peter, C.I., Midgley, J.J. and Turner, R.C. (2017) The unusual, closed flowers of *Erica lanuginosa* (Ericaeae) are adapted for rodent-pollination and not cleistogamy. *South African Journal of Botany*. 111 (2017). p.189-193.

Lubke, R.

Le Roux, M.M., Wilkin, P., Balkwill, K., Boatwright, J.S., Bytebier, B., Filer, D., Klak, C., Klopper, R.R., Koekemoer, M., Livermore, L., **Lubke**, **R.**, Magee, A.R., Manning, J.C., Paton, A., Pearce, T., Slingsby, J., Van Wyk, B.E., Victor, J.E. and von Staden, L. (2017) Producing a plant diversity portal for South Africa. *Taxon*. 66 (2). p.421-431.

Peter, C.I.

Ollerton, J., Dotterl, S., Ghorpade, K., Heiduk, A., Liede-Schumann, S., Masinde, S., Meve, U., **Peter, C.I.**, Prieto-Benitez, S., Punekar, S., Thulin, M. and Whittington, A. (2017) Diversity of Diptera families that pollinate *Ceropegia* (Apocynaceae) trap flowers: An update in light of new data and phylogenetic analyses. *Flora.* 234 (2017). p.233-244.

Peter, C.I. and Venter, N. (2017) Generalist, settling moth pollination in the endemic South African twig epiphyte, *Mystacidium pusillum* Harv. (Orchidaceae). *Flora*. 232 (2017). p.16-21.

Peter, C.I., Dold, A.P. and Melidonis, C.A.

Peter, C.I., Dold, A.P., Melidonis, C.A. and Abraham, S. (2017) Protea foliosa. *Flowering Plants of Africa*. (The Flowering Plants of South Africa). 65 (2017). p.42-48.

Ripley, B.S.

Nokelainen, O., van Bergen, E., **Ripley**, **B.S.** and Brakefield, P.M. (2017) Adaptation of a tropical butterfly to a temperate climate. *Biological Journal of the Linnean Society*. (2017). p.1-11.

Situngu, S.

Situngu, S. and Barker, N.P. (2017) Position, position, position: Mites occupying leaf domatia are not uniformly distributed in the tree canopy. *South African Journal of Botany*. 108 (2017). p.23-28.

Skowno, A.L.

Nackley, L.L., West, A.G., **Skowno, A.L.** and Bond, W.J. (2017) The Nebulous Ecology of Native Invasions. *Trends in Ecology & Evolution.* 32 (11). p.814-824.

Vetter, S.

Cocks, M., Vetter, S. and Wiersum, K.F. (2017) From universal to local: Perspectives on cultural landscape heritage in South Africa. *International Journal of Heritage Studies*. (2017). p.1-18.

Research Papers Presented at Academic/Scientific Conferences (Non-peer-reviewed Proceedings)

Coetzee, J.A.

Maseko, Z., Marsberg, T., Coetzee, J.A., Hill, M.P. and Paterson,

I.D. The distribution and impact of two species of *Eccritotarsus* on *Eichhornia crassipes* in South Africa. *Combined Congress of the Entomological and Zoological Societies of Southern Africa.* Pretoria. South Africa. July 2017.

Ngxande-Koza, S.W., Hill, M.P. and Coetzee, J.A. Pargeting an emerging weed, *Iris pseudacorus L.* (Iridaceae), in South Africa using biological control. *Combined Congress of the Entomological and Zoological Societies of Southern Africa.* Pretoria. South Africa. July 2017.

Martin, G.D., Coetzee, J.A., Weyl, P.S.R., Parkinson, M.C. and Hill, M.P. Biological control of *Salvinia molesta* in South Africa revisited. *Combined Congress of the Entomological and Zoological Societies of Southern Africa*. Pretoria. South Africa. July 2017.

Motitsoe, S.N., Hill, M.P., Coetzee, J.A., Hill, J.M. and Gama, P. Quantifying the ecological benefits through biodiversity contributions of the biological control of invasive alien aquatic weeds in South Africa. *Combined Congress of the Entomological and Zoological Societies of Southern Africa*. Pretoria. South Africa. July 2017.

Hill, M.P., Coetzee, J.A., Paterson, I.D., Martin, G.D., Hill, J.M. and Weaver, K.N. Community based implementation is vital to the widescale success of weed biological control in South Africa. *Combined Congress of the Entomological and Zoological Societies of Southern Africa*. Pretoria. South Africa. July 2017.

Owen, C.A., Coetzee, J.A. and Hill, M.P. A potential new methodology for determining thermal tolerance in insects: Are current methods accurate enough? *Combined Congress of the Entomological and Zoological Societies of Southern Africa*. Pretoria. South Africa. July 2017.

Petela, N., Coetzee, J.A., Hill, J.M. and Hill, M.P. Impact of prior feeding by two biocontrol agents, *Eccritotarsus catarinensis* and *Megamelus scutellaris*, on their subsequent feeding, and implications for water hyacinth control in South Africa. *Combined Congress of the Entomological and Zoological Societies of Southern Africa*. Pretoria. South Africa. July 2017.

Coetzee, J.A. and Peter, C.I.

Mvandaba, S.F., Coetzee, J.A., Hill, J.M., Hill, M.P., Owen, C.A. and Peter, C.I. Thermal physiology of *Stenopelmus rufinasus* and *Neohydronomus affinis* (Coleoptera: Curculionidae), two biological control agents released against the invasive aquatic weeds *Azolla filiculoides* and *Pistia stratiotes* in South Africa. *Combined Congress of the Entomological and Zoological Societies of Southern Africa*. Pretoria. South Africa. July 2017.

Naidu, P., Coetzee, J.A., Hill, J.M. and Peter, C.I. Comparison of the genetic differentiation and variation of the native and invasive ranges of *Nymphaea Mexicana* (Mexican water lily) in South Africa. *Combined Congress of the Entomological and Zoological Societies* of Southern Africa. Pretoria. South Africa. July 2017.

Rajkaran, A.

Marr, S.M., Bellingan, T.A., Bloy, L.E., Dalu, T., Esler, K., Foord, S.H., Hannweg, B., Hugo, S., Mofu, L., Rajkaran, A., Roux, H., Shelton, J., Vine, N. and Weyl, P.S.R. Training the next generation of aquatic scientists through field exposure to river research and monitoring methods. *Southern African Society of Aquatic Scientists*. Johannesburg. South Africa. June 2017.

Vetter, S.

Cocks, M.L., **Njwambe**, **T.A**. and **Vetter**, **S**. Misread landscape: The contribution of rural landscapes to people's sense of identity and belonging. *Land Ownership, Governance and Sustainability Colloquium*. Hunterstoun Centre, Hogsback. South Africa. October 2017.

Vetter, S. and Cocks, M.L. Culture inextricably entwined with nature: cultural ecosystem services and wellbeing in the Eastern Cape, South Africa. *Programme for Ecosystem Change & Society II*. Hotel Mision de los Angeles, Oaxaca. Mexico. November 2017.



Each year the research strength of the Department of Chemistry and the associated Centre for Nanotechnology Innovation (CNI) grows in number and impact. As the following list of outputs shows, 2017 is no different, with an amazing breadth and diversity of the research reflected. This is thanks in no small part to the activities of the CNI under the Directorship of Distinguished Professor Nyokong, whose students and staff collectively contributed more than sixty (60) publications in top-ranking journals. It's no surprise that the Black Science, Technology and Engineering Professionals (BSTEP) identified Professor Nyokong as a legend, and honoured her in its first ever Science, Engineering and Technology (SET) excellence award.

These staff awards are a reflection of the dedication and hard work of our Postgraduate students. Together with phenomenal support from our technical staff and administrative staff, they are able to generate award-winning articles and conference presentations. Staff and students undertook research visits to Spain, Germany, the United States of America, Tanzania, Senegal, India, and others.

In particular, I would like to point out that Rhodes students got top prizes in the South African Chemical Institute (SACI) Regional Seminars through Cuan Kruger, Akhona Ngqinambi, and Sivuyisiwe Mapukata. Students, Christian Nkanga and Nthabeleng Molupe were awarded prestigious SACI Postgraduate medals. Their recognition does not stop at Science, with students regularly winning awards such as the Investec Top 100 (K Segkota, J Harris, A May) for their work in Leadership, Teaching, and Community Engagement.

One of our proudest moments of 2017 must be the announcement that Joyce Sewry received the 2017 Vice-Chancellor's Distinguished Teaching Award. This not only leads to her recognition as a leader in teaching, but in Educational Research in Science.

As a Department, we are also very proud to recognise the great work that our alumni and graduates achieve. Former students Dr Sarah D'Souza and Dr Nolwazi Nombona attended the Nobel Laureate Meeting in Lindau, and Dr Prudence Ogunlade received an Old Rhodian Award.

In August we received the news that Professor Nelson Torto (former Head of Department in Chemistry and associated scientist), became the new Executive Director of the African Academy of Sciences.

Other highlights include the visit by Professor Susan Bourne, Head of Department at the University of Cape Town (UCT), who delivered our Barker Lecture for 2017 on Supramolecular Chemistry, and later Professor Canan Atilgan from the University Istanbul. Finally, the year was rounded off with the installation of a new National Research Foundation (NRF) sponsored HPLC-ToF MS, which will allow us to collect data in the quality of chemical entities that will undoubtedly lead to even more publications in 2018 and beyond.

I would like to wish all our graduates a successful future where ever they go, and thank them sincerely for the hard work reflected in this report.



Professor Rui Krause, Head of Department

Department of Chemistry



PUBLICATIONS

Concerts, Exhibitions, Performances, Workshops, Events

Kubheka, G., Uddin, I., Mack, J. and Nyokong, T.

Kubheka, G., Amuhaya, E.K., Uddin, I., Mack, J. and Nyokong, T. Oral and Poster Presentation. Symposium on Chemico- and Biomedicinal Research. *Synthesis and photophysical properties of hexabromoanilinoBODIPY dye-gold nanorods conjugate for use in Antimicrobial Photodynamic Therapy*. Zoology Major Lecture Theatre, Grahamstown. South Africa. 23 June 2017.

Louzada, M. and Khene, S.

Louzada, M. and Khene, S. Oral Presentation. Study and Synthesis of Binuclear Metallo Phthalocyanines and Mono Phthalocyanine Isomers imbedded in Polymers for use as an Optical Switch or Nonlinear Optical Sensor. *7th Annual DST/Mintek Nanotechnology Innovation Centre (NIC) Workshop.* Medical Research Council of South Africa (MRC), Cape Town. South Africa. 25 - 26 January 2017.

Mack, J.

Mack, J. Invited Lecturer. The rational design of BODIPY dyes for biomedical and optical limiting applications. *International Conference on Science Technology and Management (ICSTM-UVT) Workshop.* Valahia University, Romania. 6 October 2017.

Mack, J. Oral Presentation. Rational design of porphyrin related dyes for biomedical and optical limiting properties. *Kenya-South Africa Joint Research program: Researcher's Project Initiation Workshop.* United States International University - Africa, Nairobi. Kenya. 15 December 2017.

Mack, J. Oral Presentation. Development of drugs for photodynamic therapy using phthalocyanines and nanomaterials. *CSIR Rental Pool Programme Report back User Meeting*. University of the Witwatersrand (Wits Club), Johannesburg. South Africa. 14 - 15 November 2017.

Mack, J. Oral Presentation. Rational design of BODIPY dyes and their analogues for theranostics. *Symposium on Chemico- and Biomedicinal Research.* Zoology Major Lecture Theatre, Grahamstown. South Africa. 23 June 2017.

Amuhaya, E.K. and **Mack**, **J**. Oral Presentation. Novel water soluble porphyrins. *Kenya-South Africa Joint Research Program: Researcher's Project Initiation Workshop*. The Nairobi Safari Club, Nairobi. Kenya. 24 - 26 May 2017.

Managa, M., Britton, J. and Nyokong, T.

Managa, M., Britton, J. and Nyokong, T. Oral Presentation. Development of nanoconjugates of pluronic silica nanoparticles with porphyrins for photocatalysis (Won 2nd price for best oral presentation). *7th Annual DST/Mintek Nanotechnology Innovation Centre (NIC) Workshop*. Medical Research Council of South Africa (MRC), Cape Town. South Africa. 25 - 26 January 2017.

Managa, M., Britton, J., Prinsloo, E. and Nyokong, T. Poster Presentation. The effect of pluronic silica nanoparticles on the photophysical properties and photodynamic therapy activity of mono substituted metallated porphyrin. *7th Annual DST/Mintek Nanotechnology Innovation Centre (NIC) Workshop*. Medical Research Council of South Africa (MRC), Cape Town. South Africa. 25 - 26 January 2017.

Mapukata, S. and Nyokong, T.

Mapukata, S. and Nyokong, T. Oral Presentation. Laser induced photodegradation of pollutants using phthalocyanine cobalt ferrite magnetic nanoparticle conjugates electrospun in polystyrene nanofibers. *7th Annual DST/Mintek Nanotechnology Innovation Centre (NIC)*

Workshop. Medical Research Council of South Africa (MRC), Cape Town. South Africa. 25 - 26 January 2017.

Mapukata, S., Chindeka, F., Sekhosana, K.E. and Nyokong, T. Mapukata, S., Chindeka, F., Sekhosana, K.E. and Nyokong, T. Oral Presentation. Laser induced photodegradation of Orange G using phtnaiocyanine-cobait territe conjugates in nanotibers (Best Oral Presentation). *Annual Eastern Province SACI Post-Graduate Chemistry Seminar*. Rhodes University, Barratt Lecture Theatre, Grahamstown. South Africa. 20 October 2017.

Matshitse, R. and Nyokong, T.

Matshitse, R. and Nyokong, T. Oral Presentation. The development of metallophthalocyanines-graphene quantum dots conjugates for photocatalysts. *7th Annual DST/Mintek Nanotechnology Innovation Centre (NIC) Workshop 25-26 Jan 2017*. Medical Research Council of South Africa (MRC), Cape Town. South Africa. 25 - 26 January 2017.

Nyokong, T.

Nyokong, T. Keynote Speaker. Internalization of Research. Research Week: *In support of Emerging African Academics and Researchers*. Rhodes University Library, Grahamstown. South Africa. 8 - 12 May 2017.

Sindelo, A. and Nyokong, T.

Sindelo, A. and Nyokong, T. Oral Presentation. Development of magnetic nanoparticles-phthalocyanines conjugates for inactivation of bacteria. *7th Annual DST/Mintek Nanotechnology Innovation Centre (NIC) Workshop*. Medical Research Council of South Africa (MRC), Cape Town. South Africa. 25 - 26 January 2017.

Sindelo, A., Osifeko, O.L. and Nyokong, T.

Sindelo, A., Osifeko, O.L. and Nyokong, T. Oral Presentation. Photo inactivation of bacteria and fungus using indium phthalocyanines conjugate to magnetic nanoparticles. *Symposium on Chemico- and Biomedicinal Research*. Zoology Major Lecture Theatre, Grahamstown. South Africa. 23 June 2017.

Distinguished Visitors

Abdulmajid, S.

Ms S Abdulmajid. Kuwait University, Kuwait. *Research on graphene quantum dots and carbon nanotubes*. November 2017.

Aryeetey, E.

Professor E Aryeetey. African Research Universities Alliance (ARUA), Legon, Ghana. *Meeting with Professor Nyokong and tour of the CNI Facilities*. May 2017.

Bedioui, F.

Professor F Bedioui. Ecole Nationale Supérieure de Chimie de Paris, Paris, France. *Research Collaboration (SA/France)/Lecture*. February 2017.

Bourne, S.

Professor S Bourne. University of Cape Town, Cape Town, South Africa. *Barker Lecture.* July 2017.

Davis, J.

J Davis. Western Michigan University and NNMU SA, Michigan, United States of America. *Frontiers of Science*. March 2017.

Harrison, T.

Mr T Harrison. Bristol University, Bristol, United Kingdom. *Pollutants Tale and Seminar*. February 2017.

Kage, Y.

Mr Y Kage. Kyushu University, Fukuoka, Japan. *Research Collaboration* (*NRF SA/Japan*). Exchange student. January 2017.

Kimura, M.

M Kimura. Shinshu University, Ueda, Japan. *Research Collaboration (NRF SA/Japan)*. October 2017.

Klumperman, L.

Professor L Klumperman. Stellenbosch University, Stellenbosch,

Department of Chemistry



South Africa. Frontiers of Science. March 2017.

Kobayashi, N.

N Kobayashi. Shinshu University, Ueda, Japan. *Research Collaboration* (*NRF SA/Japan*). October 2017.

Kosch, M.

Professor M Kosch. South African National Space Agency, Pretoria, South Africa. *Frontiers of Science*. March 2017.

Lee, C.

Dr C Lee. CERN European Organization for Nuclear Research, Meyrin, Canton of Geneva, Switzerland. *Frontiers of Science*. March 2017.

Maurya, Y.K.

Professor YK Maurya. Kyushu University, Fukuoka, Japan. *Research Collaboration (NRF SA/Japan)*. Exchange student. January 2017.

Ngila, J.C.

Professor JC Ngila. University of Johannesburg, Johannesburg, South Africa. *Frontiers of Science*. March 2017.

Oyim, J.O.

Mr JO Oyim. The Technical University of Kenya, Nairobi, Kenya. *NRF SA/Kenya Joint Science and Technology Research Collaboration* (exchange student). November 2017.

Papoutsidakis, M.

Professor M Papoutsidakis. Piraeus University of Applied Sciences, Athens, Greece. *Research Collaboration: ERASMUS+ International Credit Mobility program.* December 2017.

Piromalis, D.

Dr D Piromalis. Piraeus University of Applied Sciences, Athens, Greece. *Research Collaboration: ERASMUS+ International Credit Mobility program.* December 2017.

Priniotakis, G.

Professor G Priniotakis. Piraeus University of Applied Sciences, Greece, Athens, Greece. *Research Collaboration: ERASMUS+ International Credit Mobility program.* February 2017.

Reyneke, B.

Ms B Reyneke. Welkom Gimnasium Secondary School, Welkom, South Africa. *Frontiers of Science*. March 2017.

Seehawer, M.

Dr M Seehawer. Oslo and Akershus University College, Oslo, Norway. *Frontiers of Science*. March 2017.

Sigala, M.

Dr M Sigala. Piraeus University of Applied Sciences, Greece, Athens, Greece. *Research Collaboration: ERASMUS+ International Credit Mobility program.* February 2017.

Thai-Keong, G.

Mr G Thai-Keong. Singapore High Commission, Pretoria, South Africa. *Meeting with Professor Nyokong and tour of CNI facilities.* July 2017.

Toutain, J.P.

Dr J.P Toutain. French Embassy, Pretoria, South Africa. *Meeting with Professor Nyokong and tour of the CNI Facilities*. June 2017.

Varenne, A.

Professor A Varenne. Ecole Nationale Supérieure de Chimie de Paris, Paris, France. *Research Collaboration (SA/France) /Lecture*. February 2017.

International Visits

Mack, J.

Mack, J. Institutul National de Cercetare-Dezvoltare pentru Chimie si Petrochimie ICECHIM, Bucharest, Romania. *Research Collaboration (NRF SA/Romania).* 1 - 9 October 2017.

Mack, J. Technical University of Kenya, Nairobi, Kenya. *NRF SA/Kenya Joint Science and Technology Research Collaboration*. 14 - 19 December 2017.

Matshitse, R.

Matshitse, R. Shinshu University, Ueda, Japan. *Research Collaboration* (*NRF SA/Japan*). Exchange PhD student. 1 September - 31 October 2017.

Nene, L.C.

Nene, L.C. Shinshu University, Ueda, Japan. *Research Collaboration* (*NRF SA/Japan*). Exchange MSc student. 1 September - 31 October 2017.

Nkhahle, R.P.

Nkhahle, R.P. Institutul National de Cercetare-Dezvoltare pentru Chimie si Petrochimie ICECHIM, Bucharest, Romania. *Research Collaboration (NRF SA/Romania)*: MSc Exchange Student. 1 October - 4 November 2017.

Nyokong, T.

Nyokong, T. L'Oréal-UNESCO For Women in Science, Paris, France. Jury Member for L'Oréal-UNESCO for Women in Science 2017 Awards. 20 - 24 March 2017.



Sindelo, A.

Sindelo, A. Shinshu University, Ueda, Japan. *Research Collaboration (NRF SA/Japan)*. Exchange MSc student. 1 September - 31 October 2017.

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Learners doing a Titration Workshop. Photo: Department of Chemistry.

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Peer-reviewed Proceedings

Lobb, K.A.

Gbayo, K.O., Isanbor, C., Lobb, K.A. and Whenu, O. Mechanism of nucleophilic substitution reactions with 4-(4'-

nitro)phenylnitrobenzofurazan ether with aniline in acetonitrile. *Virtual Conference on Computational Science (VCCS-2016)*. August 2016.

Nxele, S.R., Mashazi, P. and Nyokong, T.

Nxele, S.R., Mashazi, P. and Nyokong, T. Surface functionalization of glassy carbon electrodes via adsorption, electrografting and click chemistry using quantum dots and alkynyl-substituted phthalocyanines: A brief review. *Fourth Conference on Sensors, MEMS and Electro-Optic Systems*. Skukuza, Kruger National Park. South Africa. September 2016.

Sigauke, L.T. and Lobb, K.A.

Sigauke, L.T., Dorrington, R.A. and Lobb, K.A. Interrogation of the Solution Dynamics of Eukaryotic Initiation Factor 5A by Coupling Simulation Dynamics with NMR Observables. *2017 International Conference on Bioinformatics Research and Applications (ICBRA 2017).* Barcelona. Spain. December 2017.



Research Papers Presented at Academic/Scientific Conferences (Non-peer-reviewed Proceedings)

Britton, J., Masilela, N., Osifeko, O.L. and Nyokong, T.

Britton, J., Masilela, N., Osifeko, O.L. and Nyokong, T. Embedding unsymmetrically substituted and/or charged phthalocyanines in electrospun fibres for use in destroying unwanted compounds (Oral Presentation). *AUTEX World Textile Conference*. Corfu Holiday Palace Hotel, Corfu. Greece. May 2017.

Chindeka, F., Mashazi, P., Britton, J. and Nyokong, T.

Chindeka, F., Mashazi, P., Britton, J. and Nyokong, T. Design and fabrication of Transparent Conductive Electrodes and Dye-Sensitized Solar Cells (DSSC) (Oral Presentation). *AUTEX World Textile Conference*. Corfu Holiday Palace Hotel, Corfu. Greece. May 2017.

Hulushe, S.T. and Watkins, G.M.

Hulushe, S.T. and Watkins, G.M. Guest Inclusion of Methanol and Ethanol in Zirconium-Metal Organic Frameworks. *1st Africa Energy Materials Conference*. CSIR, Pretoria. South Africa. March 2017.

Khanye, S.D., Mbaba, M. and Oderinlo, O.

Khanye, S.D., Mbaba, M. and Oderinlo, O. Design of ferrocenyl compounds en route for treatment of breast cancer. *The 3rd TCS International Conference and the 6th FASC Congress.* Arusha. Tanzania. September 2017.

Krause, R.W.M. and Siwe Noundou, X.

Eze, F.I., **Krause**, **R.W.M**. and **Siwe Noundou**, **X**. Cytotoxicity and Anti-trypanosomal Properties of Compounds isolated from Ethylacetate fraction of Zanthoxylum leprieurii. *65th International Congress and Annual Meeting of the Society for Medicinal Plant and Natural Product Research (GA)*. Congress Centre, Basel. Switzerland. September 2017.

Lobb, K.A.

Lobb, K.A. Theoretical studies of the simultaneous formation of two discrete rotameric systems of a novel difenchyl sulphite ester. *GCC 2017: 13th German Conference on Chemoinformatics*. Mainz. Germany. November 2017.

Mashazi, P.

Mashazi, P. Surface characterization and analytical properties in the development of chemical and biological electrochemical sensors. *African Network for Electroanalytical Chemistry*. Dakar. Senegal. April 2017.

Msengana, S.V. and Watkins, G.M.

Msengana, **S.V.** and **Watkins**, **G.M.** Synthesis and characterization of Cu(II) based metal-organic frameworks (MOFs) using the ligand 1,2,4benzentricarboxylic acid (H3BAC). *Combined Congress 2017 23-26th January 2017*. Klein Kariba, Bela Bela. South Africa. January 2017.

Msengana, **S.V.** and **Watkins**, **G.M.** Synthesis and characterization of Cu(II) based metal-organic frameworks (MOFs) using the ligand 1,2,4-benzentricarboxylic acid (H3BAC). *3rd TCS: International Conference and the 6th FASC Congress.* Arusha. Tanzania. September 2017.

Msengana, S.V. and Watkins, G.T.

Msengana, **S.V.** and **Watkins**, **G.T.** Synthesis and characterization of Cu(II) based metal-organic frameworks (MOFs) using the ligand 1,2,4-benzentricarboxylic acid (H3BAC). *Combined Congress 2017 23-26th January 2017.* Klein Kariba, Bela Bela. South Africa. January 2017.

Ngoy, B.P., Mack, J. and Nyokong, T.

Ngoy, B.P., Mack, J. and Nyokong, T. Photophysical Properties and TD-DFT Calculations studies of BODIPY dyes conjugated with 4benzyloxybenzaldehyde. *28th International Conference on Photochemistry*. Strasbourg Convention & Exhibition Centre, Strasbourg. France. July 2017.

Nyokong, T.

Nyokong, T. Recent directions and the benefits of internationalization in cancer (Invited Speaker). UNESCO-Merck Africa Research Summit (MARS 2017). Hennessy Park Hotel, Port Louis. Mauritius. November 2017.

Nyokong, T. The Story of French-South Africa - Collaborations (Invited Speaker. *PROTEA 20 Years Celebration Scientific Day: a side-event of SFSA-2017*. NRF Building CSIR Complex, Pretoria. South Africa. December 2017.

Oderinlo, O., Tukulula, M. and Khanye, S.D.

Oderinlo, O., Tukulula, M. and Khanye, S.D. Novel arylpyrrolethiazolidinedione hybrid as anti-infective agents. *Tropical Infectious Diseases, Gordon Research Conference*. Texas. United States of America. March 2017.

Sekgota, K.C., Majumder, S. and Kaye, P.T.

Sekgota, K.C., Majumder, S., Isaacs, M., Mnkandhla, D., Kriel, F.H., Coates, J. and Kaye, P.T. Synthesis and Biological Screening of 3-[(N-Cycloalkylbenzamido)methyl]-2-quinolones. *Gordon Research Conference.* Colby-Sawyer College, New London. United States of America. August 2017.

Sewry, J. and Grinham, A.L.

Sewry, J. and Grinham, A.L. Soap-making: a practical exercise with the Science Extended Studies students. *SAARMSTE 2017 Conference*. Bloemfontein. South Africa. January 2017.

Sewry, J., Kelly, K.L. and Lobb, K.A.

Sewry, J., Kelly, K.L. and Lobb, K.A. Phenomenology: Pre-conceptions and experiences of non-chemists using milk paints. *SAARMSTE 2017 Conference*. Bloemfontein. South Africa. January 2017.

Sigauke, L.T. and Lobb, K.A.

Sigauke, L.T. and Lobb, K.A. The exploration of macrocycles as cardioprotection probes in reperfusion treatment. *Centre for High Performance Computing (CHPC) 2017.* Velmore Hotel Estate, Pretoria. South Africa. December 2017.

Siwe Noundou, X.

Eze, F.I., **Siwe Noundou**, **X**., Osadebe, P.O. and Uzor, P.F. Cytotoxicity and Anti-trypanosomal Properties of Compounds isolated from Ethylacetate fraction of *Zanthoxylum leprieurii*. *65th International Congress and Annual Meeting of the Society for Medicinal Plant and Natural Product Research (GA)*. Congress Centre, Basel. Switzerland. September 2017.

Siwe Noundou, X., Mbossa Teinkela, J.E., Osadebe, P.O. and Uzor, P.F. A trip to Africa Rainforest: Scientific rationale of some medicinal plants. *American Society of Pharmacognosy Annual Meeting*. Hilton Portland Downtown, Portland. United States of America. July 2017.

Smith, V.J.

Smith, V.J. Committee members were not required to present their work. 23rd International Conference on the Chemistry of the Organic Solid State, ICCOSSXX111. Stellenbosch. South Africa. April 2017.

Smith, V.J. New Guest Accessible Space under Gas Pressure. *24th Congress of the International Union of Crystallography, IUCr-24.* Hyderabad. India. August 2017.

Watkins, G.M. and Hulushe, S.T.

Watkins, G.M., Hulushe, S.T. and Musyoka, N.M. Guest Inclusion studies of Zr-Metal Organic Frameworks beware the Tsotsi. *Inorganic Conference 2017 and Carman Physical Chemistry Symposium of the South African Chemical Institute*. Hermanus. South Africa. June 2017.



Department of Computer Science

In 2017, the research activity in the Computer Science Department was organized around the mutually supporting research groups listed below. With the exception of BioInformatics, all groups are integrated in the Telkom Centre of Excellence in Distributed Multimedia, a *triple helix* initiative that brings together Industry, Government and Academia to every participant's gain. Started in 1997, as an externally funded project, the longevity of the Centre has been remarkable.



A user with an Oculus Head Mounted Display is moving sound sources in a virtual world. Photo: Department of Computer Science.

Convergence (Dr Mosiuoa Tsietsi and Professor Alfredo Terzoli)

This group carries the core activity of the Telkom Centre of Excellence, focusing on the rich intersection of legacy telecommunication systems and organizations and the Internet.

Security and Networks (Associate Professor Barry Irwin, Professor Karen Bradshaw and Mr Alan Herbert)

The Security and Networks Research Group (SNRG) concentrates in the areas of Information Security and Computer Networks, both crucial in modern computing and telecommunications.

ICT for Development (Professor Alfredo Terzoli, Dr Ingrid Sieborger and Dr Mosioua Tsietsi)

This group focuses on the long-term, multidisciplinary effort to introduce meaningful and sustainable ICT in poor areas of South Africa, rural and peri-urban.

Distributed Audio Networks (Professor Richard Foss)

The Audio Networks group deals primarily with the management and control protocol of audio streams to be used in large sound installations such as stadiums, studios and convention centres.

Parallel and Distributed Computing (Professor George Wells and Professor Karen Bradshaw)

This group concentrates on the ever present and important theme of parallel and distributed computations.

Intelligent Robots (Professor Karen Bradshaw)

This group uses Artificial Intelligence to train land-based and aerial robots to perform human tasks, through learning from their mistakes.

Computer Vision (Mr James Connan and Dr Dane Brown)

The Computer Vision group focusses on Image Processing and Machine Learning, and their interaction. Emphasis is placed on the application of computer vision techniques to real world problems.

Bioinformatics (Professor Philip Machanick)

Rhodes University Bioinformatics (RUBi) Research Group is an interdisciplinary group housed in the Department of Biochemistry, Microbiology and Biotechnology and focuses on collaborative research to produce computational outcomes of biological significance.

Postgraduates / Graduations

In 2017 the department graduated the following students:

- Eighteen (18) Honours;
- One (1) MSc by coursework and research;
- One (1) MSc by research graduated (3 others submitted their theses for examination);
- Two (2) PhD (an additional candidate submitted his thesis for examination).

During the same year, the following students were in training in the Department:

Fifteen (15) Honours;



- Thirty (30) MSc by coursework & research;
- Seventeen (17) MSc by research;
- Nine (9) PhDs.

Distinguished Visitors

Professor Magedanz from the Technische Universität of Berlin (Germany) and Fraunhofer Fokus, visited the Department in March. He delivered lectures on 5G and the Internet of Things and interacted with staff on possible collaborations, particularly the Convergence group.

Professor Erkki Sutinen, head of the Interaction Design group at the University of Turku (Finland) visited the Department in April, meeting staff members on possible collaborative projects. Professor Sutinen is not new to the Southern Africa region, having spent time here as part of Finland / Southern Africa collaborations. In particular, there are plans for a re-engagement by Finland with the region, after successful programmes such as COFISA and SAFIPA, to which Rhodes contributed and received benefits in previous years.

Professor Adolfo Villafiorita, Dr Aaron Ciaghi and Dr Pietro Molini, from the Fondazione Bruno Kessler in Trento (Italy) visited the Department in October, as part of a collaborative project on software engineering in low resource settings.

Significant Research Aligned Events

This section hightlights activities that cannot be easily inferred from the research outputs listed below.



International Visits

Bradshaw, K.

Bradshaw, K. Applied University of Hamburg, Hamburg, Germany. *Presented OpenACC programming course for Masters Students.* 8 - 13 December 2017.

Foss, R.

Foss, R. Company - miniDSP, Hong Kong, Hong Kong. *Creation of a 96-speaker system for immersive sound research.* 20 - 30 May 2017.

Wells, G.

Wells, G. Massey University, Auckland, New Zealand. *Seminar* presented Multicore Multiprocessing and Java. 20 June 2017.

Wells, G. Deakin University, Melbourne, Australia. *Visited Dr Shaun Bangay, and VR Labs.* 29 May 2017.

Patents

Foss, R.

Foss, R. (2017) *Positioning an Output Element Within a Three-Dimensional Environment*. USA. 2017. PCT/IB2016/05. In March, Professor Karen Bradshaw attended the inaugural workshop of CREATES, the Centre of Research, agricultural Advancement, Teaching Excellence and Sustainability at the Nelson Mandela African Institution of Science and Technology in Arusha, Tanzania. The workshop served as an introduction to the goals of CREATES and to brainstorm ways in which these goals could be achieved. In November, Professor Karen Bradshaw participated in the annual research meeting of the Germany/SA Partnership on Ecology, in Limpopo.

In December, Associate Professor Barry Irwin delivered a keynote address at the Centre for High Performance Computing (CHPC) Conference in Midrand, in the South African National Research (Sanren) track.

Throughout the year, Professor Terzoli maintained contacts with the Eastern Cape Provincial Government, sitting in the Eastern Cape ICT Working Group. The ICT Group main focus in 2017 was the oversight of the Broadband Plan rollout in the Province. Professor Philip Machanick continued as the editor in chief of the South African Computer Journal (SACJ), with his usual energy.



Professor Alfredo Terzoli, Head of Department

Peer Reviewed Non-Subsidy-Earning Journal Research Publications

Burke, I.D.

Burke, I.D. and van Heerden, R.P. (2017) The World is Polluted with Leaked Cyber Data. *International Journal of Cyber Warfare and Terrorism.* 7 (4). p.35-51.

Peer Reviewed Subsidy-Earning Journal Research Publications

Brown, D. and Bradshaw, K.

Brown, D. and Bradshaw, K. (2017) Feature-Fusion Guidelines for Image-Based Multi-Modal Biometric Fusion. *South African Computer Journal.* 29 (1). p.92-121.

Brown, **D**. and **Bradshaw**, **K**. (2017) Improved Automatic Face Segmentation and Recognition for Applications with Limited Training Data. *Communications in Computer and Information Science*. 716 (2017). p.415-426. Department of Computer Science





Machanick, P.

Webb, H., Steeb, O., Blane, A., Rotherham, L., Aron, S., Machanick, P., Dirr, H. and Fanucchi, S. (2017) The FOXP2 forkhead domain binds to a variety of DNA sequences with different rates and affinities. *Journal of Biochemistry.* 162 (1). p.45-54.

Smith, D. and Wells, G.

Smith, D. and Wells, G. (2017) Interprocess communication with Java in a Microsoft Windows Environment. *South African Computer Journal.* 29 (3). p.198-214.

Thinyane, H. and Sieborger, I.

Thinyane, H. and Sieborger, I. (2017) MobiSAM: Reflections from a four year case study using technology to increase participation in local government in South Africa. *Journal of community informatics.* 13 (1). p.25-49.

Peer-reviewed Proceedings

Brown, D. and Bradshaw, K.

Brown, D. and Bradshaw, K. Enhanced Biometric Access Control for Mobile Devices. *SATNAC 2017: The New Digital Economy - How to Transform the Telco Networks*. Freedom of the Seas, Royal Caribbean International, Barcelona. Spain. September 2017.

Burke, I.D.

Burke, I.D. and van Heerden, R.P. Treating Personal Data Like Digital Pollution. *16th European Conference on Cyber Warfare and Security, ECCWS 2017.* University College, Dublin. Ireland. June 2017.

Chindeka, T., Tsietsi, M. and Terzoli, A.

Chindeka, T., Tsietsi, M. and Terzoli, A. ABSTRACT: A Scalable and Fault Tolerant Cloud Platform for Virtualised IMS Network Functions. *SAICSIT'17*. Black Mountain Lodge, Thaba Nchu. South Africa. September 2017.

Chindipha, S.D. and Irwin, B.

Chindipha, S.D. and Irwin, B. An Analysis on the Re-emergence of SQL Slammer Worm Using Network Telescope Data. *SATNAC 2017: The New Digital Economy - How to Transform the Telco Networks.* Freedom of the Seas, Royal Caribbean International, Barcelona. Spain. September 2017.

Connan, J.

Ghaziasgar, M., van Roodt, D.J., Dodds, R. and **Connan, J.** Hand Gesture Recognition for Drone Control. SATNAC 2017: The New Digital Economy - How to Transform the Telco Networks. Freedom of the Seas, Royal Caribbean International, Barecelona. Spain. September 2017.

Wu, Q., Ghaziasgar, M., Dodds, R. and **Connan, J.** Audio Recognition of Contact Surface Gestures. *SATNAC 2017: The New Digital Economy* - *How to Transform the Telco Networks.* Freedom of the Seas, Royal Caribbean International, Barcelona. Spain. September 2017.



ABOVE: A control surface in a virtual world for controlling a multitrack player. The virtual hand reflects the movements of a user's real hand.

LEFT: A virtual room within which a user can select sound tracks, attach them to coloured balls, and move them within the room. Photo: Department of Computer Science.

Foss, R.

Foss, R. Multi-User Capabilities in an Immersive Sound System. *4th ICSA International Conference on Spatial Audio.* University of Music and Performing Arts, Graz. Austria. September 2017.

Frieslaar, I. and Irwin, B.

Frieslaar, I. and Irwin, B. Recovering AES-128 Encryption Keys from a Raspberry Pi. *SATNAC 2017: The New Digital Economy - How to Transform the Telco Networks*. Freedom of the Seas, Royal Caribbean International, Barcelona. Spain. September 2017.

Frieslaar, I. and **Irwin, B.** Investigating the Effects Various Compilers Have on the Electromagnetic Signature of a Cryptographic Executable. *SAICSIT 2017: Computing for humanity in today's world.* Thaba 'Nchu, Free State. South Africa. September 2017.

Frieslaar, I. and **Irwin, B.** Investigating the Electromagnetic Side Channel Leakage from a Raspberry Pi. *2017 Information Security for South Africa*. Bath Hotel, Rosebank, Johannesburg. South Africa. August 2017.

Irwin, B.

Mnjama, J.J., Foster, G. and Irwin, B. A Privacy and Security Threat Assessment Framework for Consumer Health Wearables. *2017 Information Security for South Africa*. 54 on Bath, Rosebank, Johannesburg. South Africa. August 2017.

Knoetze, T. and Tsietsi, M.

Knoetze, T. and Tsietsi, M. ARrowhead: A Mobile Augmented Reality Application using Wi-Fi Positioning for Indoor Contexts. *SAICSIT* 2017: Computing for humanity in today's world. Thaba 'Nchu, Free State. South Africa. September 2017.

Linklater, G., Connan, J., Herbert, A. and Irwin, B.

Linklater, G., Smith, C., Connan, J., Herbert, A. and Irwin, B. JSON Schema for Attribute-based Access Control for Network Resource Security. *SATNAC 2017: The New Digital Economy - How to Transform the Telco Networks.* Freedom of the Seas, Royal Caribbean International, Barcelona. Spain. September 2017.

Machanick, P.

Machanick, P. Video on Demand in a High Bandwidth World. *SAICSIT* 2017: Computing for humanity in today's world. Thaba 'Nchu, Free State. South Africa. September 2017.

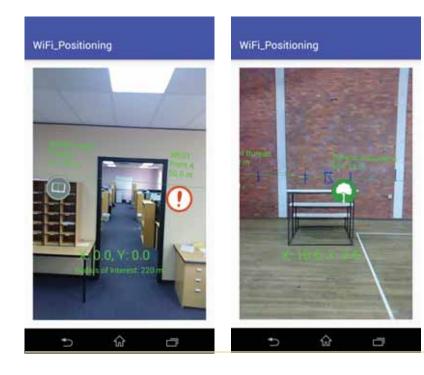
Machanick, P. and Kibet, C.K.

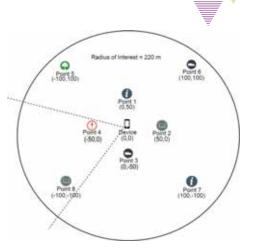
Machanick, P. and Kibet, C.K. Challenges with Modelling Transcription Factor Binding. 2017 1st International Conference on Next Generation Computing Applications (NextComp 2017). University of Mauritius, Mauritius. July 2017.

Marais, K. and Foss, R.

Marais, K. and Foss, R. Gesture Controlled Immersive Audio for the Oculus Rift Head-Mounted Display. *SATNAC 2017: The New Digital Economy - How to Transform the Telco Networks.* Freedom of the Seas,

Department of Computer Science





ABOVE: ARrowhead makes use of proximity to filter out content that is not within the viewer's radius of interest.

FAR LEFT: ARrowhead displays points of interest that are stored on a 2D radio map and represent them as graphical content on a mobile phone's standby camera display. LEFT: ARrowhead categorises points of interest into discrete categories,

representing them on a mobile phone's standby camera display. Photo: Department of Computer Science.

Royal Caribbean International, Barcelona. Spain. September 2017.

Motara, Y.M. and Irwin, B.

Motara, Y.M. and Irwin, B. SHA-1, SAT-solving, and CNF. SATNAC 2017: The New Digital Economy - How to Transform the Telco Networks. Freedom of the Seas, Royal Caribbean International, Barcelona. Spain. September 2017.

Pearson, D., Irwin, B. and Herbert, A.

Pearson, D., Irwin, B. and Herbert, A. Weems: An extensible HTTP honeypot. *SATNAC 2017: The New Digital Economy - How to Transform the Telco Networks.* Freedom of the Seas, Royal Caribbean International, Barcelona. Spain. September 2017.

Pennefather, S. and Irwin, B.

Pennefather, **S**. and **Irwin**, **B**. Design and Application of Link: A DSL for Network Frame Manipulation. *2017 Information Security for South Africa*. Bath Hotel, Rosebank, Johannesburg. South Africa. August 2017.

Pennefather, S., Bradshaw, K. and Irwin, B.

Pennefather, S., Bradshaw, K. and Irwin, B. Design of a Message Passing Model for Use in a Heterogeneous CPU-NFP Framework for Network Analytics. *SATNAC 2017: The New Digital Economy - How to Transform the Telco Networks*. Freedom of the Seas, Royal Caribbean International, Barcelona. Spain. September 2017.

Sieborger, I.

Thinyane, H., Sieborger, I., Pade-Khene, C. and Mthoko, H. Communicative ecologies and mobile phones: Forging a way to increased citizen engagement. *17th European Conference on Digital Government*. Military Academy, Lisbon. Portugal. June 2017.

Sieborger, I. and Reynell, E.

Thinyane, H., Sieborger, I. and Reynell, E. Evaluating a Mobile Visualization System for Service Delivery Problems in Developing Countries. *IST-Africa 2017 Conference*. Windhoek. Namibia. June 2017.

Sogunle, O., Tsietsi, M. and Terzoli, A.

Sogunle, O., Tsietsi, M. and **Terzoli, A.** Exposing Polyglot-Persisted Data Using the Open Data Protocol for User Data Convergence in Mobile Networks. *SATNAC 2017: The New Digital Economy - How to Transform the Telco Networks.* Freedom of the Seas, Royal Caribbean International, Barcelona. Spain. September 2017.

Sweeney, M. and Irwin, B.

Sweeney, M. and Irwin, B. A NetFlow Scoring Framework For Incident Detection. *SATNAC 2017: The New Digital Economy - How to Transform the Telco Network*. Freedom of the Seas, Royal Caribbean International, Barcelona. Spain. September 2017.

Terzoli, A. and Sieborger, I.

Terzoli, A., Sieborger, I. and Gumbo, S. Community "Broadband Islands" for Digital Government Access in Rural South Africa. 17th European Conference on Digital Government. Military Academy, Lisbon. Portugal. June 2017.

Tsietsi, M., Chindeka, T. and Terzoli, A.

Tsietsi, M., Chindeka, T. and Terzoli, A. An IMS Subscriber Location Function for OpenBaton - a standards based MANO Environment. 2017 IEEE Africon: Science, Technology & Innovation for Africa. V&A Waterfront, Cape Town. South Africa. September 2017.

Research Papers Presented at Academic/Scientific Conferences (Non-peer-reviewed Proceedings)

Frieslaar, I.

Frieslaar, I. Using Electromagnetic Emissions to Intercept AES-128 Cryptographic Keys from a Raspberry. *BSides Cape Town 2017*. Dimension Data, Black River Park, Cape Town. South Africa. December 2017.

Schmitt, V.

Schmitt, V. Hack my Heart - An overview of pacemaker vulnerabilities. *0xC0n 2017*. Gold Reef City, Johannesburg. South Africa. November 2017.

Schmitt, V. Advancements of Security on Medical Implantable Devices is the IoT the Next Step to Rooting the Human Being. *BSides Cape Town 2017*. Dimension Data, Black River Park, Cape Town. South Africa. December 2017.

Shaw, B.

Shaw, B. Securing the Industrial Internet of Things. *BSides Cape Town 2017*. Dimension Data, Black River Park, Cape Town. South Africa. December 2017.



Research and creative practice form a dynamic synergy within the outputs of the Drama Department. In 2017 the department was involved in both performing arts creative practice and the presentation and publication of papers and articles. Through this combination of activities and outputs the department encouraged a dialogical connection between practice and research, thereby consolidating and extending a theatre knowledge-base within the context of the university academic programme. At the centre of the department's academic inquiry are questions concerning theatre and performance itself - and its relationship to the audience and society in which it operates. In this manner, research *for, through* and *into* theatre is conducted.



Masters in Directing entry for the 2017 National Arts Festival: Ant directed by Mike Da Silva. Photo: Mia van der Merwe.

To do such theatre research, extensive, diverse and applied approaches are necessary, allowing space for performers, choreographers, writers, designers and directors to prepare for and create productions. The same industrious effort is required whether one is preparing to work within an appliedtheatre context, in a classroom, or in any other learning context. In pursuit of its transformative goal the department regards content and form as equally important and therefore requires that theatrical form is subject to the same intensity of enquiry that is given to theatrical content.

The department's synergistic amalgamation of research and practice has meant that staff participated in a number of international conferences, events and workshops. Through the research and creative practice of staff members the Drama department was represented nationally; and also internationally in Belgium, Brazil, Germany, Greece, the United Kingdom, the United States and Hong Kong. Dr Heike Gehring delivered papers at theatre conferences in Brazil and Belgium, while Ms Lieketso Mohoto attended a Lessac Kinesensic Training course at the Lessac Training and Research Institute at the University of Mississippi, United States.

The creative outputs of staff and students were showcased at multiple festivals - the National Arts Festival in Grahamstown, the Klein Karoo National Arts Festival, the Cape Town Fringe Festival and the Edinburgh Festival in the UK. Staff and students were also invited to residencies and research fellowships. Ms Thembela Madliki was chosen to be one of thirty (30) participants from around the world to take part in the International Association of Theatre for Children and Young People's Next Generation residency and Dr Heike Gehring



received a DAAD research grant for a period spent at the Free University in Berlin, Germany.

Professor Andrew Buckland performed in the Market Theatre production of *The Inconvenience of Wings*, written and directed by acclaimed South African director Lara Foot. At the Assembly Rooms, at the Edinburgh Festival, Buckland performed in both *The Inconvenience of Wings* and *Tobacco*, directed by Sylvaine Strike. Buckland also played the lead role in a South African film directed by Kagiso Lediga entitled, *Catching Feelings*, which was released internationally in 2017 by Netflix.

Athina Vahla - Research Associate of RU Drama - continued her inspirational work with students in the department. She received international commissions and her work, *A Soft Target*, was presented at the Riley Theatre in Leeds, United Kingdom. She also choreographed a work with students of the State School of Dance in Athens. Vahla taught at the State School of Dance in Athens as well as Trinity Laban in London.

Postgraduates / Graduations

The Drama department's postgraduate students made a strong contribution to creative outputs in a variety of ways. The Masters in Directing students presented their final thesis projects at the Fringe Programme of the 2017 National Arts Festival. In doing this, they not only offered possibilities for networking on a national and international level, but also positioned their research as professional practice. The diversity of their chosen topics and theatre-making approaches was indicative of the wide range of subjects and research methodologies spanned by the department. For example, Sam Pennington explored the relationship between competitive gaming and theatre in his work, Esports Lounge, while Mike da Silva adapted a short story for a theatre production called Ant. With her cast, Thembela Madliki co-created an original work, Bayephi, in which she explored aspects of South Africa's troubled past and its hold on the present. Bayephi won a Silver Standard Bank Ovation Award and was invited to be performed at the 2017 Cape Town Fringe Festival. Based on the strength of this work, Thembela Madliki was commissioned



to create an original theatre work for the 2018 Klein Karoo National Arts Festival. Another student, who presented work at the 2017 Cape Town Fringe Festival, was Masters in Choreography Student, Nomcebisi Moyikwa, with a work called *One Big Blink*.

Honours Directing and Choreography student, Mmatumisang Motsisi, presented a work for the 2017 National Arts Festival Student programme called *Cult Clit*. For this she won the Student Theatre Award for Best Original Work. The feedback for the work was as follows:

Cult Clit impressed with its clear vision and unified team. Here the choreography, design and tight performance ensemble elements worked harmoniously to create an entirely cohesive and powerful original theatre production (Adjudication Panel).

In addition to presenting creative work at arts festivals, the Drama department's postgraduate students presented work at conferences. Phemelo Hellemann was selected to offer a presentation from her Masters research in Applied Theatre at the 19th International Association of Theatre for Children and Young People (ASSITEJ). Nomcebisi Moyikwa was invited to perform her Thesis Project, *Qash Qash*, at the Third Space Symposium, "Decolonizing Art Institutions", which was held in Cape Town.

Another highlight was when Thembela Madliki was chosen to be one (1) of thirty (30) participants from around the world to take part in ASSITEJ's 2017 Next Generation residency.



National Arts Festival Student Production and Winner of the Best Student Festival Production: *Cult Clit* directed by Mmatumisang Motsitsi. Photo: Mia van der Merwe.

Masters in Directing entry for the 2017 National Arts Festival and Winner of an Ovation Award: *Bayephi* directed by Thembela Madliki. Photo: Mia van der Merwe.



Distinguished Visitors / International Visits

Prof Ketu Katrak visited the department as a researcher, guest lecturer and PhD co-supervisor. She brought a wealth of experience in Drama and Dance/Choreography, which was an excellent fit with the department's ethos of embodied performance practice. Her books on current Indian Contemporary Choreography and Postcolonial politics of the female body are pertinent and relevant to discussion about decolonising curricula/research and she made a rich and inspired contribution to debates on postcolonial performance.

Tony Miyambo visited the department to perform the internationally acclaimed production *Kafka's Ape* (2015) for which he and director, Phala Ookeditse Phala, received multiple awards: the "2015 Naledi Nomination for Best Cutting Edge Production", the "2015 Amsterdam Fringe Nomination for Best Foreign Production" and the "2015 Standard Bank Ovation Award". Miyambo offered a number of Acting Master Classes during his visit.

Significant Research-Aligned Events

First Physical - an associate project of the department - offered extensive interaction with the larger Grahamstown community. *BodyForms*, an educational and development initiative of the company's "Dance for All"/ "Adult Education" programme was established in 2003. In 2017 the programme experienced significant growth in that it offered somatic training in Contemporary Dance, Yoga, Hip Hop and a variety of other dance forms.

In 2017 Ubom! - another associated project of the Drama department - built the capacity of local unemployed practitioners through theatre skills courses. The *Vuka Drama Workshop Programme* for various township schools in the Grahamstown vicinity ran throughout the year offering dramafocused activities conducted by community arts practitioners. Under the supervision of Ubom! these practitioners received facilitation training from Rhodes theatre experts, while the Vuka drama workshops culminated in a presentation at the Makana Drama Development Festival.

The winner of the festival was invited to perform as part of the fringe programme at the National Arts Festival in 2018. In addition, Performing Change Workshops were run throughout the year at the Grahamstown Correctional Facility for juvenile offenders. The Makana Drama Development Festival was held during November 2017 in the Rhodes University Theatre. Local community practitioners were invited to participate and the element of competition amongst the groups noticeably raised the standard of the productions.

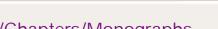
In the first part of the 2017, Ubom! created and presented a dynamic theatre intervention for children - *Zina and the Songbird* - with the express aim of igniting the love and thrill of live stage performance and theatrical arts in young minds. The production was designed to engage with archetypal situations of right and wrong as well as other important life

choices. The show was performed at the National Arts Festival and following that it was performed twice a day, for a week, to over three thousand (3000) youngsters from various primary schools in Grahamstown. In October, Luvuyo Yanta of Ubom! created a heart-warming community Christmas show which brought Christmas magic, wonder and fun into the lives of Grahamstown residents from the greater Grahamstown community - senior citizen homes, the army base and Fort England hospital.



Dr Heike Gehring, Head of Department

PUBLICATIONS



Books/Chapters/Monographs

Sutherland, A.

Hamer, N. and Sutherland, A. (2017) "Snapshot - Storying climate change adaptation: Theatre as a research tool in an Ecohealth research process in the Eastern Cape, South Africa". In: Baxter, V. and Low, K.E. (eds.). *Applied Theatre: Performing Health and Wellbeing*. London: Bloomsbury. p. 234-238. ISBN: 9781472584571.

Concerts, Exhibitions, Performances, Workshops, Events

Buckland, A.

Buckland, A. Creative consultant for *De Profundis - Prolongations* of *Silence* directed by Athina Vahla. April 2017.

Buckland, A. Performed in *The Inconvenience of Wings* written and directed by Lara Foot. Market Theatre. June - July 2017; Assembly Rooms, Edinburgh Festival. August 2017.

Buckland, A. Performed in *The Inconvenience of Wings* written and directed by Lara Foot for the Baxter Theatre. Assembly Rooms, Edinburgh Festival. August 2017.

Buckland, A. Performed in *Tobacco, and the Harmful Effect Thereof* directed by Sylvaine Strike for Fortune Cookie Theatre Company. Assembly Rooms, Edinburgh Festival. August 2017.

Buckland, **A**. Performed lead role in feature film, *Catching Feelings*, released internationally by Netflix.

Gehring, H.

Gehring, H. Presented paper at "New Stage Idioms: South African Drama, Theatre and Performance in the Twenty-First Century" in Brussels, Belgium. 12 May 2017.

Gehring, **H**. Presented paper at the International Federation for Theatre Research Conference: "Unstable geographies: Multiple theatricalities". 13 July 2017. Department of Drama



Orientation production created to orientate Rhodes University first years: Vuk'Ucave directed by Professor Andrew Buckland. Photo: Mia van der Merwe.



Ubom! Children's show: Zina and the Songbird directed by Luvuyo Yanta.

Gehring, **H**. Hosted a series of post-production talks at the Klein Karoo National Arts Festival in Oudtshoorn. 8-15 April 2017.

Krueger, A.R.

Krueger, A.R. Writer, Director, Performer. "Murder at the Exhibition" (Murder Mystery Game). *SCIFEST*. Monument in Olive Schreiner, Grahamstown, South Africa. 11 March 2017.

Vahla, A.

Vahla, A. Choreographer of *De Profundis - Prolongations of Silence* in collaboration with pianist Joanna Wicherek. Saint Andrews Drill Hall. April 2017.

Vahla, A. Choreographer of A Soft Target. Rhodes University Box Theatre, Grahamstown. April 2017.

Vahla, A. Choreographer of *October*. Rhodes University Box Theatre. October 2017.

Creative Writing

Krueger, A.R.

Krueger, A.R. (2017) "Imaginedtheatres.com is an open-access online journal". In: A Bad Spell. Imagine Theatres.

Krueger, A.R. (2017) "Experimental Writing: Africa vs Latin America Vol 1: Literatura". In: *Revolutionary Diaries*. Cameroon: Langaa RPCIG.

Peer Reviewed Non-Subsidy-Earning Journal Research Publications

Gehring, H.

Gehring, H. (2017) "Lady Anne: A case study in practice as research as a way to renegotiate history". *Current Challenges in Doctoral Theatre Research*. p. 27-39. BELOW: Masters in Directing entry for the 2017 National Arts Festival: Ant directed by Mike Da Silva.



Krueger, A.R.

Krueger, A.R. (2017) "Performing mindful creativity: Three South African case studies". *Performance and Mindfulness*. 1 (1). p.1-17. Mohoto-WaThaluki, L.

Mohoto-WaThaluki, L. (2017). "Challenging dominant ways of creating and consuming knowledge". *Buwa! A Journal of African women's experiences.* pp. 47-52.

Peer Reviewed Subsidy-Earning Journal Research Publications

Kelly, H.

Kelly, H. (2017) "The potential of the clown to renegotiate notions of femininity in contemporary performance: Ester van Der Walt's Transparent." *South African Theatre Journal.* 30 (1-3). p.46-54.

Krueger, A.R.

Krueger, A.R. (2017) Book Review: "Reader in comedy: An anthology of theory and criticism", edited by Magda Romansk and Alan Ackerman, London and New York, Bloomsbury, 2017, ISBN: 978-1-4742-4788-7. *South African Theatre Journal.* 30 (1-3). p.82-85.

Smit, S

Smit, S. (2017) "Thinking through Nicola Elliott's Bruising (2014)". Studies in Theatre and Performance. 2017 (2017). p.1-16.

Sutherland, A.

Sutherland, A. (2017) "Method and madness: De/colonising scholarship and theatre research with participants labelled mad". *RIDE-The Journal of Applied Theatre and Performance*. 22 (3). p.427-435.



Department of Economics & Economic History

The Department of Economics and Economic History was again productive in terms of research and publications in a variety of media. The Department saw one (1) monograph, twenty-four (24) biweekly column articles in Business Day and seven (7) publications in peer reviewed subsidy-earning journals.

Academic staff and students also presented nine (9) papers at academic conferences, one (1) at an international conference, one (1) at the Second Annual Economic Research Advisory Network (ERAN) Conference on Driving South Africa's Industrial Development Agenda and the rest at the biennial conference of the Economic Society of South Africa that was held at Rhodes University.

The papers and presentation and journal articles represented a wide range of economic topics and highlighted the expertise available in the Department. The research covered financial markets, quality of life economics, cultural economics, environmental and agricultural economics, ecological economics and economic growth.

Postgraduates / Graduations

The number of Postgraduates registered for Masters degrees and doctoral degrees remained steady in 2017, which was largely the result of the Environmental and Natural Economics Research Focus Area (ENREFA) and the South African Cultural Observatory.

There were also a number of other students registered for Masters studies by thesis in other areas of Economics. The Masters in Financial Markets degree by coursework and thesis continued to attract students to the programme.

The Department had an adequate year concerning Master's degree graduands, three (3) Masters degrees by thesis (two (2) Master of Commerce and one (1) Master of Science were awarded and three (3) under the Masters in Financial Markets.

The highlight of the year was the awarding of two (2) PhD degrees. Sylvia Israel-Akinbo was awarded a PhD for the thesis "Energy use patterns and trends: The impact of energy policy in South African low-income households" and Montoeli Rantlo received his PhD for the thesis "Integration of small-scale mohair farmers into the commercial agricultural economy in Lesotho: A new institutional economics approach".

Distinguished Visitors / International Visits

Professor Ferdi Botha visited the University of Antwerp in Belgium for the defence of his PhD thesis, which was successful and he was awarded his degree. Professor Charles Perrings of the School of Life Sciences Eco Services Group at the Arizona State University, Phoenix, United States of America, hosted Professor Gavin Fraser. Professor Fraser presented two (2) seminars while at the ASU. The first was "Quantifying the economic water saving benefit of water hyacinth (*Eichhornia crassipes*) control in the Vaalharts Irrigation Scheme" and the other was "An ecosystem service value chain analysis framework: a conceptual paper".

Professor Jen Snowball visited the Department of Culture, Media and Creative Industries, King's College, London, UK as a Visiting Professor. She delivered a seminar entitled: Cultural Policy and the Cultural and Creative Industries in Developing Countries: A case study of South Africa.

Significant Research Aligned Events

Professor Ferdinand (Ferdi) Botha was awarded the Vice-Chancellor's Distinguished Research Award.

Professor Snowball continues to work with the South African Cultural Observatory, which hosted a conference in Johannesburg in May 2017, at which she and several Postgraduate students presented their work. Professor Snowball also attended the International Conference on Arts and Culture Management held in Beijing, in June 2017.

The biennial conference of the Economics Society of South Africa was held at Rhodes University at the end of August 2017. Professor Gavin Keeton was the President of the society.



Professor Gavin Fraser, Head of Department



International Visits

Botha, F.

Botha, F. University of Antwerp, Antwerp, Belgium. PhD research and PhD viva. 25 September - 7 October 2017.

Fraser, G.C.G

Fraser, G.C.G. School of Life Sciences Eco services Group, Arizona State University, Phoenix, United States of America. Visiting Researcher at the School of Life Sciences Eco services Group. Hosted by Professor Charles Perrings. Presented two papers during the visit. Developing a linkage between the group and ENREFA at Rhodes. 6 September 22 January 2017.

Snowball, J.

Snowball, J. Department of Culture, Media and Creative Industries, King's College, London, London, UK. *Visiting Professor. Seminar* Delivered Entitled: Cultural Policy and the Cultural and Creative Industries in Developing Countries: A case study of South Africa. 25 November - 18 December 2017.

Other Publications

Cattaneo, N.

Cattaneo, N. (2017) Trade in Services Negotiations: A Southern African Perspective. In: International Centre for Trade and Sustainable Development (ICTSD) Issue Paper: Programme on Inclusive Economic Transformation ISSN 1995-6940. Geneva: International Centre for Trade and Sustainable Development.

Rawlins, J. and Fraser, G.C.G

Rawlins, J. and Fraser, G.C.G. (2017) Assessing Aquatic Ecosystem Services Value Chains and Markets in South Africa: Some Case Studies. Water Research Commission (WRC) Report No. 2341/7. ISBN 9781431209231.

Peer Reviewed Subsidy-Earning Journal **Research Publications**

Arp, R.S. and Fraser, G.C.G.

Arp, R.S., Fraser, G.C.G. and Hill, M.P. (2017) Quantifying the economic water savings benefit of water hyacinth (Eichhornia crassipes) control in the Vaalharts Irrigation Scheme. Water SA. 43 (1). p.58-66

Botha, F

Botha, F., Booysen, F. and Wouters, E. (2017) Family Functioning and Socioeconomic Status in South African Families: A Test of the Social Causation Hypothesis. Social Indicators Research. (2017). p.1-23

Botha, F., Wouters, E. and Booysen, F. (2017) Satisfaction with Family Life in South Africa: The Role of Socioeconomic Status. Journal of Happiness Studies, 2017 (2017), p.1-34.

Botha, F., Wouters, E. and Booysen, F. (2017) Happiness, Socioeconomic Status, and Family Functioning in South African Households: a Structural Equation Modelling Approach. Applied Research in Quality of Life. (2017). p.1-43

Feddersen, M., Nel, H. and Botha, F.

Feddersen, M., Nel, H. and Botha, F. (2017) Exports, capital formation and economic growth in South Africa. African Review of Economics & Finance (The Journal of the African Centre for Economics & Finance). 9 (1). p.213-244.

Keeton, G.R.

Keeton, G.R. (2017) Obtaining clear and timely business cycle turning point signals with a composite business cycle indicator. Journal for Studies in Economics and Econometrics. 41 (3). p.61-64

Snowball, J. and Tarentaal, D.

Snowball, J., Collins, A. and Tarentaal, D. (2017) Transformation and job creation in the cultural and creative industries in South Africa. Cultural Trends. 26 (4). p.295-309.

Research Papers Presented at Academic/Scientific Conferences (Non-peer-reviewed Proceedings)

Botha, F.

Botha, F., Wouters, E. and Boovsen, F. Happiness, socioeconomic status and family functioning in South African households: A structural equation modelling approach. 15th Conference of the International Society of Quality of Life Studies (ISQOLS). University of Innsbruck, Innsbruck. Austria. September 2017.

Botha, F., Keeton, G.R. and Nel, H. Botha, F., Keeton, G.R. and Nel, H. Revisiting the ability of the yield curve to forecast turning points in the South African business cycle. Biennial Conference of the Economic Society of South Africa (ESSA). Rhodes University, Grahamstown. South Africa. August 2017.

Drummond, F.J. and Snowball, J.

Drummond, F.J. and Snowball, J. Regional Development and the Cultural and Creative Industries in South Africa: A Case Study of the Sarah Baartman District. Economic Society of South Africa. Rhodes University, Grahamstown. South Africa. September 2017

Israel-Akinbo, S.O., Snowball, J. and Fraser, G.C.G. Israel-Akinbo, S.O., Snowball, J. and Fraser, G.C.G. The Energy Transition Patterns of Low-income Households in South Africa. Economic Society of South Africa. Rhodes University, Grahamstown. South Africa. September 2017.

Keeton, G.R.

Keeton, G.R. Post-truth, alternative facts & Fakeconomics. 2017 Biennial Conference of the Economic Society of South Africa. Rhodes University, Grahamstown. South Africa. August 2017.

Ndawona, T.M., Keeton, G.R. and Cattaneo, N.

Ndawona, T.M., Keeton, G.R. and Cattaneo, N. An analysis of the impact and policy implications of the financialization of commodity markets. Second Annual Economic Research Advisory Network (ERAN) Conference on Driving South Africa's Industrial Development Agenda. Bloemfontein. South Africa. March 2017.

Ndhlovu, R.M.E. and Snowball, J.

Ndhlovu, R.M.E. and Snowball, J. Developing a Regional Cultural Policy: Guidelines for Areas without Big Cities. Economic Society of South Africa. Rhodes University, Grahamstown. South Africa. September 2017.

Pitot, M.J.A. and Botha, F.

Pitot, M.J.A. and Botha, F. Suicide and the South African business cycle: A time series approach, 2006-2015. Biennial Conference of the Economic Society of South Africa (ESSA). Rhodes University, Grahamstown. South Africa. August 2017.

Rawlins, J.M. and Fraser, G.C.G.

Rawlins, J.M., Fraser, G.C.G. and De Lange, W. An ecosystem service value chain analysis framework: a conceptual paper. Biennial Conference of the Economic Society of South Africa. Rhodes University, Grahamstown. South Africa. August 2017.



The Faculty of Education's existing and ever-expanding research culture continues to extend beyond schooling. In addition to a focus on studies within the broader Education and Development Field, most of which involve personnel within and across organisations interested in the educational aspects of their work, our work increasingly shifts to broader decoloniality of education issues, the teaching of reading in the early years, and international research collaborations continue to strengthen our scholarly activities.



Professor Callie Grant and Dr Farhana Kajee and nine (9) of the eleven (11) (two (2) missing in the picture) MEd Educational Leadership 2017 graduates. Photo: Faculty of Education.

The Faculty's research trajectory continues to enable us as a Faculty to bridge the gap between research and teaching, teaching and research, schooling and higher education, and research in higher education and civil society. The trajectory also includes a number of studies that focus on community learning via expansive learning research. This trajectory further presents us with an opportunity to take sufficient advantage of existing expertise in the Faculty in the service of our province, country, continent, and the international community.

Postgraduates / Graduations

The Department celebrated the graduation of a number of students at the graduation ceremony in April 2017. Across the two (2) Education Department campuses, i.e. Grahamstown and in Namibia, we have graduated the total of thirty-four (34) MEd students and fourteen (14) PhD students.

Research Chairs:

The Environmental Learning Research Centre

The Faculty's Research Chairs continue to make significant

contributions to educational knowledge generation and educational development in the country.

In 2017 the SARChI Chair in Global Change and Social Learning Systems continued its research into transformative social learning systems and green skills learning pathways. The Chair is developing theoretical, methodological and policy knowledge of transformative education and learning processes that address critical global change challenges and concerns, amongst these being food and water security, climate change, biodiversity loss and climate resilient green economy development.

The SARChI Chair in Global Change and Social Learning Systems works closely with the **Murray and Roberts Chair of Environmental Education**, both being based in the Department's Environmental Learning Research Centre (ELRC), which hosts a cohort of sixty (60) Postgraduate scholars. The Murray and Roberts Chair is leading research in the areas of green skills research with a focus on demand-side analysis and monitoring, evaluation and learning in natural resources management and climate change resilience contexts.



In 2017, Environmental Learning Research Centre researchers produced three (3) Books, fifteen (15) Journal papers, nineteen (19) Book Chapters, sixteen (16) keynote papers, and fortyfive (45) Conference Presentations, showing a high level of research productivity.

The Centre also graduated three (3) PhDs and three (3) Masters scholars in the 2017 graduation ceremony.

Publishing highlights include the publication of a Springer book on '*Schooling and Sustainable Development in Africa*'. This book captures ten (10) years of research on Education for Sustainable Development and educational quality and relevance in southern Africa, arguing that sustainability concerns are, and must be a key feature of what counts as quality education in Africa. The research from this book informed the design and development of a sixty (60) Institution Teacher Education Programme on Education for Sustainable Development in southern Africa, designed and implemented in 2017 by the Chair and Postdoctoral scholar Dr Sirkka Tshiningayamwe in partnership with UNESCO, the southern African Universities Association and the Swedish International Centre for Education for Sustainable Development.

A second publishing highlight was the publication of a Special Issue of the South African Qualifications Authority's Bulletin (their official journal) entitled '*Learning Pathways, the National Qualifications Framework (NQF), and Lifelong Learning in South Africa*' which carries eight (8) papers produced by Professor Lotz-Sisitka and leading Green Skills researcher, Dr Presha Ramsarup. The papers report on the methodological dimensions of the Phase 2 SAQA/Rhodes University partnership, and draw substantively on the PhD of Dr Ramasrup. This research has provided new methodological foundations for Green Skills Learning Pathways research in South Africa, and offers a critical realist laminated system approach to considering green skills development in a transitioning system framework.

This new research focus has been significantly expanded in 2017 under the leadership of Professor Rosenberg, with a number of Green Skills studies undertaken for some of South Africa's Sector Education and Training Authorities under the banner of the national Green Skills Research programme that is supported by the Development Bank of South Africa and the National Environmental Sector Skills Planning Forum. This research was represented by Professor Rosenberg at the International Conference on Greening Skills: TVET for Sustainability hosted by UNESCO and the government of China in July 2017.

On the conferencing front, highlights were the Environmental Learning Research Centre collaboration with the University of Witwatersrand Centre for Researching Education and Labour and other national partners to host the 10th **International Researching Work and Learning Conference (RWL10)**. This Conference brought two hundred (200) work and learning researchers and a number of international researchers from fifteen (15) countries to Rhodes University and the Education Department. Professor Annalise Sannino from the Centre for Research on Activity Development and Learning (CRADLE) at the University of Helsinki, Finland - one of the SARChI Chair's International Visiting Professors - offered a keynote address into this conference which set out a pathway for fourth generation cultural historical activity theory research. Together with Professor Engeström, also from CRADLE and a Visiting Professor of the SARChI Chair, Professor Sannino offered a workshop on cultural historical activity theory which benefitted research scholars at the conference, but also in our Department.

Senior Research Associates of the SARChI Chair and ELRC, Dr Mutizwa Mukute and Dr Leigh Price also continued to contribute to the research programme of the Chair and the Environmental Learning Research Centre.

In March 2017 Dr Leigh Price collaborated with Professor Lotz-Sisitka to run a one (1)-week Research School in Critical Realism and Social Science Research, which attracted a team of four (4) researchers from Japan.

Dr Mukute has been working with Professor Lotz-Sisitka to establish a transboundary curriculum innovation and research network for institutions of higher learning in the Limpopo Basin of South Africa, involving South African and Mozambique universities.

Dr Price was appointed Editor of the **Journal of Critical Realism**, and in 2017 the book entitled 'Critical Realism, Environmental Learning and Social Change' edited by Dr Price and Professor Lotz-Sisitka in 2016 was co-awarded the Cheryl Frank Memorial Prize by the International Association of Critical Realism. Dr Price also co-authored a new book in 2017 in the Routledge critical realism series focusing on 'Interdisciplinarity and wellbeing'.

In 2016 Professor Eureta Rosenberg took over the Editor-in-Chief role for the **Southern African Journal of Environmental Education**, an accredited journal that has been published out of the Department of Education at Rhodes University for the past twenty-eight (28) years. Current co-editors of the journal are Dr Lausanne Olvitt and Dr Mucha Togo.

In 2017 a special issue of the journal focussing on student papers associated with the 2016 Environmental Education Association of Southern Africa Conference was produced. The journal is now freely available via the excellent African Open Source system for journal distribution, African Journals Online (AJOL) which has considerably expanded the reach and impact of the journal (at peak readers from around the globe download more than one thousand (1000) full papers from the SAJEE per month).

Professor Lotz-Sisitka continues to serve as co-editor of the International Journal of Learning, Culture and Social Interaction.

Professor Lotz-Sisitka continued to support research on transformative learning (T-learning) and in 2017, in addition to providing ongoing co-ordination of the International Social Science Council research programme currently operating in

nine (9) countries on four (4) continents, she presented a number of international keynote papers on the this focus, including at the 8th International Sustainability Transitions Conference held in Gothenberg in Sweden in June 2017 and the GIZ/DAAD International Expert Meeting focussing on the role of Higher Education, Science and New Alliances in the context of Sustainable Development.

One of the leading T-learning projects being developed under this programme known as the 'Amanzi [Water] for Food' project - also recipient of the Vice-Chancellor's Community Engagement Award, and winner of a Mail and Guardian Award for Greening the Future (in the category women and climate change) - was selected to be part of a session at the Second Partnership for Action on Green Economy Ministerial Conference in Berlin, Germany in March 2017.

This project is being led by PhD researcher, Tichaona Pesanayi, and involves a number of Masters and PhD scholars, two (2) of whom graduated with distinctions for their research on this project.

Dr Dylan McGarry, Postdoctoral Research Fellow in the Tlearning programme, also made a number of international contributions, including offering a keynote address at the 2nd world Encounter on Sustainable Actions: Transforming. Complex. Futures. in Mexico, August 2017.

He also represented the T-learning programme together with Dr Mukute and other researchers at the 3rd International Transformations to Sustainability Conference held in Dundee, Scotland in August 2017 which has led to him leading an international working group on 'Decolonising Sustainability' in the Transformations to Sustainability network.

The South African Numeracy Chair

The Mathematics Education Professor Robyn Jorgensen from the University of Canberra, visited the Department in October 2017 to do data gathering on the family math story time programme that was run with two (2) partner schools in Grahamstown. In 2018 this research will be jointly analysed and papers written and repeated in one school in the Australian context.

Professor Graven and Dr Einat Heyd-Metzuyanim from the Technion Israel Institute of Technology have collaborated since 2012 on cross national research into learner dispositions and ritual teaching practices, and ran a double session working group at the leading international conference PME in Szeged on our research into ritual and explorative discourse in mathematics classrooms.

In 2017 she and Professor Graven published a joint article on their research data across contexts in one of the leading international journals ESM and they are now editing a special issue of ESM on this topic. They are also currently editing a special issue of ZDM on identity in mathematics education that will be published at the end 2018.

In September 2017, she visited the project with Professor Tabach to work with Professor Graven on the ESM and ZDM issues and co-presented a lecture to the BEd undergraduates on creativity in mathematics and co-presented a methodological workshop with Professor Tabach for the project research team.

Professor Michal Tabach from Tel Aviv University visited the Education Department as part of his research project on integrating technology to mathematics education. As a young teacher, she taught mathematics with open digital tools on a regular basis for all topics of study. Naturally, as she became more involved in doing research, her focus was on learning in an open digital tools environment. However, soon it become clear to her that teacher education is a key factor in integrating technology to every-day school practices. She currently leads two (2) projects aimed at helping practicing teachers to integrate technology into their practice, based on their pedagogical-mathematical needs. She co-presented a lecture to the BEd undergraduates on creativity in mathematics and co-presented a methodological workshop with Dr Heyd-Metzuyanim for the project research team.

In October 2017, Dr Anne Bennison of the University of Queensland gave a guest lecture for our BEd and PGCE undergraduates and presented a methodological workshop for Postgraduates in the Faculty. Dr Bennison was also guest speaker at the SAERA Conference in Port Elizabeth.

In July 2017, Professor Vince Geiger from the Australian Catholic University co-presented a workshop with Professor Gabriele Kaiser of the University of Hamburg to our Postgraduate students on tips for publishing in journals where they shared their experiences as journal editors. Professor Vince Geiger also gave a guest lecture on "Teachers as designers of numeracy tasks across the curriculum" to faculty academic staff and students, and Professor Gabriele Kaiser gave a guest lecture on "Innovative assessment approaches and new paradigms within the assessment of teachers' professional competencies" to faculty academic staff and students.

The SARChI Mathematics Education Chair

Professor Matthias Ludwig from the Goethe University in Frankfurt, Germany, visited the Mathematics Education Chair to work with Postgraduate students on his MathsCityMap project, which foregrounds realistic and authentic mathematical problem-solving skills. This aligns well with the visualisation research agenda of the Chair. As a result of this visit, Dr Clemence Chikiwa visited the MathsCityMap research group in Frankfurt to establish a research collaboration relationship between the Chair and Goethe University.

Distinguished Visitors / International Visits

The Department continues to attract internationally renowned scholars and intellectuals. Almost every year one (and sometimes more) of our disciplines hosts a visiting academic or team of academics.

In 2017, the Education Department hosted Dr David Rose from the University of Sydney, Australia. Dr Rose is a pioneer



of the groundbreaking *Reading to Learn* (RtL) pedagogy for teaching reading and writing across the curriculum, and from primary to tertiary education. In a collaborative effort between the Education Department and GADRA, Dr Rose also met with local teachers as part of the Vice-Chancellor's Reviving Grahamstown Education initiative where he opened a conversational and multimedia presentation on how the RtL works. In addition to giving a University-wide Seminar of RtL pedagogy, Dr Rose also got involved in teaching our own BEd FP second and third year students.

We also hosted a dialogue on 27 January 2017. The dialogue involved colleagues from the Netherlands and the US. We titled it: "Decolonising the Curriculum Conversation: RSA - US - Netherlands Perspectives".

The Rhodes University's DVC Teaching and Learning, Dr Chrissie Boughey, and the Dean of the Education Faculty, Professor Di Wilmot, also gave presentations, together with four (4) colleagues from universities in the US and the Netherlands. The nature and quality of the engagements at this dialogue created a need for further dialogue, but this time in the Netherlands. The invitation came from the Dutch Organisation for International Cooperation in Higher Education.

The Environmental Learning Research Centre, as outlined above, hosted a number of international visitors in 2017 including four Japanese Professors from Fukayama City University, Ehime University, and Naruto University.

Visitors attending the 10th Researching Work and Learning Research Conference included Professors Lolwane and Webster from Wits University, Professors Sannino and Engestrom from Helsinki University in Finland, Professor Holmberg from Chalmers University in Sweden, Professor Guy Standing from the University of London, UK, and Professor Johnny Sung from the Institute for Adult Learning in Singapore.

During the year Dr Ruy Koide from the Institute for Global Environmental Strategies (IGES) and Dr Stephanie Chan from the Stockholm Environmental Institute, Stockholm University also visited the ELRC to discuss the scaling of one of the projects, *Food for Us*, which is a UNEP funded 10 Year Framework project on Sustainable Consumption and Production Learning. The project is developing a mobile application learning tool for reducing food waste and transforming market chains.

Significant Research Aligned Events

Professor Emmanuel Mgqwashu has become co-investigator in an internal research project called: "South African Rurality in Higher Education" (2017 - 2020). This is a collaborative study between the universities of Bristol, Brighton, Johannesburg, Rhodes and Fort Hare. It is qualitative, targeting twelve (12) second-year students in the Science Faculty, and twelve (12) second-year students in the Humanities who lived and studied in rural areas. Students are co-researchers in this project. They are documenting their own lived experiences of learning in rural areas, of learning at university and how they make this important 'transition'. Another project in which he is a Primary Investigator is called: "Learning to Read, Reading to Learn, Learning to Write: Literacy Development for Secondary Schooling" (2015 - 2017). This is a National Research Foundation (NRF) funded project that examined the role of the teaching of reading across the curriculum for epistemological access within schooling. Out of this project, three (3) PhD and two (2) MEd students received their degrees.

Professor Marc Schafer has been appointed Associate Editor for the EURASIA Journal of Mathematics, Science and Technology Education, an accredited international journal. He has also been appointed as co-chair for the VISUALISATION IN MATHEMATICS working group for the big international ICME-14 Congress in China in 2020.

Professor Mellony Graven appointed as co-editor for a Special Issue on Identity for the ZDM international journal.

Dr Ingrid Schudel and a group of Master's students are coresearchers in CYCLES - an international comparative study of the lifestyles and embedded experience of young people aged twelve (12) - twenty four (24) in urban communities. The study is coordinated by the Centre for the Understanding of Sustainable Prosperity (CUSP) University of Surrey, United Kingdom and University of Canterbury, NZ, and involves research partners in India, Bangladesh, South Africa, Japan and Brazil.

In 2017, Lorna Musiyiwa (Master's student) travelled to the University of Surrey for a research meeting. The team have written a case study within a desktop research review conducted for this project (*https://cusp.ac.uk/wpcontent/uploads/CYCLES-background-report-online.pdf*). The research has now extended into a series of focus group discussions with young people in the Grahamstown area.

As an outcome of the Fundisa for Change NRF-funded research, Dr Ingrid Schudel has worked with students to communicate their research to environmental education teacher professional development partners in way that it can be meaningfully taken up into practice. Five (5) research narratives are available on the Fundisa for Change website: *http://fundisaforchange.co.za/research-in-a-nutshell/.* This is an ongoing project and is a platform for publishing further narratives for engaging curriculum developers, policy-makers, teacher educators and funders in the field.



Professor Emmanuel Mfanafuthi Mgqwashu, Head of Department



Books/Chapters/Monographs

Burt, J.

Burt, J. and Lusithi, T. (2017) Being the Earth's Comrade: Research for the People, by the People. In: von Kotze, A. and Walters, S. (eds.). *Forging Solidarity: Popular Education at Work*. Rotterdam, The Netherlands: Sense Publishers. p.105-115. ISBN: 9789463009218.

Dube, C.

Dube, C. (2017) The Uptake of Education for Sustainable Development in Geography Curricula in South African Secondary Schools. In: Lotz-Sisitka, H., Shumba, O., Lupele, J. and Wilmot, D. (eds.). *Schooling for Sustainable Development in Africa*. New York: Springer. p.93-105. ISBN: 9783319459875.

Engestrom, Y. and Sannino, A.

Vetoshkina, L., **Engestrom, Y.** and **Sannino, A.** (2017) On the Power of the Object: History-Making through Skilled Performance in Wooden Boat Building. In: Sandberg, J., Rouleau, L., Langley, A. and Tsoukas, H. (eds.). *Skillful Performance: Enacting Capabilities, Knowledge, Competence, and Expertise in Organizations (Perspectives on Process Organization Studies)*. Oxford: Oxford University Press. p.73-102. ISBN: 9780198806639.

Euvrard, G.J.

Euvrard, G.J. (2017) *JDE: The Original South African Cryptic Crossword.* South Africa: Euvrard, GJ. ISBN: 9780868104911.

Graven, M.

Graven, M. (2017) Teacher Perceptions of the Successes and Challenges of a Mathematics Homework Drive for Primary Learners In: Webb, P. and Roberts, N. (eds.). *The Pedagogy of Mathematics in South Africa: Is There a Unifying logic?* Johannesburg, South Africa: Real African Publishers. p.161-174. ISBN: 9780987034718.

Graven, M. and Venkat, H. (2017) Advocating Linked Research and Development in the Primary Mathematics Education Landscape in Contexts of Poverty. In: Graven, M. and Venkat, H. (eds.). *Improving Primary Mathematics Education, Teaching and Learning: Research for Development in Resource-Constrained Contexts*. UK: Palgrave Macmillan. p.11-23. ISBN: 9781137529794.

Venkat, H. and **Graven**, **M**. (2017) Changing Teaching Through a Resources Approach. In: Graven, M. and Venkat, H. (eds.). *Improving Primary Mathematics Education, Teaching and Learning: Research for Development in Resource-Constrained Contexts*. UK: Palgrave Macmillan. p.163-178. ISBN: 9781137529794.

Graven, M. and Venkat, H. (ed.) (2017) *Improving Primary Mathematics Education, Teaching and Learning: Research for Development in Resource-Constrained Contexts.* UK: Palgrave Macmillan. ISBN: 9781137529794.

Kulundu, I.

Kulundu, I. (2017) Change drivers at the front lines of the future: rising cultures for sustainability education in contemporary South Africa. In: Corcoran, P.B., Weakland, J.P. and Wals, A.E.J. (eds.). *Envisioning Futures for Environmental and Sustainability Education*. The Netherlands: Wageningen Academic Publishers. p.419-426. ISBN: 9789086863037.

Kulundu, I. (2017) The Obscure Anatomy of the NGO Sector. In: Matthews, S. (ed.). *NGOs and Social Justice in South Africa and Beyond*. Durban: University of KwaZulu-Natal Press. p.131-141. ISBN: 9781869143282.



Distinguished Professor Heila Lotz-Sisitka addressing recently graduated students, parents, friends and families at the Education Faculty's 2017 Graduation Lunch.

Photo: Faculty of Education.

Lotz-Sisitka, H.

Lotz-Sisitka, H. (2017) Education and the Common Good. In: Jickling, B. and Sterling, S. (eds.). *Post-Sustainability and Environmental Education: Remaking Education for the Future*. UK: Palgrave Macmillan. p.63-76. ISBN: 9783319513218.

Ardoin, N.M., Reid, A., Lotz-Sisitka, H. and Gonzalez Gaudiano, E.J. (2017) Afterword. In: Russ, A. and Krasny, M. (eds.). *Urban Environmental Education Review*. Ithaca: Cornell University Press. p.297-298. ISBN: 9781501707759.

Lotz-Sisitka, H. and Lupele, J. (2017) ESD, Learning and Quality Education in Africa: Learning Today for Tomorrow. In: Lotz-Sisitka, H., Shumba, O., Lupele, J. and Wilmot, D. (eds.). *Schooling for Sustainable Development in Africa*. New York: Springer. p.3-24. ISBN: 9783319459875.

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Lotz-Sisitka, H. and Wilmot, D.

Lotz-Sisitka, H., Lupele, J., Shumba, O. and Wilmot, D. (ed.) (2017) Schooling for Sustainable Development in Africa. New York: Springer. ISBN: 9783319459875.

Mabeza, C.M.

Mabeza, C.M. (2017) Water and Soil in Holy Matrimony? A smallholder farmer's innovative agricultural practices for adapting to climate in rural Zimbabwe. Cameroon: Langaa RPCIG. ISBN: 9789956764518.

Mandikonza, C.

Mandikonza, C. and Mukundu, C. (2017) Enhancing Agency and Action in Teacher Education in Zimbabwe. In: Lotz-Sisitka, H., Shumba, O., Lupele, J. and Wilmot, D. (eds.). *Schooling for Sustainable Development in Africa*. New York: Springer. p.245-257. ISBN: 9783319459875.

Mukute, M., Masilela, M.P. and Olvitt, L.L.

Krasny, M.E., **Mukute**, **M.**, Aguilar, O., **Masilela**, **M.P.** and **Olvitt**, **L.L.** (2017) Community Environmental Education. In: Russ, A. and Krasny, M. (eds.). *Urban Environmental Education Review.* Ithaca: Cornell University Press. p.124-132. ISBN: 9781501707759.





Professor Emmanuel Mgqwashu introducing Dr Sally-Ann Robertson. Photo: Faculty of Education.

Ngcoza, K.M.

Chikunda, C. and **Ngcoza, K.M.** (2017) Integrating Afrocentric Approaches for Meaningful Learning of Science Concepts. In: Lotz-Sisitka, H., Shumba, O., Lupele, J. and Wilmot, D. (eds.). *Schooling for Sustainable Development in Africa*. New York: Springer. p.79-91. ISBN: 9783319459875.

O'Donoghue, R.

O'Donoghue, **R**. (2017) Situated Learning in Relation to Human Conduct and Social-Ecological Change. In: Lotz-Sisitka, H., Shumba, O., Lupele, J. and Wilmot, D. (eds.). *Schooling for Sustainable Development in Africa.* New York: Springer. p.25-38. ISBN: 9783319459875.

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Pausigere, P. (2017) Key Aspects of Communities of Practice That Enable Primary Maths Teacher Learning. In: Graven, M. and Venkat, H. (eds.). *Improving Primary Mathematics Education, Teaching and Learning: Research for Development in Resource-Constrained Contexts.* UK: Palgrave Macmillan. p.217-234. ISBN: 9781137529794.

Sannino, A. and Engestrom, Y.

Sannino, A. and Engestrom, Y. (2017) Relational Agency, Double Stimulation, and the Object of Activity: An Intervention Study in a Primary School. In: Edwards, A. (ed.). *Working Relationally in and across Practices: A Cultural-Historical Approach to Collaboration*. Cambridge: Cambridge University Press. p.58-77. ISBN: 9781107110373.

Sannino, A., Engestrom, Y. and Lemos, M. (2017) Formative Interventions for Expansive Learning and Transformative Agency. In: Cole, M., Penuel, W. and O'Neill, K. (eds.). *Cultural-Historical Activity Theory Approaches to Design-Based Research*. New York: Routledge: Taylor and Francis. p.1. ISBN: 9781138570825.

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Schudel, I. (2017) Deliberations on a Changing Curriculum Landscape and Emergent Environmental and Sustainability Education Practices in South Africa. In: Lotz-Sisitka, H., Shumba, O., Lupele, J. and Wilmot, D. (eds.). *Schooling for Sustainable Development in Africa*. New York: Springer. p.39-54. ISBN: 9783319459875.

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Sibanda, L. (2017) Do the Annual National Assessments in Mathematics Unfairly Assess English Language Competence at the Expense of Mathematical Competence? In: Graven, M. and Venkat, H. (eds.). *Improving Primary Mathematics Education, Teaching and Learning: Research for Development in Resource-Constrained Contexts.* UK: Palgrave Macmillan. p.147-159. ISBN: 9781137529794.

Slemming, F.

Slemming, F. (2017) The place of education theories in writing centres: Why this makes for significant research. In: Clarence, S. and Dison, L. (eds.). *Writing Centres in Higher Education: Working in and across the disciplines.* Stellenbosch: SUN PRESS. p.19-34. ISBN: 9781928357544.

Songqwaru, N.Z.

Songqwaru, N.Z. and Shava, S. (2017) Strengthening Teachers' Knowledge and Practices Through a Biodiversity Education Professional Development Programme. In: Lotz-Sisitka, H., Shumba, O., Lupele, J. and Wilmot, D. (eds.). *Schooling for Sustainable Development in Africa*. New York: Springer. p.205-218. ISBN: 9783319459875.

Franzen, T.M.O., Thomashow, C., Leou, M. and **Songqwaru, N.Z.** (2017) Educator Professional Development. In: Russ, A. and Krasny, M. (eds.). *Urban Environmental Education Review*. Ithaca: Cornell University Press. p.202-211. ISBN: 9781501707759.

Spira, M. and Robertson, S.A.

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Stott, D. (2017) Researching the Nature of Early Numeracy Progression in After-School Clubs. In: Graven, M. and Venkat, H. (eds.). *Improving Primary Mathematics Education, Teaching and Learning: Research for Development in Resource-Constrained Contexts*. UK: Palgrave Macmillan. p.45-60. ISBN: 9781137529794.

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Stott, D., Mofu, Z. and Ndongeni, S. (2017) Adapting Aspects of the Mathematics Recovery Programme for Use in Various South African Contexts. In: Graven, M. and Venkat, H. (eds.). *Improving Primary Mathematics Education, Teaching and Learning: Research for Development in Resource-Constrained Contexts*. UK: Palgrave Macmillan. p.61-78. ISBN: 9781137529794.

Tshiningayamwe, S.A.N.

Tshiningayamwe, S.A.N. (2017) Education for Sustainable development in the Namibian Biology Curriculum. In: Lotz-Sisitka, H., Shumba, O., Lupele, J. and Wilmot, D. (eds.). *Schooling for Sustainable Development in Africa*. New York: Springer. p.107-118. ISBN: 9783319459875.

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Tshiningayamwe, S.A.N. and Songqwaru, N.Z. (2017) Towards Professional Learning Communities: A Review. In: Lotz-Sisitka, H., Shumba, O., Lupele, J. and Wilmot, D. (eds.). *Schooling for Sustainable Development in Africa*. New York: Springer. p.259-273. ISBN: 9783319459875.

Vallabh, P.

Vallabh, P. (2017) Transforming epistemic cultures in ESE with citizen and civic sciences as means for reframing participation in the commons. In: Corcoran, P.B., Weakland, J.P. and Wals, A.E.J. (eds.). *Envisioning Futures for Environmental and Sustainability Education*. The Netherlands: Wageningen Academic Publishers. p.87-101. ISBN: 9789086863037.

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Mathematics Education, Teaching and Learning: Research for Development in Resource-Constrained Contexts. UK: Palgrave Macmillan. p.81-95. ISBN: 9781137529794.

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Wilmot, D.

Wilmot, D. (2017) Issues-based Enquiry: An Enabling Pedagogy for ESD in Teacher Education and School Geography. In: Lotz-Sisitka, H., Shumba, O., Lupele, J. and Wilmot, D. (eds.). *Schooling for Sustainable Development in Africa*. New York: Springer. p.129-138. ISBN: 9783319459875.

Zazu, C.

Zazu, C. (2017) The Culture Hut Concept as Curriculum Innovation: Engaging the Dialectic Nature of Heritage in Zimbabwean Schools to Support ESD Learning. In: Lotz-Sisitka, H., Shumba, O., Lupele, J. and Wilmot, D. (eds.). *Schooling for Sustainable Development in Africa*. New York: Springer. p.67-78. ISBN: 9783319459875.

Concerts, Exhibitions, Performances, Workshops, Events

Burt, J.

Burt, J. Course. Changing practice: Olifants: course for environmental activists in the Olifants catchment. *Module 2: Changing practice: Olifants: course for environmental activists in the Olifants catchment.* Emalahleni, Burgersfort. South Africa. 1 January 2017.

Burt, J. Course. Changing practice: Olifants: course for environmental activists in the Olifants catchment. *Module 1: Changing practice: Olifants: course for environmental activists in the Olifants catchment.* Emalahleni, Burgersfort. South Africa. 23 - 25 May 2017.

Burt, J. Short course. Changing practice: Olifants: course for environmental activists in the Olifants catchment. *Module 3: Changing practice: Olifants: course for environmental activists in the Olifants catchment.* Emalahleni, Burgersfort. South Africa. 1 January 2017.

Dalvit, L.

Dalvit, L. Webinar (Virtual presentation). Advancing MOOCS for development initiative hosted by Emerge Africa. *Webinar hosted by the University of Cape Town*. Online. 24 August 2017.

Graven, M.

Graven, M. Plenary lecture: Blending elementary mathematics education Research with development for equity - An ethical imperative enabling qualitatively richer work. In J. Novotná & H. Moraová (Eds.). *14th International Symposium Elementary Maths Teaching: Equity and diversity in elementary mathematics education.* (pp. 20-31). Prague: SEMT. 2017.

Lotz-Sisitka, H.

Lotz-Sisitka, H. Inaugural Address Response. *Inaugural Lecture of Professor Esther Kibuka-Sebitosi*. University of South Africa (UNISA), Pretoria. South Africa. 23 November 2017.

Lotz-Sisitka, H. Guest Lecture. *Transformative Learning*. University of Mpumalanga, Nelspruit. South Africa. 12 September 2017.

Lotz-Sisitka, H. Workshop. *Challenge Lab at Rhodes University with Professor John Holmberg and Johann Larsson*. Chalmers University. Sweden. 8 December 2017.

Lotz-Sisitka, H. Workshop participation. Workshop participation: Lotz-Sisitka, H. 2017. *Invited international participant of the Third United Nations Educational, Scientific and Cultural Organization (UNESCO) symposium on the future of Education for Sustainable Development.* Stellenbosch. South Africa. 13 - 17 June 2017.

Lotz-Sisitka, H. Research School (Organisation and Presentation). *Critical Realism School.* Rhodes University, Grahamstown. South Africa. 5 - 10 March 2017.

Lotz-Sisitka, H. International Meeting. *Presentation on the International Training Programmes on climate resilient development (oriented to SDGs) for southern Africa.* SIDA Headquarters, Stockholm. Sweden. 24 February 2017.

Lotz-Sisitka, H. Workshop. *Participation in international seminar week and PhD research school on Social (in)justice through Education. Can research make a difference?* Umea University. Sweden. 20 - 24 February 2017.

Lotz-Sisitka, H. International Seminar. *Third seminar in the bilateral collaboration between Rhodes University and Aarhus University on 'Education and social learning in response to climate change risk and vulnerability'*. Denmark. Finland. 15 - 17 February 2017.

Lotz-Sisitka, H. National Steering Committee. *Green Matter Project Meeting*. Sandton, Johannesburg. South Africa. 13 February 2017.

Lotz-Sisitka, H. Workshop. A methodology for exploring local Social-Ecological- Economic (SEE) Justice & Sustainability in inter-disciplinary ways with Masters level students. *Curriculum transformation workshop: Challenge lab.* Environmental Learning Research Centre, Grahamstown. South Africa. 4 December 2017.

Lotz-Sisitka, H. Workshop. 2nd International T-learning Research School and Meeting. 2nd International T-learning Research School and Meeting. Hotell Toftagården, Spireavägen. Sweden. 5 - 9 July 2017.



Professor Emmanuel Mgqwashu celebrating with his PhD and MEd students at the Education Faculty's 2017 Graduation Lunch. Photo: Faculty of Education.



Lotz-Sisitka, H. Workshop/research school. *Critical Realism Research School*. ELRC, Grahamstown. South Africa. 6 - 10 March 2017.

Lotz-Sisitka, H., Mcgarry, D., Kulundu, I. and James, A.K. Lotz-Sisitka, H., Mcgarry, D., Kulundu, I. and James, A.K. Workshop. ISSC Transformative Social Learning Networks workshop. *ISSC Transformative Social Learning Networks workshop*. Environmental Learning Research Centre, Grahamstown. South Africa. 6 - 8 February 2017.

Schudel, I.

Schudel, I. Meeting. Pre-service science teacher education. *Pre-service science teacher education, hosted by Professor Loyiso Jita on behalf of the Human Resource Development Council Maths and Science Standing Committee*. University of the Free State, Bloemfontein. South Africa. 22 - 23 November 2017.

Schudel, I. Workshop. Cultivating the Globally Sustainable Self conference. *Cultivating the Globally Sustainable Self conference*. James Madison University, Virginia. United States of America. 20 - 25 March 2017.

Stott, D. (2017). Plenary paper: Progressive progress and profiling: Progression spectra for teachers. In T. Penlington & C. Chikiwa (Eds.), *Proceedings of the 23rd Annual National Congress of the Association for Mathematics Education of South Africa.* (pp. 38-45). Port Elizabeth: AMESA.

Stott, D. (2017). Workshop: Progressive development and profiling: Progression spectra for mathematics teachers. In T. Penlington & C. Chikiwa (Eds.). *Proceedings of the 23rd Annual National Congress of the Association for Mathematics Education of South Africa.* Port Elizabeth: AMESA.

Distinguished Visitors

Alexander, C.

Professor Charles Alexander: Associate Vice Provost for Student Diversity and Director of the Academic Advancement Program at the University of California, Los Angeles (UCLA). He is also an Adjunct Associate Professor in the Division of Public Health at UCLA's School of Dentistry. His research interest is academic pipeline programs and their impact on workforce diversity in the health professions.

Bennison, A.

Dr Bennison presented a workshop for Postgraduate students on tips for publishing in journals where they shared their experiences as journal editors. He also gave a guest lecture on "Teachers as designers of numeracy tasks across the curriculum" to faculty academic staff and students.

Chan, S.

Dr S Chan, 10YFP Sustainable Lifestyles and Education Programme, Stockholm Environment Institute, Stockholm University, Sweden. UNEP Site Visit for the Food for Us Project, including a Scaling and Impact Assessment Framework session. October 2017.

Chikamori, K.

Professor K Chikamori, International Educational Development, Naruto University of Education, Japan. Critical Realism, Education and the Social Sciences Research School, a programme offered by the SARChI Chair in Global Change Social Learning Systems & the Centre for Postgraduate Studies at Rhodes University, in association with the International Centre for Critical Realism, Institute of Education, London University.

Derossi, M.

Professor M Derossi. University of Padua, Grahamstown, South Africa. Seminar on Digital storytelling for educational documentation. April 2017.

Engestrom, Y.

Professor Y Engestrom. Centre for research on activity, development and learning (CRADLE), University of Helsinki, Helsinki, Finland. Workshop and conference. December 2017. Professor Y Engestrom. RWL10 Pre-Conference Workshop entitled "Activity-Theoretical Analyses of Change Laboratory Interventions". RWL10 Conference presentation. December 2017.

Haan, W.

Mr. Wim Haan: Coordinator Diversity and secretary of the steering group diversity in 2006. He was one of the initiators of the Summer course for first generation students, that was organized by the VU from 2010-2014. Furthermore, he initiated and was responsible for the study trip to Israel and the Palestinian territories for five years.

Dr Heyd-Metzuyanim, E and Professor Tabach, M.

In September 2017, they visited the Numeracy Chair project to work with Professor Graven on the ESM and ZDM issues and co-presented a lecture to the B. Ed undergraduates on creativity in mathematics and co-presented a methodological workshop with Professor Tabach for the project research team.

Holmberg, J.

Professor J Holmberg. Chalmers University, Gothenburg, Sweden. Workshop. December 2017.

Professor J Holmberg. Challenge Lab Master Class to PHD and Masters Students in the Education Department, on 4 December. RWL10 Conference presentation. December 2017.

Professor Jorgensen, R.

Professor Jorgensen visited the Numeracy Research project in October 2017 to do data gathering on the family math story time programme that was run with two partner schools in Grahamstown. In 2018 this research will be jointly analysed and papers written and repeated in one school in the Australian context.

Koide, R.

Dr R Koide. Researcher, Sustainable Consumption and Production Area, Institute for Global Environmental Strategies (IGES), Japan. UNEP Site Visit for the Food for Us Project, including a Scaling and Impact Assessment Framework session. October 2017.

Leiss, D.

Professor D Leiss. Leuphana University of Lüneburg, Lüneburg, Germany. Collaboration. January 2017.

Linneweber-Lammerskitten, H.

Professor H Linneweber-Lammerskitten. University of Applied Sciences and Arts Northwestern, Switzerland. Consolidation of VITALmaths project. July 2017.

Lolwane, P.

Professor P Lolwane, Recently Retired Director of the Centre for Researching Education and Labour, University of the Witwatersrand, South Africa. RWL10 Opening Address entitled "Opening Address: The story of the relationship between work and learning in South Africa". December 2017.

Ludwig, M.

Professor M Ludwig. Goethe University, Frankfurt, Germany. To engage with SARChI Mathematics Education Chair on his work with his MyCityMaths project. A collaboration is being set up with his University, which incorporates our visualization research. Teaching on a BEd Mathematics Education course. July 2017.

Kamsteeg, F.

Professor Frans Kamsteeg: Associate Professor in Organizational Anthropology at Vrije Universiteit, Amsterdam. His research focuses on sense making and cultural change in (higher) education, with a special focus on transformation and diversity issues in South African academia. As an engaged scholar and ethnographer he has a strong interest in methodological reflexivity.

Park, J.

Dr J Park, South African environmentalist and founder of Food & Trees for Africa. Collaborative Sustainability Think Tank (Conversation with



Jeunesse Park and Rhodes University Departmental Heads. April 2017.

Rose, D.

Dr D. Rose. is the Director of Reading to Learn, an international literacy program that trains teachers across school and university sectors, in Australia, Africa, Asia and western Europe. He is an Honorary Associate of the Department of Linguistics, and has been an Associate of the Faculty of Education and Social Work, which he joined as a U2000 Research Fellow in 2001, and a Principal Research Fellow with the Koori Centre at the University of Sydney.

Sabelis, I.

Professor Ida Sabelis: Associate Professor Vrije Universiteit Amsterdam, Editor in Chief for the Journal Gender, Work and Organization (Wiley). Her research focuses on diversity and issues of time / temporality, which leads to an interest in sustainability of work and of human animal relations. She has an interest in critical methods of the social sciences to obtain alternative perspectives on what we take for granted.

Sannino, A.

Professor A Sannino. Centre for research on activity, development and learning (CRADLE), University of Helsinki, Helsinki, Finland. Lecture and conference. December 2017.

Professor A Sannino. RWL10 Pre-Conference Workshop entitled "Activity-Theoretical Analyses of Change Laboratory Interventions". RWL10 Keynote Speaker entitled "Keynote 1: The work and learning of an enacted utopia: The struggle to eradicate homelessness". December 2017.

Shouho, M.

Professor M Shouho, Professor of Home Economics, Fukuyama City University, Japan. Critical Realism, Education and the Social Sciences Research School, a programme offered by the SARChI Chair in Global Change Social Learning Systems & the Centre for Postgraduate Studies at Rhodes University, in association with the International Centre for Critical Realism, Institute of Education, London University. March 2017.

Standing, G.

Professor G Standing. School of Oriental and African Studies, London, England. Lecture. December 2017.

Professor G Standing. RWL10 Keynote Speaker entitled "Keynote 2: The growing precariat under rentier capitalism". December 2017.

Sung, J.

Professor J Sung. Institute for Adult Learning, Singapore, Singapore. Lecture and conference. December 2017.

Professor J Sung. RWL10 Pre-Conference site excursion lead. RWL10 Keynote Speaker entitled "Keynote 3: Skills policy, business model and job quality for inclusive society". December 2017.

Takeshita, H.

Professor H Takeshita, Home Economic Education, Ehime University, Japan. Critical Realism, Education and the Social Sciences Research School, a programme offered by the SARChI Chair in Global Change Social Learning Systems & the Centre for Postgraduate Studies at Rhodes University, in association with the International Centre for Critical Realism, Institute of Education, London University. March 2017.

Ueno, M.

Dr M Ueno, Deep Home Economics Learning Society, Environmental education, Fukayama City University, Japan. Critical Realism, Education and the Social Sciences Research School, a programme offered by the SARChI Chair in Global Change Social Learning Systems & the Centre for Postgraduate Studies at Rhodes University, in association with the International Centre for Critical Realism, Institute of Education, London University. March 2017.

Valenzuela, A.

Professor Abel Valenzuela: Professor of Urban Planning and Chicano Studies and Director of UCLA's Institute for Research on Labor and

Employment. He has authored numerous research articles, books, and reports on immigrant settlement, work, and urban poverty. His research on day labor and immigrant labor markets have helped frame national public and policy narratives on immigrant and low wage workers.

Webster, E.

Professor E Webster. Society, work and development institute, University of Witwatersrand, Johannesburg, South Africa. Lecture and conference. December 2017.

Professor E Webster. RWL10 Keynote Speaker entitled "Keynote 4: The Future of work: Its implications for the world of learning". December 2017.

Wells, H.

Professor Harry Wells: Associate Professor Vrije Universiteit Amsterdam, Publication Manager African Study Centre Leiden and Extra Ordinary Professor at University of the Western Cape. His research focuses on diversity and transformation in higher education and on human-animal studies in the context of nature conservation, both in South Africa.

International Visits

Chikiwa, C.

Chikiwa, **C**. An exploration of how consistently and precisely mathematics teachers code-switch in Multilingual classrooms. Presentation made to teaching staff and research students at Department of Mathematics Education, Goethe University, Frankfurt, Germany. November 2017.

Chikiwa, C. *Education in Southern Africa: The Case of South Africa, Zimbabwe and Namibia.* Presentations made to students at Department of Mathematics Education, Goethe University, Frankfurt, Germany. December 2017.

Lotz-Sisitka, H.B.

Lotz-Sisitka, H.B. Aarhus University, Denmark. 15-17 February 2017. Presentations on collective learning and agency formation in times of climate change.

Lotz-Sisitka, H.B. Umea University, Sweden. 20-24 February 2017. Participation in international seminar week and PhD research school on 'Social (in)justice through Education - Can research make a difference?'

Lotz-Sisitka, H.B. University of Osnabruck, Germany, 9-13 October 2017. Transformational Learning Workshop between Rhodes University and University of Osnabruck.

Mgqwashu, E.M.

Mgqwashu, E.M. South Africa Institute of Vrije Universiteit Amsterdam, Netherlands. 1 - 9 April 2017.

Schafer, M.

Schafer, M. Goethe University, Frankfurt, Germany. Presenting workshops on Visualisation. 5 - 14 March 2017.

Other Publications

Burt, J. and Lotz-Sisitka, H.

Wilson, J., Munnik, V., **Burt, J.**, Periera, T., Ngcozela, T., Mokoena, S., Lusithi, T. and Lotz-Sisitka, H. (2017) Citizen Monitoring of the NWRS2. In: *Water Research Commission K5/2313/10*. South Africa: WRC.

Burt, J. and Price, L.

Munnik, V., **Burt, J.**, **Price**, L., Barnes, G., Ashe, B. and Motloung, S. (2017) Principled, Pragmatic Revitalisation of Catchment Management Forums in Principled, Pragmatic Revitalisation of Catchment Management Forums in South Africa. In: *WRC Technical Report: WRC Project No. K5/2411*. South Africa: WRC.

Mgqwashu, E.M.

Mgqwashu, E.M. In South Africa, what are we supposed to do away with when we decolonise the curriculum? *OpenDemocracy free thinking for the world*. Wednesday, 1 March 2017.



https://opendemocracy.net/wfd/emmanuel-mgqwashu/in-south-africawhat-are-we-supposed-to-do-away-with-when-we-decolonisecurriculum

Mukute, M.

Mukute, M., Colvin, J., Jeans, H. and Barihaihi, M. (2017). In: *Adaptive* governance for adaptive farming: Communities and government in Uganda working collaboratively to produce seasonal forecasts for smallholder farmers. UK: Oxfam International.

Musiyiwa, L. and Schudel, I.

Nissen, S., Aoyagi, M., Burningham, K., Oliveira, M., Hasan, M., Hayward, B., Jackson, T., Jha, V., **Musiyiwa**, L., Schudel, I. and *et al.* (2017) Young and Urban: Understanding the Sustainability Challenges. In: *CUSP Working Paper*. University of Surrey. Guildford, UK: Centre for Understanding of Sustainable Prosperity (CUSP).

Peer Reviewed Non-Subsidy-Earning Journal Research Publications

Graven, M.

Long, C., **Graven, M.**, Sayed, Y. and Lampen, E. (2017) Enabling and Constraining Conditions of Professional Teacher Agency: The South African Context. *Contemporary Education Dialogue*. 14 (1). p.5-21.

Kambeyo, L. and Ngcoza, K.M.

Kambeyo, L. and Ngcoza, K.M. (2017) Using Easily Accessible Resources to Teach Acids and Bases: A Namibian A Namibian Case Study. *International journal of educational sciences*. 18 (1-3). p.47-55.

Lotz-Sisitka, H.

Lotz-Sisitka, H. and Ramsarup, P. (2017) Using Dialectical Critical Realism in the Analysis of Career Stories in Learning Pathways Research. In: *SAQA Bulletin: Learning Pathways for Sustainable Development, the National Qualifications Framework (NQF), and Lifelong Learning in South Africa.* South Africa: SAQA.

Lotz-Sisitka, H. and Ramsarup, P.

Lotz-Sisitka, H. and Ramsarup, P. (2017) Introduction: Researching Sustainable Development Learning Pathways Towards Progression in Learning and Work. In: *SAQA Bulletin: Learning Pathways, the National Qualifications Framework (NQF), and Lifelong Learning in South Africa.* South Africa: SAQA.

Lotz-Sisitka, H. and Ramsarup, P. (2017) Learning Pathways and Articulation: Early Conceptual Explorations and Implications for Research Design(s). In: *SAQA Bulletin: Learning Pathways, the National Qualifications Framework (NQF), and Lifelong Learning in South Africa.* South Africa: SAQA.

Lotz-Sisitka, H. and Ramsarup, P. (2017) Analysing Career Stories with Dialectical Critical Realism in Learning Pathways research. In: SAQA Bulletin: Learning Pathways, the National Qualifications Framework (NQF), and Lifelong Learning in South Africa. South Africa: SAQA.

Lotz-Sisitka, H., Ramsarup, P. and Mohanoe, N.

Lotz-Sisitka, H., Ramsarup, P. and Mohanoe, N. (2017) Learning Pathways and Differentiation: Initial Methodological Explorations and Implications for Research Design(s). In: *SAQA Bulletin: Learning Pathways, the National Qualifications Framework (NQF), and Lifelong Learning in South Africa.* South Africa: SAQA.

Lotz-Sisitka, H., Ramsarup, P., Mohanoe, N. and Olvitt, L.L.

Lotz-Sisitka, H., Ramsarup, P., Mohanoe, N. and Olvitt, L.L. (2017) Boundary Making and Boundary Crossing in Learning Pathways Access and Progression: Voices from the Workplace. In: *SAQA Bulletin: Learning Pathways, the National Qualifications Framework (NQF), and Lifelong Learning in South Africa.* South Africa: SAQA.

Ramsarup, P.

Ramsarup, P. (2017) Systems Elements Influencing the Emergence of Learning Pathways from a Green Skills Perspective. In: SAQA Bulletin:

Learning Pathways, the National Qualifications Framework (NQF), and Lifelong Learning in South Africa. South Africa: SAQA.

Ramsarup, P. (2017) Understanding Learning Pathways and Transitioning: Perspectives from the Literature. In: *SAQA Bulletin: Learning Pathways, the National Qualifications Framework (NQF), and Lifelong Learning in South Africa.* South Africa: SAQA.

Ramsarup, P. and Lotz-Sisitka, H.

Ramsarup, **P**. and **Lotz-Sisitka**, **H**. (2017) An In-depth Case Study of Environmental Engineering: Learning and Work Transitioning in Boundaryless Work. In: *SAQA Bulletin: Learning Pathways, the National Qualifications Framework (NQF), and Lifelong Learning in South Africa.* South Africa: SAQA.

Ramsarup, P. and Lotz-Sisitka, H. (2017) An Expanded Methodological View on Learning Pathways as Progression in Learning and Work: A Laminated Systems Perspective. In: *SAQA Bulletin: Learning Pathways, the National Qualifications Framework (NQF), and Lifelong Learning in South Africa.* South Africa: SAQA.

Sannino, A. and Engestrom, Y.

Laitinen, A., **Sannino, A.** and **Engestrom**, **Y**. (2017) From controlled experiments to formative interventions in studies of agency: methodological considerations. *Educação*. 39 (2017). p.14-23.

Sibanda, J.

Sibanda, J. (2017) Extent of the Utilisation of Vocabulary Learning Opportunities from Classroom Print. *International journal of educational sciences*. 16 (1-3). p.129-142.

Stott, **D**. (2017) Developing number sense in Foundation and Intermediate Phase learners. *Learning and Teaching Mathematics*. 22 (4). p.15-19.

Vale, P. and Stott, D.

Vale, **P**. and **Stott**, **D**. (2017) Developing Spatial Reasoning in foundation and Intermediate Phase Learners. *Learning and Teaching Mathematics*. 1 (07). p.1-10.

Wilmot, D.

Wilmot, D. and Goldschagg, P. (2017) Exploring the role of a Google Group in enabling lesson resource sharing in a South African geography teachers' professional learning community. *Journal of Geography Education for Southern Africa*. 2 (2). p.9-24.

Wilmot, **D**. (2017) What did we do and what did we learn? A fieldtrip to the beach and a dairy farm with pre-service Foundation Phase teachers. *Journal of Geography Education for Southern Africa*. 2 (1). p.68-77.

Peer Reviewed Subsidy-Earning Journal Research Publications

Engestrom, Y.

Engestrom, Y. (2017) Conflict and Curiosity: The Legacy of Naoki Ueno. *Mind Culture and Activity.* 24 (2). p.146-149.

Haapasaari, A., **Engestrom**, **Y**. and Kerosuo, H. (2017) From initiatives to employee-driven innovations. *European Journal of Innovation Management*. (2017). p.1-21.

Euvrard, G.J.

Euvrard, G.J. (2017) South Africanising the English Cryptic Crossword. *Ensovoort.* 37 (2017). p.1-10.

Giloi, S.

Giloi, S. and Belluigi, D.Z. (2017) Underlying knowledge-knower structures in graphic design: Contributing to establishing a cohesive language for use in graphic design education. *Art, Design & Communication in Higher Education. 16 (1). p.7-22.*

Grant, C.

Grant, C. (2017) Excavating the South African teacher leadership



archive: Surfacing the absences and re-imagining the future. *Educational Management Administration & Leadership.* 2 (2017). p.1-19.

Grant, C. (2017) Distributed leadership in South Africa: yet another passing fad or a robust theoretical tool for investigating school leadership practice? *School Leadership and Management 37 (5*). p.457-475.

Graven, M.

Graven, M. (2017) Book Review: Research for educational change: Transforming researchers' insights into improvement in mathematics teaching and learning. Authors: Jill Adler and Anna Sfard (Eds.) ISBN: 978-1-138-18732 Publisher: Routledge, London, 2017. Pythagoras. 38 (1). p.1-4.

Abtahi, Y., **Graven, M.** and Lerman, S. (2017) Conceptualising the more knowledgeable other within a multi-directional ZPD. *Educational Studies in Mathematics*. 96 (2017). p.275-287.

Graven, **M**. and Coles, A. (2017) Resisting the desire for the unambiguous: productive gaps in researcher, teacher and student interpretations of a number story task. *ZDM: Mathematics Education.* 49 (2017). p.881-893.

Graven, M. and Pausigere, P.

Graven, M. and **Pausigere, P.** (2017) Learning affordances and participation enablers within a primary mathematics in-service community of practice. *South African Journal of Childhood Education.* 7 (1). p.1-11.

Lotz-Sisitka, H., Mukute, M., Chikunda, C., Baloi, A. and Pesanayi, T.

Lotz-Sisitka, H., Mukute, M., Chikunda, C., Baloi, A. and Pesanayi, T. (2017) Transgressing the norm: Transformative agency in communitybased learning for sustainability in southern African contexts. *International Review of Education.* 63 (2017). p.897-914.

Mgqwashu, E.M.

Mgqwashu, **E.M**. and Makhathini, B. (2017) Transforming primary school teachers' perceptions of the 'place' of teaching reading: the role of Reading to Learn methodology. *The Independent Journal of Teaching and Learning*. 12 (1). p.30-49.

Moodly, A.L.

Moodly, A.L. and Toni, N.M. (2017) Women's Voices of and on Leadership in Higher Education: A South African Perspective. *Journal of Educational Studies*. 16 (1). p.184-198.

Moodly, A.L. and Toni, N.M. (2017) Re-imagining higher education leadership - in conversation with South African female deputy vice-chancellors. *Perspectives in education.* 35 (2). p.155-167.

Ngcoza, K.M. and Jawahar, K.

Agunbiade, E., Ngcoza, K.M., Jawahar, K. and Sewry, J. (2017) An Exploratory Study of the Relationship between Learners' Attitudes Towards Learning Science and Characteristics of an Afterschool Science Club. *African Journal of Research in Mathematics, Science and Technology Education (AJRMSTE) or African Journal of Research in MST Education.* 21 (3). p.271-281.

Olvitt, L.L.

Olvitt, L.L. (2017) Education in the Anthropocene: Ethico-moral dimensions and critical realist openings. *Journal of Moral Education.* 46 (4). p.396-409.

Pausigere, P.

Pausigere, P. (2017) A sociological analysis of the pictures used in the South African foundation phase numeracy workbooks and their mathematical implications. *Journal of Education*. 70 (2017). p.24-45.

Price, L.

Price, L. (2017) Wellbeing research and policy in the U.K.: questionable science likely to entrench inequality. *Journal of Critical Realism*. 16 (5). p.451-467.

Ramsarup, P. and Lotz-Sisitka, H.

Ramsarup, P. and Lotz-Sisitka, H. (2017) The Nature of Learning and

Work Transitioning in Boundaryless Work: The Case of the Environmental Engineer. *Southern African Journal of Environmental Education*. 33 (2017). p.99-116.

Rosenberg, E. and Togo, M.

Rosenberg, E. and Togo, M. (2017) Editorial. Journal development, scholar development and quality. *Southern African Journal of Environmental Education*. 33 (1). p.9-13.

Sannino, A. and Engestrom, Y.

Sannino, A. and Engestrom, Y. (2017) Co-generation of societally impactful knowledge in Change Laboratories. *Management Learning.* 48 (1). p.80-96.

Schudel, I.

Schudel, I. (2017) Modelling Dialectical Processes in Environmental Learning: An Elaboration of Roy Bhaskar's Onto-axiological Chain. *Journal of Critical Realism.* 16 (2). p.163-183.

Sibanda, L.

Sibanda, L. (2017) Grade 4 Learners' Linguistic Difficulties in Solving Mathematical Assessments. *African Journal of Research in Mathematics, Science and Technology Education (AJRMSTE) or African Journal of Research in MST Education.* 21 (1). p.86-96.

Peer-reviewed Proceedings

Burt, J.

Burt, J. and Wilson, J. Changing practice: A course to support water activists in South Changing practice: A course to support water activists in South Africa. *Collaborative and Sustainable Learning for a Fairer World: Rhetoric or Reality.* North-West University, Potchefstroom Campus. South Africa. November 2015.

Burt, J. Changing Practice: A course to support water activists in South Africa. 'The River Speaks'. *Action Learning, Acton Research Association World Congress 2015.* St. George Hotel and Conference Centre, Centurion, Pretoria. South Africa. November 2015.

Chikiwa, S., Westaway, L. and Graven, M.

Chikiwa, S., Westaway, L. and Graven, M. Learning from Practice: What Mathematics Knowledge is Needed for Developing Number Sense? *AMESA 2017: Restoring the Dignity of Mathematics Learners Through Quality Teaching and Learning.* Nelson Mandela University, Port Elizabeth. South Africa. July 2017.

Deepak Mavani, B. and Pravin Mavani, D.

Deepak Mavani, B. and Pravin Mavani, D. Workshop: Integrating Dynamic Geometry Software in Mathematics Classrooms. *AMESA* 2017: Restoring the Dignity of Mathematics Learners Through Quality Teaching and Learning. Nelson Mandela University, Port Elizabeth. South Africa. July 2017.

Graven, M.

Abtahi, Y., **Graven**, M., Barwell, R. and Lerman, S. ABSTRACT: What does "Socio-Cultural-Historical Views of Teaching and Learning of Mathematics" Mean to Us? *41st PME Annual Conference*. Singapore. July 2017.

Liveve, A.K. and Ngcoza, K.M.

Liveve, A.K. and Ngcoza, K.M. Mobilizing traditional music and dance to mediate learning of concepts of echo and waves under the topic of sound in Grade 10 Physical Science. *Rediscovering IKS for Continental Identity and Empowerment in a Changing World*. Braamfontein Campus of the University of the Witwatersrand, Johannesburg. South Africa. November 2017.

Long, R.

Long, R. Grade R Numeracy Communities: The Potential for Teacher Growth. *AMESA 2017: Restoring the Dignity of Mathematics Learners Through Quality Teaching and Learning.* Nelson Mandela University, Port Elizabeth. South Africa. July 2017.



Metelerkamp, R.G. and Graven, M.

Metelerkamp, R.G. and Graven, M. #Silo's Must Fall: Lesson Study as a Stimulus for Teacher Collaboration. *AMESA 2017: Restoring the Dignity of Mathematics Learners Through Quality Teaching and Learning.* Nelson Mandela University, Port Elizabeth. South Africa. July 2017.

Mofu, Z., Graven, M. and Stott, D.

Mofu, Z., Graven, M. and Stott, D. Primary Teaching Learning Through Participating in a Mathematics Club Programme: The Story of Mandie. *AMESA 2017: Restoring the Dignity of Mathematics Learners Through Quality Teaching and Learning.* Nelson Mandela University, Port Elizabeth. South Africa. July 2017.

Ngcoza, K.M.

Ngcoza, K.M. Negotiating Boundary Crossing from Traditional or Indigenous Knowledge to Modern Science: A South African Xhosa Perspective. *9th International Conference on Education and New Learning Technologies*. Barcelona. Spain. July 2017.

Ngcoza, K.M. and Chikunda, C.

Mukwambo, M., **Ngcoza**, **K.M.** and **Chikunda**, **C.** Supporting science teachers to incorporate indigenous knowledge in science teaching practices. *Rediscovering IKS for Continental Identity and Empowerment in a Changing World*. Braamfontein Campus of the University of the Witwatersrand, Johannesburg. South Africa. November 2017.

Ramasike, L.F. and Ngcoza, K.M.

Ramasike, L.F. and Ngcoza, K.M. Mobilising Indigenous Languages as a Resource in Conjunction with a 'Straw Electricity' Analogy to Enhance Learner Talk and Sense-Making of Ohm's Law. *Rediscovering IKS for Continental Identity and Empowerment in a Changing World*. Braamfontein Campus of the University of Witwatersrand, Johannesburg. South Africa. November 2017.

Robertson, S.A., and Graven, M.

Robertson, S.A., and **Graven, M.** ABSTRACT: South African Challenges to transitioning from ritual to explorative participation. *41st Conference of the International Group for the Psychology of Mathematics Education (PME)*. National Institute of Education. Singapore. July 2017.

Robertson, S.A., & Graven, M. (2017). Linguistic obstacles to second language learners' access to mathematical talk for individualized sensemaking. *Short Communication presented at the 40th Annual Conference of the Mathematics Education Research Group of Australasia (MERGA)* 2017. Monash University, Melbourne, Australia.

Schafer, M.

Chikiwa, C. and Schafer, M. Promoting Critical Thinking in Multilingual Mathematics Classes Through Questioning: Are Teachers Truly Cultivating it? 8th UNISA/ISTE Conference on Mathematics, Science and Technology Education. Mopani Camp, Kruger National Park, Limpopo. South Africa. October 2017.

Chikiwa, C. and Schafer, M. Teaching Mathematics in Multilingual Classrooms: Oral Questioning as a Formative Assessment Technique. *Research to learn and teach for diversity in Mathematics, Science and Technology Education*. Central University of Technology, Free State. South Africa. January 2017.

Simasiku, F.S., Ngcoza, K.M. and Mandikonza, C.

Simasiku, F.S., Ngcoza, K.M. and Mandikonza, C. Namibian science teachers' perceptions and experiences on the inclusion of indigenous knowledge in their lessons. Rediscovering IKS for Continental Identity and Empowerment in a Changing World. Braamfontein Campus of the University of the Witswatersrand, Johannesburg. South Africa. November 2017.

Stevenson-Milln, C.

Stevenson-Milln, C. Merging Mathematics and Music in the Foundation Phase: Why This is Critically Important in South Africa. *AMESA 2017: Restoring the Dignity of Mathematics Learners Through Quality Teaching and Learning*. Nelson Mandela University, Port Elizabeth. South Africa. July 2017.

Stott, D.

Stott, D. Progressive Progress and Profiling: Progression Spectra for Teachers. *AMESA 2017: Restoring the Dignity of Mathematics Learners Through Quality Teaching and Learning.* Nelson Mandela University, Port Elizabeth. South Africa. July 2017.

Stott, D., Graven, M., Baart, N., Hebe, G. and Mofu, Z.

Stott, D., Graven, M., Baart, N., Hebe, G. and Mofu, Z. After School Maths Clubs: Investigating Learner Progression in an Expanding Intervention Model. *AMESA 2017: Restoring the Dignity of Mathematics Learners Through Quality Teaching and Learning*. Nelson Mandela University, Port Elizabeth. South Africa. July 2017.

Tweedie, M.

Tweedie, M. Workshop: How I teach number sense in the Grade R classroom. *AMESA 2017: Restoring the Dignity of Mathematics Learners Through Quality Teaching and Learning.* Nelson Mandela University, Port Elizabeth. South Africa. July 2017.

Wood, S.

Wood, S. Workshop: The Order of Operations: Putting the 'Term' Back into Bodmas. *AMESA 2017: Restoring the Dignity of Mathematics Learners Through Quality Teaching and Learning.* Nelson Mandela University, Port Elizabeth. South Africa. July 2017.

Research Papers Presented at Academic/Scientific Conferences (Non-peer-reviewed Proceedings)

Burt, J. and James, A.K.

Burt, J., James, A.K., Walters, S. and von Kotze, A. Popular education as and at work. *Researching Work and Learning*. Rhodes University, Grahamstown. South Africa. December 2017.

Burt, J. and Lotz-Sisitka, H.

Wilson, J., Munnik, V., **Burt, J.**, Pereira, T., Ngcozela, T., Mokoena, S., Lusithi, T. and **Lotz-Sisitka**, **H**. Building participatory democracy through water activism: a South African case study. *Association for Research on Civil Society in South Africa*. School of Governance, University of the Witwatersrand, Johannesburg. South Africa. July 2017.

Dalvit, L.

Dalvit, L. and **Buthelezi**, M.T. Exploring how mobile phones mediate bonding, bridging and linking social capital in a South African rural area. *IAMCR*. Barahona, Cartagena de Indias. Colombia. July 2017.

Dalvit, L. Apps development as a catalyser of mobile literacy: bridging academia and rural communities in South Africa. *9th international conference on Education and New learning technologies*. Palma de Mallorca, Barcelona. Spain. July 2017.

Dalvit, L. and Chimpololo, A.

Dalvit, L. and **Chimpololo, A.** Mediation of heutagogical practices through the use of mobile technologies as learning tools: An intervention for a teacher training programme in Malawi. *DEASA*. University of Zambia, Lusaka. Malawi. October 2017.

Dirwai, C.

Dirwai, **C**. Decolonising the curriculum? An opportunity to explore communal farmers? Social learning and capabilities as transformation beyond the basket case. *As part of a panel School, University and Community: Diverse education and learning sites and interfaces for engaging notions of transforming curricula, education and learning processes.* South African Research Education Association, Port Elizabeth. South Africa. October 2017.

Dongwi, B.L., Schafer, M. and Kellen, M.E.

Dongwi, B.L., Schafer, M. and **Kellen, M.E.** Enacted visualisation in mathematical reasoning. *25th Southern African Association dedicated to the advancement of research in Mathematics, Science and Technology Education (SAARMSTE)*. Central University of Technology, Free State. South Africa. January 2017.

Grant, C.

Grant, C. 'Double stimulation and artifact use in leadership learning for school learners' at the Research Work and Learning Conference, Rhodes University. December 2017.

Grant, C., Quinn, L. and Vorster, J. *'Decolonizing university practice: leading academic departments in a challenging Higher Education context*' at the South African Educational Research Association (SAERA). Cape Town, October 2017.

Grant, C. 'A formative intervention for developing learner leadership: An activity theoretical analysis of a high school learner leadership club' at the European Group of Organisational Studies (EGOS). Copenhagen Business School, Denmark, July 2017.

Grant, C. 'Success' and 'failure' in two post-graduate research learning spaces: an activity theoretical analysis' at the 6th Biennial POSTGRADUATE Supervision Conference. University of Stellenbosch, April 2017.

Jalasi, E.M.

Jalasi, E.M. "Expansive learning and change agency amongst users of improved cookstoves in Malawi." *Paper presented at the third seminar in the bilateral collaboration between Rhodes University and Aarhus University on 'Education and social learning in response to climate change risk and vulnerability'.* Denmark. February 2017.

James, A.K.

James, A.K. Critical pedagogy and decolonisation: Despite our best (in)tension(s). Part of panel titled: Unsettling the space: Uncertainty as a decolonising method. *South African Education Research Association* (*SAERA*). Boardwalk Hotel, Port Elizabeth. South Africa. October 2017.

James, A.K. Critical pedagogy and decolonisation: Despite our best (in)tension(s). Part of panel titled: Unsettling the space: Uncertainty as a decolonising method. *South African Education Research Association (SAERA).* Boardwalk Hotel, Port Elizabeth. South Africa. October 2017.

Kajee, F.

Kajee, F. Knowledge and knowers in Educational leadership and Management Master's (ELM) programmes in South Africa. *LCT conference*. Sydney, Australia. July 2017.

Kajee, F.

Kajee, F. The reality of knowledge and knower practices in Educational leadership & Management Master's (ELM) programmes in South Africa: Is it a case of restricted transformation & decolonization? *South African Education Research Association (SAERA)*. Boardwalk Hotel, Port Elizabeth. October 2017.

Kulundu, I.

Kulundu, I. Ruminating in praxis. Part of panel titled: Unsettling the space: Uncertainty as a decolonising method. *South African Education Research Association (SAERA)*. Boardwalk Hotel, Port Elizabeth. South Africa. October 2017.

Kulundu, I. "Collective Resonance and a Multiplicity Of Being In a Polarized world". *Paper presented at the third seminar in the bilateral collaboration between Rhodes University and Aarhus University on 'Education and social learning in response to climate change risk and vulnerability'*. Denmark. February 2017.

Kumalo, S.H.

Kumalo, S.H. The Impossibility of Separable Categories - Unearthing the Banality of Binarisms in the #MustFall movement. *As part of a panel School, University and Community: Diverse education and learning sites and interfaces for engaging notions of transforming curricula, education and learning processes. South African Education Research Association (SAERA).* Boardwalk Hotel, Port Elizabeth. South Africa. October 2017.

Lotz-Sisitka, H.

Lotz-Sisitka, H. Higher Education, Science and the 2030 Agenda: Transformative learning and partnerships. *Keynote address - Response* from the South - at the GIZ DAAD International Expert Meeting: 'Role of Higher Education, Science and New Alliances in the context of the 2030 Agenda'. Berlin. Germany. March 2017.

Lotz-Sisitka, H. ESD and Community Learning. *Invited Panel Presentation at the Global Universities Network for Innovation International Conference on Sustainable Development Goals: Actors and Implementation.* Barcelona. Spain. September 2017.

Lotz-Sisitka, H. Sustainability Starts with Teachers. Opening Paper and Lead Presenter. The United Nations Educational, Scientific and Cultural Organization (UNESCO) and The Southern African Regional Universities Association (SARUA) Environmental Sustainability Development Workshop. Swaziland. July 2017.

Lotz-Sisitka, H. T-learning and ESD in educational transformations. *Keynote address at the ESD, Science and Technology Conference.* University of KwaZulu Natal, Durban. South Africa. January 2017.

Lotz-Sisitka, H. Amanzi for Food: Transformative Learning for Green Economy Learning Pathways. Invited Presentation for the Amanzi For Food Green Economy Learning Award in the Session 'Investing Now for a Green Economy Future: Education and Training as Catalyst' hosted by UNITAR at the Second Partnership for Action on Green Economy Ministerial Conference. Berlin. Germany. March 2017.

Lotz-Sisitka, H. "Co-creating Transformative Activity in the Anthropocene: reframing processes in expansive learning". *International Society of Cultural-historical and Activity Research (ISCAR 2017) Congress - Taking a 360° view of the landscape of cultural-historical activity research: The state of our scholarship in practice?* Quebec City. Canada. August 2017.

Lotz-Sisitka, H. Sustainability Starts with Teachers. *Keynote paper, lead presenter and programme design. The United Nations Educational, Scientific and Cultural Organization (UNESCO) and The Southern African Regional Universities Association (SARUA) Environmental Sustainability Development Workshop.* Johannesburg. South Africa. April 2017.

Lotz-Sisitka, H. 'Re-invigorating Politics as Potentia': Transitions and Transformative Learning in South Africa. *Invited Keynote address at 8th International Sustainability Transitions Conference*. Gothenburg. Sweden. June 2017.

Lotz-Sisitka, H. Pioneers as Relational Subjects: Relationality in Collective Learning and Change Agency Formation. *Paper presented at the third seminar in the bilateral collaboration between Rhodes University and Aarhus University on Education and social learning in response to climate change risk and vulnerability.* Denmark. February 2017.

Lotz-Sisitka, H. Setting the Scene and Closing the Conference: Transitions, Transformations and Transgressions in Researching Work and Learning. *Opening and Closing Plenary Contributions at the 10th International Researching Work and Learning Conference*. Grahamstown. South Africa. December 2017.

Lotz-Sisitka, H. Natural Capital: Going beyond the World's Planetary Boundaries. What role for philanthropy in such a time? *Keynote address at the Independent Philanthropy Association of South Africa (IPASA) Philanthropy Symposium*. Stellenbosch. South Africa. October 2017.

Lotz-Sisitka, H. and Odumo, N. Environmental Learning Research and Transformative Learning at Rhodes University. *Opening paper from South Africa at the Collaborative Transformational Learning Workshop between Rhodes University and University of Osnabruck*. Germany. October 2017.

Lotz-Sisitka, H. T-learning and social (in)justice of education? *Keynote* address during the international seminar week on 'Social (in)justice through Education - Can research make a difference? Umea University, Umea. Sweden. February 2017.

Lotz-Sisitka, H. Sustainability Starts with Teachers. Opening Paper and Lead Presenter. The United Nations Educational, Scientific and





Cultural Organization (UNESCO) and The Southern African Regional Universities Association (SARUA) Environmental Sustainability Development Workshop. Lusaka. Zambia. June 2017.

Lotz-Sisitka, H., Mukute, M., Chikunda, C., Pesanayi, T. and Engestrom, Y.

Lotz-Sisitka, H., Mukute, M., Chikunda, C., Pesanayi, T., Chisoni, E., Madikze, L., Muthambo, C. and Engestrom, Y. Double stimulation and scaling within learning networks: features of expansive social learning in Southern Africa socio-ecological work and learning contexts. *Researching Work and Learning*. Rhodes University, Grahamstown. South Africa. December 2017.

Lotz-Sisitka, H., Pesanayi, T. and Chikunda, C.

Lotz-Sisitka, H., Pesanayi, T. and Chikunda, C. Building Commoning Activity: Expansive learning in two sites in southern Africa. *American Educational Research Association (AERA) 2017 Conference entitled "Knowledge to Action: Achieving the Promise of Equal Educational Opportunity"*. San Antonia. USA. April 2017.

Mandikonza, C. and Lotz-Sisitka, H.

Mandikonza, C. and Lotz-Sisitka, H. Sustainability starts with teachers: mediating change-oriented professional learning to enhane reflexive praxis and agency in teacher education. *10th International Conference on Researching Work and Learning*. Rhodes University, Grahamstown. South Africa. December 2017.

Masilela, M.P. and Olvitt, L.L.

Masilela, M.P. and Olvitt, L.L. Tranforming knowledge-sharing practices to improve healthcare waste management: a formative intervention case study. *Researching Work and Learning*. Rhodes University, Grahamstown. South Africa. December 2017.

Masuku Van Damme, S.

Masuku Van Damme, S. Surfacing children's socio-cultural knowledge in intergenerational learning in contexts of home/pasture and school using postcolonial theory framework. *As part of a panel School, University and Community: Diverse education and learning sites and interfaces for engaging notions of transforming curricula, education and learning processes.* South African Education Research Association, Port Elizabeth. South Africa. October 2017.

Matiwane, L.M.

Matiwane, L.M. Change laboratories with youth to reconceptualise work in Lenye Village, South Africa. *Researching work and learning*. Rhodes University, Grahamstown. South Africa. December 2017.

McGarry, D.K.

McGarry, D.K. The contributions T-learning has to Transformations to Sustainability. *3rd International Transformations Conference*. Dundee. Scotland. September 2017.

Temper, L., **McGarry, D.K.** and Weber, L. From Academic to Political Rigour: Insights from the Tarot of Transgressive Research. *12th Conference of the European Society for Ecological Economics: Ecological Economics in Action - Building a reflective and inclusive community.* Budapest. Hungary. July 2017.

McGarry, D.K. and Sugandh, S. Joint keynote: learning to transgress hot messes Lessons from Mandela's South Africa and the opportunities present in a 'post- truth' world: Lessons from Gandhi's India. *2nd world Encounter on Sustainable Actions: Transforming. Complex.* Futures. Mexico. August 2017.

Mgqwashu, E.M.

Mgqwashu, E.M. Panel Presentation: "How can principles of democracy and social justice inform our research into the student experience in higher education"? *Critical dialogue, HELTASA National Conference: Higher Education Well-Being: Transcending Boundaries Reframing Excellence.* Durban University of Technology, Durban: 21 - 24 November 2017.

Mgqwashu, E.M. Parallel Session Presentation: "Education for Public Good in the Age of Coloniality: implications for pedagogy". *5th SAERA*

National Conference: Education in an Era of Decolonisation and Transformation. Nelson Mandela University, Port Elizabeth: 23 - 26 October 2017.

Mgqwashu, E.M. Keynote address: "Democratising the classroom for epistemological access: the role of Reading to Learn Pedagogy in an Eastern Cape Secondary School". *Reading to Learn Pedagogy National Conference*. KZN, Pietermaritzburg: 8 - 10 September 2017.

Mgqwashu, E.M. Panel Presentation: "The potential of participatory research in influencing curriculum policy change in South Africa: SARiHE - researching rural students' lived experiences". *European Conference on Educational Research*. University College UCC, Campus Carlsberg, Humletorvet, 1799 Copenhagen V, Denmark: 21 - 22 August 2017.

Mgqwashu, E.M. Parallel session presentation: "Coloniality in the curriculum: the darker side of modernity". *EP-Nuffic Annual International Conference*. Vrije Universiteit Amsterdam, Netherlands. 5 - 9 April 2017.

Mukute, M.

Mukute, **M**. Keynote: Double stimulation, transformative learning and agency in organic agriculture workplaces: Insights from expansive social learning in the Zimbabwe networked district organic associations. *10th Researching Work and Learning Conference*. Rhodes University, Grahamstown. South Africa. December 2017.

Mukute, M. Response to the keynote speech on Researching Work and Learning for Enacted Utopias to Overcome Homelessness. *10th Researching Work and Learning Conference*. Rhodes University, Grahamstown. South Africa. December 2017.

Mukute, M. and Lotz-Sisitka, H.

Mukute, M. and Lotz-Sisitka, H. Transgressive social learning and socio-ecological systems in times of climate change. *Transformations* 2017 International Conference. Dundee. Scotland. September 2017.

Mukute, M., Lotz-Sisitka, H. and Pesanayi, T.

Mukute, M., Lotz-Sisitka, H. and Pesanayi, T. Change Laboratories in southern Africa in agriculture and natural resource management workplace. *American Educational Research Association (AERA) 2017 Conference entitled "Knowledge to Action: Achieving the Promise of Equal Educational Opportunity"*. San Antonia. USA. April 2017.

Mukute, M., Lotz-Sisitka, H., Pesanayi, T., Chikunda, C. and Baloi, A. Mukute, M., Lotz-Sisitka, H., Pesanayi, T., Chikunda, C. and Baloi, A. Transgressing the norm in sustainability-oriented expansive learning processes in rural-based activities: Insights from cross-case analysis in five African countries. *Transformations 2017 International Conference*. Dundee. Scotland. September 2017.

Nghifimule, S.N. and Schafer, M.

Nghifimule, S.N. and Schafer, M. An analysis of nature of visualization objects in three Namibian Grade 9 mathematics textbooks. *25th Southern African Association dedicated to the advancement of research in Mathematics, Science and Technology Education (SAARMSTE).* Central University of Technology, Free State. South Africa. January 2017.

Nkhahle, L.J.

Nkhahle, L.J. What characterises an effective continuing teacher professional development initiative? *Lessons learnt from Fundisa for Change National Teacher Training Programme*. South African Research Education Association, Boardwalk Hotel, Port Elizabeth. South Africa. October 2017.

Olvitt, L.L.

Olvitt, L.L. The significance of values and ethico-moral positions for transformative learning in contexts of social-ecological and economic vulnerability: A CHAT-led exploration. Taking a 360° view of the landscape of cultural-historical activity research: The state of our scholarship in practice? *International Society of Cultural-historical and Activity Research (ISCAR 2017) Congress.* Quebec City. Canada. August 2017.

Olvitt, L.L. and Ward-Smith, C.F.

Akhurst, J., Olvitt, L.L. and Ward-Smith, C.F. A community psychology



take on decolonised, ethics-led and embodied nature-based pedagogies for culturally diverse youth. *Society for Community Research and Action Biennial conference*. University of Ottawa, Ottawa. Canada. June 2017.

Pesanayi, T., Fumo, T. and Lotz-Sisitka, H.

Pesanayi, T., Fumo, T., Lotz-Sisitka, H. and Makhaga, N. Exploring five interconnected expansive learning mediation processes in Amanzi [water] for Food project in the eastern cape, South Africa. *10th International Conference on Researching Work and Learning.* Rhodes University, Grahamstown. South Africa. December 2017.

Ramsarup, P., Jenkin, N.P. and Rosenberg, E.

Moroane, K., Ramsarup, P., Jenkin, N.P. and Rosenberg, E. Greening work in the South African surface coatings sector: a focus on the paint industry. Transitions, Transformations, and Transgressions in Work and Learning and Work and Learning Research. *10th International Conference on Researching Work and Learning*. Rhodes University, Grahamstown. South Africa. December 2017.

Rosenberg, E.

Rosenberg, E. Panelist: What solutions exist to anticipate green skills? Presentation in Panel on 4 July 2017 on: Greening Skills: TVET for sustainability. In Skills on the Move: Global trends, local resonances. *UNESCO International Conference*. Tangshan. People's Republic of China. January 2017.

Rosenberg, E. Researching skills and sustainability: A South African perspective. Researchable Issues in TVET and Continuing Education and Training: South Africa, Africa and Beyond. *Launch of the Journal for Vocational and Continuing Education and Training (JOVCET)*. University of the Western Cape, Cape Town. South Africa. November 2017.

Rosenberg, E. What research tells us about producing green skills. *Biodiversity Research and Evidence Indaba*. Johannesburg. South Africa. August 2017.

Rosenberg, E. Methodology for less harmful, more helpful evaluation in natural resource management programmes in South Africa. *From Promise to Practice, 2017 International Conference for Realist Research, Evaluation and Synthesis.* Brisbane convention and exhibition centre, Brisbane. Australia. October 2017.

Rosenberg, E. and Burt, J.

Colvin, J., **Rosenberg, E.** and **Burt, J.** Resilience monitoring, evaluation, assessment and learning (MEAL) presentations and workshop. *Resilience for Development Colloquium*. Sunnyside Park Hotel, Johannesburg. South Africa. April 2017.

Rosenberg, E. and Mclean, D.D.

Rosenberg, E. and Mclean, D.D. Researching green work: An opportunity to rethink how we determine skills demand. *10th International Conference on Researching Work and Learning.* Rhodes University, Grahamstown. South Africa. December 2017.

Rosenberg, E. and Mudau, V.

Rosenberg, E., Mtati, N. and Mudau, V. Evaluation - Optimising Evidence for Accountability and Learning in NRM Programmes. *Biodiversity Research and Evidence Indaba*. Birchwood Hotel, Johannesburg. South Africa. August 2017.

Schafer, M.

Chikiwa, C. and **Schafer**, **M**. Promoting critical thinking in multilingual mathematics classes through questioning: are teachers truly cultivating it? *8th UNISA/ISTE International Conference on Mathematics, Science and Technology Education*. Kruger National Park, Limpopo. South Africa. October 2017.

Schafer, M. Das Potential ideal typischer mathematischer Dialoge in Videoclips. *GDM 2017*. Universitat Potsdam, Potsdam. Germany. February 2017.

Chikiwa, **C**. and **Schafer**, **M**. Teacher Code Switching in Mathematics Multiligual Classrooms: Oral Questioning as a Formative Assessment Technique. *25th Southern African Association dedicated to the advancement of research in Mathematics, Science and Technology* *Education (SAARMSTE).* Central University of Technology, Free State. South Africa. January 2017.

Schafer, M. and Chikiwa, C.

Schafer, M. and Chikiwa, C. Promoting critical thinking in multilingual mathematics classes through questioning: are teacher's truly cultivating it? *International Society for Technology in Education (ISTE).* Mopani Camp in Kruger National Park, Limpopo. South Africa. October 2017.

Schudel, I.

Schudel, I. The heart of knowledge: An axiological perspective on knowledge practices. *2nd Legitimation Code Theory Conference*. LCT Centre for Knowledge Building, Sydney. Australia. July 2017.

Stevens, A.W.

Stevens, A.W. Reflections on the Rhodes University Mathematics Experience. *25th Southern African Association dedicated to the advancement of research in Mathematics, Science and Technology Education (SAARMSTE).* Central University of Technology, Bloemfontein. South Africa. January 2017.

Stott, D.

Stott, D. Interactive gesturing: Deepening of mathematical activity with young learners in a South African context. *International Symposium Elementary Maths Teaching: Equity and diversity in elementary mathematics education*. Charles University, Prague. Czech Republic. January 2017.

Vallabh, P.

Vallabh, **P**. Unsettling how we think knowledge is built. Part of panel titled: Unsettling the space: Uncertainty as a decolonising method. *SAERA*. Boardwalk Hotel, Port Elizabeth. Johannesburg. October 2017.

Vallabh, P. Citizen Sciences as Reflexive Social Movements. *9th World Environmental Education Congress*. Vancouver. Canada. September 2017.

Van Wyk, S.

Van Wyk, S. Ethics-orientated expansive learning for social-ecological transformation: the case of a river improvement project. *National Wetlands Indaba*. Sun International Wild Coast, Port Edward, KwaZulu-Natal. South Africa. October 2017.

Ward, M.R. and Lotz-Sisitka, H.

Ward, M.R. and Lotz-Sisitka, H. Sustainable value creation, concept formation and expansive learning: exploring the need potential and mechanisms for changing business models. Transitions, Transformations, and Transgressions in Work and Learning and Work and Learning Research. *10th International Conference on Researching Work and Learning*. Rhodes University, Grahamstown. South Africa. December 2017.

Ward, M.R., Jenkin, N.P., Rosenberg, E. and Ramsarup, P.

Ward, M.R., Jenkin, N.P., Rosenberg, E. and Ramsarup, P. Aligning policy, strategy and skills for sustainability: an occupationally directed study into green supply chain management in public sector in South Africa. Transitions, Transformations, and Transgressions in Work and Learning and Work and Learning Research. *10th International Conference on Researching Work and Learning*. Rhodes University, Grahamstown. South Africa. December 2017.

Westaway, L. and Graven, M.

Westaway, L. and Graven, M. Why teachers of Foundation Phase have yet to 'take up' progressive roles. 'In 40 years. We are still learning'. *Mathematics Education Research Group of South Africa (MERGA)*. Monash University, Melbourne. Australia. July 2017.

Wilmot, D.

Wilmot, D. The importance of recognising students' habitus when making pre-service teacher education curriculum decisions. *International Geography Union (IGU) Commission on Geographical Education Symposium*. Universidade de Lisboa campus, Lisbon. Portugal. October 2017.

Wilmot, D. Connecting and responding to the challenge of quality geography education in the south(ern) Africa. *The South African Geography Teachers' Association [SAGTA] Conference*. St John's College, Johannesburg. South Africa. June 2017.



Staff and students remained active in their research endeavours and had their works presented at conferences and symposia locally and internationally, as well as getting their papers published.



Graduation: Back Row: Professor R Adendorff, E Barron Le-Roux, T Hussey, Associate Professor M de Vos, Mr I Sieborger, Ms T Probert. Front Row: L Buthelezi, Associate Professor S Hunt, S-L Schafli, I Mohr, B Taylor, Professor SR Simango. Photo: courtesy Professor SR Simango

Abroad, **Professor Simango** presented his works at the University of Gothenburg in Sweden, and **Associate Professor Hunt** presented her work at the University of Birmingham in the United Kingdom.

Locally **Professor Simango** presented his works at the Conference of the Language Associations of Southern Africa held at Rhodes University and at the Southern African Microlinguistics Workshop held at Stellenbosch University; whilst **Associate Professor Hunt**, presented her work at the Language in the Media Conference held at the University of the Western Cape.

Professor Adendorff continued serving on the Board of the Dictionary of South African English as well as on the national (PANSALB-affiliated) English Language Board. He and **Professor Simango** continued to serve as members of the Academy of Science of South Africa.

Associate Professor de Vos and Associate Professor Hunt continued to serve as president for, respectively, the Linguistic Society of Southern Africa and the Southern African Applied Linguistics Association. **Professor Simango** continued to serve on the editorial board of the journal: *Southern African Linguistics and Applied Language Studies*, and was elected as a non-executive director for the Molteno Institute for Language and Literacy.

Postgraduates / Graduations

One (1) student graduated with a PhD with a thesis focusing on a comparative analysis of ellipsis in isiXhosa and Mandarin. She has since assumed the position of Director of African Languages at Beijin Foreign Studies University.

Two (2) other students graduated with MA degrees with theses focusing on APPRAISAL theory and South African Sign Language. A number of Postgraduate students presented their works at the annual mini-conference held at the beginning of September 2017.

Distinguished Visitors / International Visits

The department hosted a number of African Humanities Program Fellows from universities in Nigeria, Ghana, and



Uganda at different points in the year. The scholars, who spent between six (6) and eight (8) weeks in the department, presented their works at research seminars and interacted with staff and Postgraduate students.

Dr Eva-Marie Strom, a Postdoctoral Research Fellow, returned to Sweden after two-and-half years in the department.

Significant Research Aligned Events

The second Transformation in Linguistics Summit, convened by **Associate Professor De Vos** and **Associate Professor Hunt**, which was held at the University of the Free State,



Peer Reviewed Subsidy-Earning Journal Research Publications

Bennett, W.G.

Bennett, W.G. and Rose, S. (2017) Moro voicelessness dissimilation and binary [voice]. *Phonology*. 34 (2017). p.473-505.

De Vos, M.

Riedel, K. and **De Vos**, **M**. (2017) Swahili coordinated infinitives and non-canonical case-marking. *Journal of African Languages and Linguistics*. 38 (2). p.265-288.

Hunt, S.

Jaworska, S. and **Hunt, S.** (2017) Differentiations and intersections: a corpus-assisted discourse study of gender representations in the British press before, during and after the London Olympics 2012. *Gender and Language*. 11 (3). p.336-364.

Kohlo, M.D.K., Sieborger, I. and Bennett, W.G.

Kohlo, M.D.K., Sieborger, I. and Bennett, W.G. (2017) A perfect end: A study of syllable codas in South African Sign Language. *Spil Plus.* 52 (2017). p.127-156.

Savic, S.

Savic, S. (2017) The perfective and imperfective aspects in Xhosa. *Spil Plus.* 52 (2017). p.45-72.

Sieborger, I. and Adendorff, R.

Sieborger, I. and Adendorff, R. (2017) We're talking about semantics here: Axiological condensation in the South African parliament. *Functions of Language*. 24 (2). p.196-233.

Strom, E.M.B.

Strom, E.M.B. (2017) What the giant tells us about agreeing postverbal subjects in Xhosa. *Spil Plus.* 52 (2017). p.73-100.

Peer-reviewed Proceedings

Bennett, W.G.

Bennett, W.G. and DelBusso, N. Typological consequences of ABCD constraint forms. *NELS 47: Forty-Seventh Annual Meeting of the North East Linguistic Society.* University of Massachusetts, Amherst. USA. October 2016.

offered linguists and language practitioners from universities around the country the opportunity to reflect on new directions in research in linguistics and access to the discipline in South Africa.



Professor Silvester Ron Simango, Head of Department

Research Papers Presented at Academic/Scientific Conferences (Non-peer-reviewed Proceedings)

Hunt, S.

Hunt, S. Boast and bellow, giggle or chatter: gender and verbs of speech in children's fiction. *Corpus Linguistics Conference*. Birmingham. UK. July 2017.

Jaworska, S. and **Hunt, S.** Intersections of (trans)nationalism, gender, race and crime in online news: the case of Oscar Pistorius: Olympian and murderer. *Language in the Media 7 Conference*. Cape Town. South Africa. October 2017.

Simango, S.R.

Simango, S.R. Events and Shadows: Evidence from isiXhosa tense and aspect. *The semantics of verbal morphology in underdescribed languages*. University of Gothenburg, Gothenburg. Sweden. June 2017.

Simango, S.R. Spatial deixis in ciNsega. *6th Southern African Microlinguistics Workhop.* Stellenbosch University, Stellenbosch. South Africa. December 2017.

Simango, S.R. An English preposition takes a stroll in isiXhosa. *Conference of the language Associations of Southern Africa.* Rhodes University, Grahamstown. South Africa. June 2017.



The Department of Environmental Science produced a record number of journal articles (41) in 2017 The publications were supplemented with two (2) book chapters and thirty-three (33) conference presentations. The conference presentations were almost double those of the previous year.

This is clear testimony of the environmental footprint of our research both locally and internationally. The research outputs cover diverse areas and were produced by authors from diverse institutes and departments. Again, this is an important indicator of our transdisciplinary research that addresses complex environmental challenges.

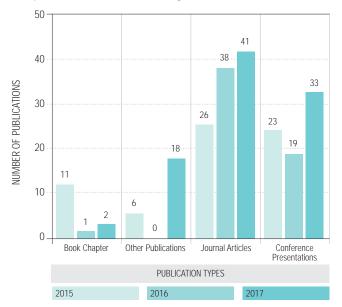


Figure 1. Department of Environmental Science research outputs during the last three years (2015-2017).

There was a decrease in the numbers of our current MSc and PhD Postgraduate students. The numbers of MSc and PhD students decreased by 24% and 45%, respectively compared to the previous year. There will be a need to put in place a strategy to increase the number of Postgraduate students to at least match those of the previous years (Figure 2).

Postgraduates/Graduations

The numbers of Postgraduate students who have graduated have remained generally similar during the last three (3) years (Figure 2). In 2017 we graduated twenty-one (21) Honours, four (4) Masters and two (2) PhD students.

Distinguished Visitors / International Visits

In 2017 we had twenty-one (21) international visits by both staff and senior Postgraduate students. Countries visited

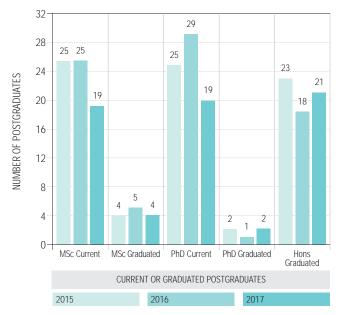


Figure 2. Numbers of current and graduated Postgraduate students in the Department of Environmental Science during the last three years (2015-2017).

included Sweden, Mexico, Scotland, Portugal, India, Tanzania and Uganda. This is evidence of our global outreach in terms of disseminating our research findings and collaboration.

Significant Research Aligned Events

In October we had our annual research forum with **Professor Vincent Kakembo** from Nelson Mandela University as the guest speaker. The Dean of Science also attended the forum. His presence was an excellent motivation to the staff.



Professor James Gambiza, Head of Department

Department of Environmental Science



PUBLICATIONS

Books/Chapters/Monographs

Hamer, N.

Hamer, N. and Sutherland, A. (2017) Snapshot - Storying climate change adaptation: Theatre as a research tool in an Ecohealth research process in the Eastern Cape, South Africa. In: Baxter, V. and Low, K.E. (eds.). *Applied Theatre: Performing Health and Wellbeing*. London: Bloomsbury. p.234-238. ISBN: 9781472584571.

Other Publications

Fox, H.E. and Shackleton, S.

Fox, H.E. and Shackleton, S. (2017) Learning from the decline of smallholder agricultural projects in the Kat River Valley, Eastern Cape, South Africa. In: Shackleton, S. (ed.). *Policy Brief No 17*. Grahamstown: Department of Environmental Science.

Gambiza, J.

Gambiza, J. (2017) Land degradation neutrality legal and institutional environment. In: Gambiza, j. (ed.). UNCCD Land Degradation Neutrality Target Setting Programme. South Africa: Department of Environmental Affairs.

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Dr Deepa Pullanikkatil with research assistants during a study on fibre craft in Swaziland.

Photo: Department of Environmental Science.

Lunderstedt, K.E., Mtati, N., Ntshudu, M.E., Powell, M. and Weyer, D.J.

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Pereira, T.L. and Shackleton, S.

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Peer Reviewed Subsidy-Earning Journal Research Publications

Chakona, G.

Chakona, G., Swartz, E.R. and Chakona, A. (2017) The status and distribution of a newly identified endemic galaxiid in the eastern Cape Fold Ecoregion, of South Africa. *Aquatic Conservation-Marine and Freshwater Ecosystems*. p.1-13.

Chakona, G. and Shackleton, C.M.

Chakona, G. and Shackleton, C.M. (2017) Voices of the hungry: a qualitative measure of household food access and food insecurity



Honours students taking Eco-school committee members on an environmental "scavenger hunt" at Amakhala Game Reserve. Photo: Department of Environmental Science.

in South Africa. Agriculture and Food Security. 6 (66). p.1-17.

Chakona, G. and Shackleton, C.M. (2017) Local setting influences the quantity of household food waste in mid-sized South African towns. *PLoS One.* 12 (12). p.1-20.

Chakona, G. and Shackleton, C.M. (2017) Minimum Dietary Diversity Scores for Women Indicate Micronutrient Adequacy and Food Insecurity Status in South African Towns. *Nutrients*. 9 (812). p.1-16.

Cundill, G.

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Cundill, G., Carlos Bezerra, J., De Vos, A. and Ntingana, N.

Cundill, G., Carlos Bezerra, J., De Vos, A. and Ntingana, N. (2017) Beyond benefit sharing: Place attachment and the importance of access to protected areas for surrounding communities. *Ecosystem Services*. 28. p.140-148.

Dalu, M.T.B.

Dalu, M.T.B., Dalu, T. and Wasserman, R.J. (2017) Correspondence: Restrict bush fires used in animal hunts. *Nature*. 547. p.18.

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Dalu, T., Wasserman, R.J. and Dalu, M.T.B. (2017) Agricultural intensification and drought frequency increases may have landscape-level consequences for ephemeral ecosystems. *Global Change Biology*. 23. p.983-985.

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Mangwale, K., Shackleton, C.M. and Sigwela, A. (2017) Changes in forest cover and carbon stocks of coastal scarp forests of the Wild Coast, South Africa. *Southern Forests*. 79 (4). p.305-315.

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Mutekwa, V.T. and Gambiza, J.

Mutekwa, V.T. and Gambiza, J. (2017) Forest protected areas governance in Zimbabwe: Shift needed away from a long history of local community exclusion. *Journal of Environmental Management*. 198. p.330-339.

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Nott, M. and **Thondhlana, G.** (2017) Fuelwood preferences, use and availability in the #Khomani San resettlement farms, southern Kalahari, South Africa. *Forests Trees and Livelihoods.* 26 (3). p.156-169.

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Palmer, A., Finca, A., **Mantel, S.K.**, **Gwate, O.**, Mûnch, Z. and Gibson, L. (2017) Determining fPAR and leaf area index of several land cover classes in the Pot River and Tsitsa River catchments of the Eastern Cape, South Africa. *African Journal of Range & Forage Science*. p.1-5.

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Ruwanza, S. and Shackleton, C.M. (2017) Ecosystem scale impacts of non-timber forest product harvesting: Effects on soil nutrients. *Journal of Applied Ecology*. 54. p.1515-1525.

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Dr Deepa Pullanikkatil, Postdoctoral Research Fellow, with Kenyan Sculptor Morris Foit at his residence in Nairobi. Photo: Department of Environmental Science.

Shackleton, C.M., Guild, J., Bromham, B., Impey, S., Jarrett, M., Ngubane, S. and Steijl, K. (2017) How compatible are urban livestock and urban green spaces and trees? An assessment in a medium-sized South African town. *International Journal of Urban Sustainable Development.* 9 (3). p.243-252.

Sholto-Douglas, C.C., Shackleton, C.M. and Ruwanza, S.

Sholto-Douglas, C.C., Shackleton, C.M., Ruwanza, S. and Dold, A.P. (2017) The Effects of Expansive Shrubs on Plant Species Richness and Soils in Semi-arid Communal Lands, South Africa. *Land Degradation* & *Development*. 28. p.2191-2206.

Spires, M. and Shackleton, S.

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Tata Ngome, P.I., Shackleton, C.M., Degrande, A. and Tieguhong, J.C. (2017) Addressing constraints in promoting wild edible plants' utilization in household nutrition: A case of the Congo Basin forest area. *Agriculture & Food Security.* 6 (20). p.1-10.

Thondhlana, G. and Cundill, G.

Thondhlana, G. and Cundill, G. (2017) Local people and conservation officials' perceptions on relationships and conflicts in South African protected areas. *International Journal of Biodiversity Science, Ecosystems Services and Management.* 13 (1). p.204-215.

Research Papers Presented at Academic/Scientific Conferences (Non-peer-reviewed Proceedings)

Cockburn, I.L. and Shackleton, S.

Cockburn, I.L. and **Shackleton, S.** Ideals vs reality: Grappling with the nitty gritty of knowledge co-production processes in sciencesociety partnerships. *Resilience for Development Colloquium*. Sunnyside Park Hotel, Johannesburg. South Africa. May 2017.

Cockburn, J. and Shackleton, S.

Cockburn, J. and Shackleton, S. Ideals vs reality: Grappling with the nitty-gritty of knowledge production processes in science-society



partnerships. *Colloquium on Resilience for Development in 2017*. Johannesburg. South Africa. May 2017.

Cockburn, J., Cundill, G. and Shackleton, S. Cockburn, J., Cundill, G., Shackleton, S. and Rouget, M. A learning jar and two maps: Mobilising local knowledge for collaborative

stewardship in multifunctional landscapes across South Africa. *Colloquium on Resilience for Development 2017.* Johannesburg. South Africa. May 2017.

Cockburn, J., Cundill, G., Shackleton, S. and Rouget, M. Stewardship and development for transformation: Learning at the interface of research and practice in diverse social-ecological contexts in South Africa. *Transformations 2017*. Dundee. Scotland. August 2017.

Cockburn, J., Cundill, G., Shackleton, S. and Rouget, M. Exploring enablers and barriers of landscape-scale collaborative stewardship initiatives in South Africa: Voices from the landscape. *II Open Science Conference of the Programme of Ecosystem Change and Society.* Oaxaca. Mexico. November 2017.

De Vos, A.

De Vos, A., Cumming, G.C. and Roux, D. Ecosystem services as a conceptual framework for unpacking the value of protected areas: Emerging themes and policy opportunities. *Resilience & Development Colloquium 2017*. Johannesburg. South Africa. May 2017.

De Vos, A., Cumming, G.C. and Roux, D. Measuring ecosystem services for the management of social-ecological protected areas. *Resilience 2017.* Stockholm. Sweden. August 2017.

De Vos, A., Biggs, R. and Presier, R. Methods for understanding socialecological systems: A systematic review. *Resilience 2017.* Stockholm. Sweden. August 2017.

De Vos, A., Reid, J.L., Nelson, J.L. and Nelson, J.D.G.

De Vos, A., Reid, J.L., Nelson, J.L., Nelson, J.D.G. and Cole, N. Out of signt, out of pocket: The value of water-related ecosystem services provided by an undervalued protected area section to diverse downstream stakeholders. *PECSii Conference*. Oaxaca. Mexico. November 2017.

Deponselle, K.N. and Rouillard, T.K.

Deponselle, K.N., Rouillard, T.K. and Carlos Bezerra, J. Living in a protected area: Sense of Place of residents in Knysna, South Africa. *Garden Route Interface Meeting.* Pine Lake Marina, Sedgefield. South Africa. September 2017.

Falayi, M., Shackleton, S. and Cundill, G.

Falayi, M., Shackleton, S. and Cundill, G. A longitudinal study of

changes in the use and value of provisioning services in a rural community in South Africa. *58th annual Meeting of the Society for Economic Botany.* Braganca. Portugal. June 2017.

Gambiza, J.

Gambiza, J. Achieving land degradation neutrality: The role of restoration. 5th Annual Land Restoration Society of Southern Africa (LaRSSA) Conference on Resilient Landscapes in a Changing Climate. Olifants River Lodge, Mpumalanga. South Africa. August 2017.

Garekae, H.

Garekae, H. Household and stakeholder perspectives on forest management regimes in Botswana: Implications for sustainable forest management. *7th Forest Science Symposium*. Pietermaritzburg. South Africa. July 2017.

Gusha, B. and Palmer, A.R.

Gusha, **B**. and **Palmer**, **A**.**R**. Performance of livestock production in the north-Eastern Cape communal areas: A stochastic frontier analysis. *52nd Grassland Society of Southern Africa*. Hoedspruit. South Africa. July 2017.



The Langkloof was an in-depth case study in Jessica Cockburn's PhD research on collaboration and stewardship in multifunctional landscapes. Photo: Department of Environmental Science.



Jessica Cockburn partnered with a local organisation (Living Lands) for her PhD research in the Langkloof. This is a team photo of the Living Lands Langkloof team taken at the top of Formosa Peak - the highest mountain in the Langkloof mountain range.

Photo: Department of Environmental Science.

Department of Environmental Science





Jessica Cockburn and Alta de Vos visiting Monte Alban - an ancient Zapotec ruin near the city of Oaxaca in Mexico. Photo: Department of Environmental Science.

Hardisty, S.E. and De Vos, A.

Hardisty, S.E., De Vos, A. and Daw, T. How gear use affects the income and subjective wellbeing of four Kenyan fishing communities. *Resilience for Development Colloquium*. Johannesburg. South Africa. May 2017.

Hardisty, S.E., De Vos, A. and Daw, T. How gear use affects the income and subjective wellbeing of four Kenyan fishing communities. *10th WIOMSA Scientific Symposium*. Dar Es Salaam. Tanzania. October 2017.

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Manyani, A., Shackleton, C.M. and Cocks, M. How do urban dwellers identify with natural elements within urban green spaces in the Eastern Cape? *IERM Convention: People & Green Spaces*. Johannesburg. South Africa. September 2017.

Martins, A.R.O. and Shackleton, C.M.

Martins, A.R.O. and Shackleton, C.M. The production and commercialisation of palm wine *Hyphaene coriacea* and Phoenix. Braganca. Portugal. June 2017.

Masunungure, C. and Shackleton, S.

Masunungure, C. and Shackleton, S. Exploring long-term livelihood and natural resource change: Implications and future trajectories. *Colloquium on Resilience for Development: Assessment methods and transformation practices.* Sunnyside Park Hotel, Johannesburg. South Africa. May 2017.

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Njwaxu, A. and Shackleton, C.M.

Njwaxu, A. and Shackleton, C.M. Assessing the abundance of nontimber forest products in relation to forest succession on the Wild Coast, South Africa. *Society for Economic Botany Annual Conference*. Braganca. Portugal. June 2017.

Pullanikkatil, D.

Pullanikkatil, D., Phalira, W., Kaneka, B., Mkanthama, C. and Chiotha, S. PHE approach for climate change adaptation: The case of Lake Chilwa Basin, southern Malawi. *African Great Lakes Conference 2017: Conservation and Development in a Changing Climate*. Entebbe. Uganda. May 2017.

Reid, J.L. and De Vos, A.

Reid, J.L. and De Vos, A. Benefit flows from an out-of-sight mountain stream to users in downstream Plettenberg Bay. *Garden Route Interface Meeting.* Plettenberg Bay. South Africa. September 2017.

Rouillard, T.K. and Deponselle, K.N.

Rouillard, T.K., Deponselle, K.N. and Carlos Bezerra, J. Sense of Place of tourists in the Knysna area: A case study from South Africa. *Garden Route Interface Meeting.* Pine Lake Marina, Sedgefield. South Africa. September 2017.

Senkoro, A.M. and Shackleton, C.M.

Senkoro, A.M., Shackleton, C.M., Voeks, R. and Riberio, A. Usos e maneio de Walburgia salutaris (Bertol.f.) Chiov. (Canellaceae) especies ameacada do exitincao a sul de Mocambique. *Science and Technology Congress.* Lisbon. Portugal. July 2017.

Senkoro, A.M., Shackleton, C.M., Voeks, R. and Riberio, A. Uses, knowledge and management of the Pepper-bark tree (*Warburgia salutaris*), a threatened medicinal plant species in southern Mozambique. *57th Annual Conference of the Society for Economic Botany*. Braganca. Portugal. June 2017.

Shackleton, C.M.

Soumya, K.V., Setty, S. and **Shackleton, C.M.** Ecology and human use of dhoop from *Boswellia serrata* Roxb. in the Western Ghats, Karnataka. *Conference on Conservation Science and Sustainable Development*. Bangalore. India. January 2017.

Shackleton, C.M., Ticktin, T. and Cunningham, T. Non-timber forest products as bio-cultural keystone species. *57th Annual Conference of the Society for Economic Botany*. Braganca. Portugal. June 2017.

Shackleton, C.M. and Shackleton, R.T.

Shackleton, C.M., Kull, C.A. and Shackleton, R.T. The role of invasive alien species in shaping local livelihoods and human wellbeing. *14th International conference on the Ecology and Management of Alien Plant Invasions: Synthesis, challenges and new opportunities.* Lisbon. Portugal. September 2017.

Shackleton, S.

Shackleton, S. Who is the most vulnerable to climate change, why and what does this mean for adaptation. *THINK!FEST, Burning issues: Climate conundrums*. Grahamstown. South Africa. July 2017.

Shackleton, S., Dunywa, S.A. and Nkata, Z.Z.

Shackleton, S., Dunywa, S.A. and Nkata, Z.Z. Coping with heavy rainfall events, storms and floods in informal settlements in East London. *Adaptation Think Tank/Colloquium 2017.* Rhodes University, Grahamstown. South Africa. May 2017.

Thondhlana, G. and Bulunga, A.A.L.

Thondhlana, G. and Bulunga, A.A.L. Interventions yield energy-saving behaviour in residences at Rhodes University, South Africa. *International Symposium on Society and Resource Management*. Umea. Sweden. June 2017.

Xoxo, B.S. and De Vos, A.

Xoxo, B.S., De Vos, A. and Biggs, R. Influence of systems studied on methods that are used to understand social-ecological systems. *Resilience for Development Colloquium.* Johannesburg. South Africa. May 2017.



The Fine Art Department has enjoyed a productive year, engaging with a wide range of research endeavours and producing significant outputs in the form of publications, research papers presented at conferences and symposia, and various practice-as-research outputs such as exhibitions, performances, creative writing and artists' talks. Members of the department have been involved in exhibition curation, arts activism, interviews, arts residencies and workshops.



The Inheritance - a Master of Fine Art exhibition by Charis Futcher - was held in the newly renovated Art School Gallery. Photo: Department of Fine Art.

The Department has hosted various research-related events, including the *Six Mountains on her Back: (Re)thinking African Feminisms Colloquium* co-facilitated by Dr Sharlene Khan; *The Making of a Book* talks and workshop organised by Ms Christine Dixie and Mr Brian Garman (Journalism); and the ongoing *Lucid Lunchbox* programme of talks and events run by the *Arts of Africa and Global Souths* research programme, under Professor Ruth Simbao. Particularly noteworthy has been the significant research contribution made by our Postgraduate students (many of whom presented papers or exhibited their practice-as-research internationally); and by the Postdoctoral Research Fellows and Research Associates affiliated to the Department through the SARChI Chair Programme, *Arts of Africa and Global Souths*.

Postgraduates / Graduations

In 2017, the Department graduated three (3) MFA students, Ms Kathleen Sawyer, Ms Charis Futcher, and Mr Callan Grecia, all of whom presented solo exhibitions as part of their practiceas-research submissions. We also graduated two (2) MA students, Ms Lara Littleford, and Mr Andrew Mulenga; and one (1) PhD student, Dr Rachel Baasch. Our Postgraduates were active in publishing their research, with Mr Mulenga publishing a book chapter and Mr Sikhumbuzo Makandula publishing an interview in the peer reviewed journal, *African Arts.* Mr Mulenga, Mr Makandula, Mr Tshilumba Jean-Sylvain, Ms Philiswa Lila, and Mr Stary Mwaba presented their research at various conferences and symposiums, in South Africa, Ghana and Zimbabwe.

In addition, our Postgraduates participated in numerous exhibitions as contributing artists, performers and/or curators, which took place at venues across South Africa, the USA, Zimbabwe, Brazil and Germany. Ms Lila participated in four (4) exhibitions, and was a finalist in the Sasol New Signatures competition. Ms Gladys Kalichini participated in two (2) exhibitions, including the *Africa Centre Artists in Residence programme* in Miami. Mr Makandula participated in seven (7) exhibitions, including one (1) in Zimbabwe and three (3) in the USA. Mr Luthando Mama participated in four (4) exhibitions, including a contemporary art festival in Brazil, and Mr Mwaba participated in an exhibition at the Museum of Contemporary Art in Liepzig, Germany.



Distinguished Visitors / International Visits

Several staff members undertook international visits in 2017. Dr Khan was invited to Paris, France for the *Cité internationale des arts residency*.

Professor Dominic Thorburn visited London, UK, for a collaboration with artist Tammy Mackay. Professor Maureen de Jager undertook a research trip to *Documenta 14* in Kassel, Germany; and Professor Simbao visited Kampala, Uganda, and Kumasi, Ghana, to research contemporary art in those regions.

At the same time, the Fine Art Department enjoyed visits by, and productive research engagements with, various Postdoctoral Research Fellows and Research Associates, who contributed richly to our research portfolio. Many of these contributions are consolidated in the first issue of the UCLA/MIT Press journal, *African Arts*, under its new editorial consortium partnership with Rhodes University (the Rhodes University Editorial Board is the only Africa-based partner and is headed by Professor Simbao).

In addition to the article by SARChI Postgraduate Mr Makandula, this edition included articles by 2016 Rhodes Writing Fellow Ms Nomvuyo Horwitz, and Senior Research Associates Dr Angelo Kakande and Dr Amanda Tumusiime who are both at Makerere University.

The journal issue also included a dialogue with fifteen (15) authors, including Professor Simbao and Dr Tumusiime, as well as SARChI Postdoctoral Research Fellow, Dr Eyitayo Tolulope Ijisakin.

Significant Research Aligned Events

In addition to the research contributions of our Postgraduates and Visitors, and the notable research initiatives mentioned above, individual staff members contributed to the Department's research portfolio in the following ways:

Professor Maureen de Jager published an article in the peerreviewed journal, *Image and Text*; and presented papers at two (2) conferences: the *THEOREM* symposium in Cambridge, UK, and *Booknesses: Taking Stock of the Book Arts in South Africa* in Johannesburg. Her practice-as-research outputs included a performance at the Institute of Contemporary Art in London; and participation in three group exhibitions, in Cambridge and in Johannesburg.

Ms Christine Dixie presented her exhibition, *To Be King*, in Venice, Italy and at the London International Festival; and also participated in a group exhibition in London. She was invited to deliver a lecture at the University of Johannesburg; and presented a paper on her research at *The International Conference of the Image* in San Servolo, Italy. Together with James Sey, she published a peer-reviewed article in *Thesis eleven*. Dr Sharlene Khan presented her research at numerous conferences, including at the *Six Mountains on her Back: (Re)thinking African Feminisms Colloquium* (Grahamstown), the *East African Literary and Cultural Studies Conference* (Dar es Salaam, Tanzania), and the *Translate Contemporary Art roundtable* (Paris). Her publications include creative writing, and an artist's monograph, *I Make Art.* In addition, she has participated in four group exhibitions, including the *Thessaloniki Biennale* in Greece.

Ms Mbali Khoza presented a paper at the *17th Triennial Arts Council of the African Studies Association (ACASA) Symposium on African Art* in Accra, Ghana. She also curated two (2) projects at the Rhodes University Photography Building, Grahamstown.

Professor Ruth Simbao organised and ran the 'Art POWA Publishing Workshop' in collaboration with Dr Tumusiime at Makerere University in Kampala, Uganda. Her publications include two (2) peer-reviewed articles in *African Arts* (one of them co-authored). She has also delivered numerous conference presentations in South Africa, Zimbabwe and Ghana, including an invited plenary talk at the *International Conference of African Cultures* in Harare; and a keynote address at the *Referencing China and East Asia in Southern Africa Visual Culture Symposium* in Johannesburg.

Professor Dominic Thorburn participated in, and curated, the *District Six Commemorative Print Portfolio Exhibition* in Grahamstown. He also participated in the group exhibitions *Pulled* in Grahamstown, and *Circumference and Radius* in Havana, Cuba.

Ms Rat Western published a book chapter in *Risk, Participation* and Performance Practice: Critical Vulnerabilities in a Precarious World and participated in two (2) group exhibitions - at the National Arts Festival (Grahamstown) and the ICA Live Arts Festival (Cape Town).



Professor Maureen de Jager, Head of Department

Department of Fine Art





ABOVE: The Inheritance - a Master of Fine Art exhibition by Charis Futcher - was held in the newly renovated Art School Gallery.

RIGHT: The Fine Art Department hosted The Making of a Book - a day of talks on the topic of book arts and a subsequent workshop facilitated by bookbinder, Heléne van Aswegen. Photo: Department of Fine Art.

PUBLICATIONS

Books/Chapters/Monographs

Khan, S.

Khan, S. and Asfour, F. (eds.) (2017) / Make Art. Johannesburg: Sharlene Khan. ISBN: 9780620762823.

Khan, S. (2017) I Make Art: Voicing Voice, Speaking Self and Doing. In: Khan, S. and Asfour, F. (eds.). *I Make Art*. Johannesburg: Sharlene Khan. p.4-19. ISBN: 9780620762823.

Mulenga, A.M.

Mulenga, A.M. (2017) Germinating in the cracks: the identity of contemporary Zambian art. In: Kreienbaum, M.A. and Pillmann, R. (eds.). Sambia - 72 Volksgruppen bilden einen Staat: Einblicke in eine postkolonial Gesellschaft (Zambia -72 ethnic group form a state: insights into a postcolonial society). Berlin & Toronto: Budrich UniPress. p.61-84. ISBN: 9783863887483.

Western, N.A.

Western, N.A. (2017) At the Risk of Being Sincere: Participation and Delegation in South African Contemporary Live-Art. In: O'Grady, A.K. (ed.). *Risk, Participation and Performance Practice: Critical Vulnerabilities in a Precarious World.* UK: Palgrave Macmillan. p.179-204. ISBN: 9783319632414.

Concerts, Exhibitions, Performances, Workshops, Events

Bezuidenhout, N.B.

Bezuidenhout, **N.B.** Exhibiting artist. *Floradale Fine Art summer exhibition*. Floradale Centre, East London. South Africa. 2 December 2017.

De Jager, M.S.

De Jager, M.S. Exhibiting artist/presenter. IN PARENTHESIS. PhD

work-in-progress performance-recital. Institute of Contemporary Arts, London. United Kingdom. 29 November 2017.

De Jager, M.S. Exhibiting artist. *THEOREM*. Ruskin Gallery, Cambridge. United Kingdom. 6 - 20 July 2017.

De Jager, M.S. Exhibiting artist. *Booknesses: South African Book Arts.* FADA Gallery, Johannesburg. South Africa. 24 March - 5 May 2017.

De Jager, M.S. Exhibiting artist. *Booknesses: Artists Books from the Jack Ginsberg Collection*. UJ Art Gallery, Johannesburg. South Africa. 25 March - 5 May 2017.

Dixie, C.

Garman, B.D. and Dixie, C. Co-convenor. *The Making of a Book Talks and Workshop*. Fine Art Department, Rhodes, Grahamstown. South Africa. 15 - 22 September 2017.

Dixie, **C.** Exhibiting artist. *To Be King.* London International Festival. Coronet Cinema, London. Britain. 1 - 4 November 2017.

Dixie, **C.** Workshop. *The Making of a Book*. Rhodes School of Fine Art, Grahamstown. South Africa. 16 - 17 September 2017.

Dixie, C. Exhibiting artist. To Be King. *Personal Structures*. Palazzo Bembo, Venice. Italy. 13 May - 26 November 2017.

Dixie, C. Exhibiting artist. Trade Ship I-III. *Trop Comprendre*. Sulger-Buel-Lovell gallery, London. Britain. 2 October - 18 November 2017.

Futcher, C.

Futcher, C. Solo artist. The Inheritance. *MFA exhibition*. Art School Gallery, Grahamstown. South Africa. 19 February - 3 March 2017.

Grecia, C.

Grecia, **C**. Solo artist. These aesthetics are not new. *MFA Exhibition*. Art School Gallery, Grahamstown. South Africa. 7 - 12 February 2017.

ljisakin, E.T.

Ijisakin, E.T. Participant. Unveiling the treasures of Print making in

Department of Fine Art



LEFT: Rhodes University joined the editorial consortium of *African Arts* in 2017, and the first issue published thereafter featured several articles by Fine Art Postgraduates, Postdoctoral Research Fellows, and Research Associates affiliated to the SARChI Chair programme, Arts of Africa and Global Souths.

Photo: Department of Fine Art.





Contemporary Nigerian Art. *African Humanities Program Workshop "Manuscript and Development Workshop for Book manuscripts" organised by the American Council of Learned Society (ACLS).* Hephzibah Christian Centre, Aburi. Ghana. 22 - 25 May 2017.

Jean-Sylvain, T.M. and Mpati, M.

Jean-Sylvain, T.M. and Mpati, M. Curator. Inzwi!! *Group Exhibition*. Rhodes University Fine Art Gallery, Grahamstwon. South Africa. 29 June - 9 July 2017.

Kakande, A.

Kakande, A. Invited guest. The future of the African Humanities Program. *American Council of Learned Societies (ACLS) African Humanities Program Mentorship Inaugural Meeting.* Solarium Conference Room, Fairway Hotel, Kampala. Uganda. 13 - 16 June 2017.

Kakande, A. Exhibiting artist. No Medals for Capriciousness. *Artwork exhibited with a write-up titled "I say: No Medals for Capriciousness" in Different but one 21 Staff Exhibition for academic staff at Margaret Trowell School of Industrial and Fine Art.* Institute of Heritage Conservation and Restoration, Makerere University, Kampala. Uganda. 15 February - 15 March 2017.

Kalichini, G.M.

Kalichini, G.M. Residency and Exhibition. ChaMoneka: Uncasting Shadows. *Africa Centre Artists in Residence programme*. Fountainhead Residency, Miami. USA. 1 March - 30 April 2017.

Kalichini, G.M. Exhibiting artist. Inzwi!! *Rhodes University Lucid Lunchbox (Group Exhibition).* Fine Art Department Gallery, Grahamstown. South Africa. 29 June - 9 July 2017.

Khan, S.

Khan, S. Exhibiting artist. Nervous Conditions. *Looking after Freedom*. Stellenbosch University Gallery, Stellenbosch. South Africa. 7 - 26 September 2017.

Khan, S. Exhibiting artist. When the moon waxes red. *Re-membering: Memory, Intimacy, Archive*. KZNSA Gallery, Durban. South Africa. 15 August - 3 September 2017.

Khan, S. Exhibiting artist. Nervous Conditions. *Looking after Freedom.* Michaelis Galleries, University of Cape Town, Cape Town. South Africa. 23 May - 23 June 2017.

Khan, S. Exhibiting artist. When the moon waxes red. *Thessaloniki Biennale*. State Museum of Contemporary Art, Thessaloniki. Greece. 30 September - 31 December 2017.

Khoza, M.

Khoza, M. Curator. *Uzoyithola kanjani uhleli ekhoneni*. Rhodes University Photography Building, Grahamstown. South Africa. 6 October 2017.

Khoza, M. Curator. *Untitled (abstract from Ralph Ellison's Invisible Man)*. Rhodes University Photography Building, Grahamstown. South Africa. 15 September 2017.

Lila, P.

Lila, P. Exhibiting artist and Solo performer. Tic Tok Talk. *Infecting the City*: Longmarket St, Cape Town. South Africa. 5 - 7 April 2017.

Lila, P. Presenter. In conversation with Andrew Tshabangu and Thembinkosi Goniwe Footprints exhibition. *Lucid Lunchbox*. Rhodes University, Grahamstown. South Africa. 5 July 2017.

Lila, P. Curator. Classes and Methods: objects to perform. *Nirox Winter Fair 2017*. Nirox Sculpture Park, Krugersdorp. South Africa. 6 May - 31 July 2017.

Lila, P. Exhibiting artist. Deadlines. *Sasol New Signature competition (Group Exhibition).* Pretoria Art Museum, Pretoria. South Africa. 31 August - 3 October 2017.

Makandula, S.

Makandula, S. Exhibiting artist. *African Voices*. Group Exhibition in conjunction with the *International Conference on African Cultures*. National Gallery of Zimbabwe, Harare. Zimbabwe. 11 - 13 September 2017.

Makandula, S. Exhibiting artist. *AFlagrant Arcade in Contemporary Art, Art Africa Fair.* Waterfront, Cape Town. South Africa. 24 February - 5 March 2017.

Makandula, S. Exhibiting artist. *My Collection: A Benefit Auction and Exhibition*. Museum of Contemporary African Diaspora Arts (MoCADA), New York. USA. 12 May - 4 June 2017.

Makandula, S. Exhibiting artist. *Contemporary African Spirituality.* Calabar Gallery, Harlem, New York. USA. 26 January - 28 April 2017.

Makandula, S. Exhibiting artist. *1:54 Contemporary African Art Fair.* Pioneer Place, Brooklyn, New York. USA. 5 - 7 May 2017.

Makandula, S. Exhibiting artist. The Spear of a Nation. *Bright Young Things: No fairy Tale, Art Africa Fair.* Waterfront, Cape Town. South Africa. 24 February - 5 March 2017.

Makandula, S. Exhibiting artist. *Looking After Freedom*. Michaelis Gallery, Cape Town. South Africa. 23 May - 16 June 2017.

Mama, L.V.J.

Mama, L.V.J. Artist Talk/Lecture. *New Media and Photography*. The Market Photo Workshop, Johannesburg. South Africa. 15 May 2017.

Mama, L.V.J. Workshop Convenor. *100 Years of the University of Fort Hare Print Exchange Portfolio.* Walter Sisulu University, East London City Campus. South Africa. 9 - 16 January 2017.

Mama, L.V.J. Exhibiting artist and curator. *100 Years of the University of Fort Hare Print Exchange Portfolio.* The Steve Biko Center, Ginsberg-King William's Town. South Africa. 24 March - 10 June 2017.

Mama, L.V.J. Participant. *20th Contemporary Art Festival. Sesc Videobrasil.* Associação Cultural Videobrasil, Sao Paolo. Brazil. 3 October - 14 December 2017.



Mwaba, S.M.

Mwaba, S.M. Exhibiting artist. Chinese Cabbage. *Chinafrika. Under Construction.* Museum of Contemporary Art, Liepzig. Germany. 2 June - 24 September 2017.

Simbao, R.

Simbao, **R**. Organiser. Organised and ran the Art POWA Publishing Workshop in collaboration with Amanda Tumusiime, Makerere University, Kampala, Uganda. Forest Cottages, Kampala. Uganda. 1 January 2017.

Thorburn, D.

Thorburn, D. Exhibiting artist and curator. *District Six Commemorative Print Portfolio Exhibition. National Arts Festival Fringe.* Studio Gallery, Rhodes University Department of Fine Art, Grahamstown. South Africa. 29 June - 21 July 2017.

Thorburn, D. Exhibiting artist. *Pulled*. Festival Gallery, Grahamstown. South Africa. 19 September - 30 October 2017.

Thorburn, D. Exhibiting artist. *Circumference and Radius*. Taller de Gráfica de la Habana, Havana. Cuba. 15 September - 15 October 2017.

Tumusiime, A.

Tumusiime, A. Curator. Advocating for full inclusion with Uganda Sign Language through Art for the Deaf community. Makerere Art Gallery, Kampala. Uganda. 4 September 2017.

Tumusiime, **A**. Exhibiting artist. Exclusion through Public Monuments: the basis for fresh directions in the Uganda's artistic production. *All the Light we Can See: An exhibition of Artworks in which public monuments in Kampala have been rendered accessible for persons with disability.* Makerere Institute of Heritage Research and Conservation, Kampala. Uganda. 27 October - 15 November 2017.

Western, N.A.

Western, N.A. Video Artist. Ghostdance for one (reworked). *National Arts Festival*. Nun's Chapel, Grahamstown. South Africa. 5 - 8 July 2017.

Western, N.A. Video Artist. Ghostdance for one. *ICA Live Arts Festival*. Hiddingh Hall - UCT, Cape Town. South Africa. 25 February 2017.

Creative Writing

Khan, S.

Khan, S. (2017) Under the Influence of Covering Sarah: Exorcising the Trauma of Colonialism and Racism. In: *South Africa: The Conversation.*

Khan, S. (2017) When the moon waxes red. In: Gosine, A. and Kempadoo, R. (eds.). USA: Duke University Press.

Khan, S. (2017) Teaching to Empower. In: Diallo, A., Jayawardena, N.M. and Sarr, F. (eds.). Berlin, Germany: ContemporaryAnd.com: Platform for International Art from African Perspectives.

Simbao, R.

Simbao, R. (2017) Chinafrika. In: MacGarry, M. (ed.). "A Song of Uhuru and a difficult dance: Anawana Haloba's Sound Memories of Tazara". Johannesburg: MetroZones and All Theory No Practice.

Simbao, R. (2017) Gareth Nyandoro Exhibition at the Armory Show, New York. In: *"Street Slang and Visual Improv: Gareth Nyandoro's Kuchekacheka" (Armory Show, New York, 2017) (Masimba Hwati (coauthor))*. Johannesburg: SMAC Gallery.

Simbao, R. (2017) Remnants Exhibition. In: *"Located on an Oblique Slanting Line: Thania Petersen's Remnants"*. Exhibition text for Remnants, Everard Read Gallery, Cape Town.

Distinguished Visitors

Dixie, C.

C Dixie. The University of Johannesburg, Johannesburg, South Africa. *Lecture.* September 2017.

Khan, S.

S Khan. Association internationale des critiques d'art, Paris, France.

Cité internationale des arts residency. November 2017.

Thorburn, D.

D Thorburn. Greenwich Printmakers. London, United Kingdom. *Collaboration with Tammy Mackay, Professional artist.* July 2017.

International Visits

De Jager, M.S.

De Jager, M.S. PhD research, Kassel, Germany. *Documenta 14*. 24 June - 1 July 2017.

Mulenga, A.M.

Mulenga, A.M. Tate Modern, London, England. *Tate Intensive: Art matters.* 9 - 14 July 2017.

Simbao, R.

Simbao, R. Kwame Nkrumah University of Science and Technology (Fine Art Department), Kumasi, Ghana. *Research on contemporary art in Ghana, and visit with Blaxtarlines collective at KNUST.* 7 - 14 August 2017.

Simbao, R. Makerere University, Kampala, Uganda. *Research on contemporary art in Kampala, and external examiner for the Margaret Trowell School of Industrial and Fine Art at Makerere University.* 9 - 15 July 2017.

Peer Reviewed Subsidy-Earning Journal Research Publications

De Jager, M.S.

De Jager, M.S. (2017) Refocusing the traumatic past (an essay in two parts). *Image and Text.* 29 (2017). p.204-218.

Dixie, C.

Dixie, C. and Sey, J. (2017) Wrapping Johannesburg: A boxing story. *Thesis eleven.* 141 (1). p.86-102.

Horwitz, N.M.

Horwitz, N.M. (2017) Aporias of Rock Art Interpretation: Advancing a Phenomenological Reading. *African Arts.* 50 (2). p.30-45.

Kakande, A.

Kakande, A. (2017) Reimag[in]ing the Village as a Portrait of a Nation-State in Uganda. *African Arts*. 50 (2). p.46-57.

Makandula, S.

Makandula, S. and Nsubuga, E.S. (2017) Interview: Reimagining Our Missing Histories. *African Arts.* 50 (2). p.68-83.

Simbao, R.

Simbao, R. (2017) Situating Africa: An Alter-geopolitics of Knowledge, or Chapungu Rises. *African Arts.* 50 (2). p.1-9.

Simbao, R., Ijisakin, E.T. and Tumusiime, A.

Simbao, R., Miko, W.B., Ijisakin, E.T., Tchibozo, R., Hwati, M., NG-Yang, K., Mudekereza, P., Nalubowa, A., Hyacinthe, G., Jason, L.R., Abdou, E., Chachage, R., Tumusiime, A., Sousa, S. and Muchemwa, F. (2017) Reaching Sideways, Writing Our Ways: the Orientation of the Arts of Africa Discourse. *African Arts.* 50 (2). p.10-29.

Tumusiime, A.

Tumusiime, **A**. (2017) Alex Baine's Women's Emancipation in Uganda: A Visual Archive of the History of a New Generation of Women in Uganda. *African Arts.* 50 (2). p.58-67.



Research Papers Presented at Academic/Scientific Conferences (Non-peer-reviewed Proceedings)

De Jager, M.S.

De Jager, M.S. Sightlines. *THEOREM*. Anglia Ruskin University, Cambridge. United Kingdom. July 2017.

De Jager, M.S. Proposal for THE BOOK OF HOLES. *Booknesses: Taking Stock of the Book Arts in South Africa.* University of Johannesburg, Johannesburg. South Africa. March 2017.

Dixie, C.

Dixie, **C**. Sedimented Significations in Foucault's Frontispiece, Lacan's Borrowed Slide and the Fanonian inspired film, *The battle of Algiers*. *The International Conference on the Image*. Venice International University, San Servolo. Italy. October 2017.

Jean-Sylvain, T.M.

Jean-Sylvain, T.M. Studio photography as a contemporary genre: resisting historical and discursive legacy, forging new tropes. *Arts Council of the African Studies Association Triennial Conference*. University of Ghana, Accra. Ghana. August 2017.

Kakande, A.

Kakande, A. Searching Locally for Clues: Local Issues which Undermine the Participation of Uganda's Artists in the Globalised Art Market. *The Future of Contemporary African Art in a Globalised Art World*. Makerere University, Kampala. Uganda. November 2017.

Kakande, A. Towards the Enjoyment of the Legal Right to Culture in Uganda. *International Symposium on "Strengthening Human Rights Research and Education in Sub-Saharan Africa (SHUREA)"*. University of Pretoria, Pretoria. South Africa. October 2017.

Kakande, A. 55+ years of banana? *Reading Art and Politics in Uganda.* 32 degree East, Kampala. Uganda. March 2017.

Kakande, A. My thoughts on Kampala's Roadside Pottery: New Forms, New Meanings, National Heritage. *Norms and values: a foundation to productivity (Keynote address)*. National Theatre, Kampala. Uganda. May 2017.

Kakande, A. Peter Mulindwa's work. *Object of the Month*. Makerere Institute of Heritage Research and Conservation, Kampala. Uganda. June 2017.

Kakande, A. On harnessing Uganda's legal and policy frameworks for cultural development: rigid, polemical and conservative interpretations are not productive! *Culture and Creative Industries: The Engine for Unity and Employment Creation JAMAFEST*. Kampala. Uganda. September 2017.

Khan, S.

Khan, S. I Make Art - Voicing Voice, Speaking Self and Doing Criticality. *Art Search symposium*. University of the Witswatersrand, Johannesburg. South Africa. March 2017.

Khan, S. Concerning Violence. *Democratic Violence Conference*. Rhodes University, Grahamstown. South Africa. March 2017.

Khan, S. When the moon waxes red. *NEST Symposium*. University of Cape Town, Cape Town. South Africa. March 2017.

Khan, S. Thinking Through, Talking Back: Creative Theorisation as Site of Praxis-Theory. *Six Mountains on her Back: (Re)thinking African Feminisms Colloquium.* School of Fine Art, Rhodes University, Grahamstown. South Africa. July 2017.

Khan, S. When the moon waxes red. *East African Literary and Cultural Studies (EALCS) Conference*. University of Dar es Salaam, Dar es Salaam. Tanzania. August 2017.

Khan, S. The Personal is Institutional. *Translate Contemporary Art roundtable, 50th AICA Congress.* Institut National de l'historie de l'art, Paris. France. November 2017.

Khoza, M.

Khoza, M. What difference does it make who is speaking? *17th Triennial Arts Council of the African Studies Association (ACASA) Symposium on African Art.* University of Ghana, Legon Campus Institute of African Studies, Accra. Ghana. August 2017.

Lila, P.

Lila, P. If performance is a mode of narration, what does the narration tell us about eye/I. *Narrative Enquiry for Social Transformation (NEST) Colloquium and Summer School*. University of Cape Town, Cape Town. South Africa. March 2017.

Makandula, S.

Makandula, S. Avarana: Walking through veils of ignorance. *Arts Council of the African Studies Association Triennial Conference*. University of Ghana, Accra. Ghana. August 2017.

Mulenga, A.M.

Mulenga, A.M. Speculative nonconformity: a Zambian consideration. *Speculative Freedoms and Alternative Futures: Afro SciFi, Fantasy and Spec-Fic.* English Department, Rhodes University, Grahamstown. South Africa. September 2017.

Mulenga, A.M. Germinating in the cracks: the identity of contemporary Zambia art. *International Conference on African Cultures*. National Gallery of Zimbabwe, Harare. Zimbabwe. September 2017.

Mwaba, S.M.

Mwaba, S.M. Chinese Cabbage. *Africa-China Symposium Referencing China and East Asia in Southern African Visual Culture*. Goethe Institute, Johannesburg. South Africa. April 2017.

Simbao, R.

Simbao, R. Invited Plenary talk: "Chapungu Rising: The Centre of Gravity and an Alter-geopolitics of Knowledge". *International Conference of African Cultures*. National Gallery of Zimbabwe, Harare. Zimbabwe. September 2017.

Simbao, R. "A Song of Uhuru and a Difficult Dance: Anawana Haloba's Sound Memories of TAZARA". *ChinaAfrika Symposium. This symposium ran parallel to the "Referencing China and East Asia in Southern African Visual Culture symposium"*. Goethe Institute, Johannesburg. South Africa. April 2017.

Simbao, R. Keynote speaker: "The Direction of Place and the Orientation of Discourse: Portrayals of 'China' that Reach Sideways". *Referencing China and East Asia in Southern Africa Visual Culture Symposium. (This Symposium ran parallel to the "ChinAfrika" Symposium)*. Goethe Institute, Johannesburg. South Africa. April 2017.

Simbao, R. Chair of Panel: "Between Place and a Raised Foot: The Pace, Protest and Sway of Ambulatory Art" and presented the paper "Walking: Pace, Protest and Artistic Practice". *Arts Council of the African Studies Association Triennial Conference*. University of Ghana, Accra. Ghana. August 2017.



The Geography Department undertakes research that reflects the diversity of discipline, with projects that included: sustainable utilisation of, and policies relating to, wild honeybush; land and agrarian reform; human mobility; the role of tertiary institutions on Grahamstown; the social dynamics of small towns; geographical simulations; the impacts of dams on societies and river systems; soil erosion and sediment transfer; wetlands and their importance to society and the natural environment; the application of Geographical Information Systems (GIS) and Remote Sensing to solving social and natural environmental problems; Antarctic Geomorphology and Biogeomorphology; and climate change.

Not only is our research academically diverse, but spatially extensive, with projects extending from the Nordic Arctic to Antarctica.

An aspect that the Department is extremely proud of is our training of Postgraduate students and exposing them to the international research community. All those who have been involved in such interactions have shown that Rhodes University, and the Department of Geography, are conducting research that is internationally relevant and of an international standard.

Postgraduates / Graduations

At the April Graduation ceremonies, Calle Borg and Anthea Copteros were awarded their PhD's. Gabrielle Ayres, Amy Barclay, Danuta Hodgson, Nicolas Huchermeyer, Tennielle Jacobs, Julliette Lagesse, Chabala Mbao, Breanne Robb (Cum Laude), and Philippa Schegel graduated with their MSc Degrees.

Sindile Sibiya, and Jarred Pauls, Honours students, were awarded best speaker prises the South Africa Students Geography Conference.

Distinguished Visitors / International Visits

Visiting Professor Ian Foster (Northampton University, Visiting Professor) linked up with Emeritus Professor Kate Rowntree to undertake field work in the Karoo.

Visiting Professor Kevin Hall visited the Department and presented lectures to undergraduate and Postgraduate students and continued his collaborations with Professor Ian Meiklejohn.

Visiting Professor Thembela Kepe (Toronto University) continued his association with the Department of Geography, visiting us in May and June and then again in August. His research in Pondoland and in the Grahamstown area includes the supervision of three (3) PhD's, two (2) of whom are staff members. In addition, he assists with the lecturing of undergraduates.



MSc student, Wouter van der Walt and Honours student Tidimalo Maphoto working on a burnt plot, where wild honeybush is grown in the Langkloof Mountains, Eastern Cape. Photo: Department of Geography.

Significant Research Aligned Events

Ms. Gillian McGregor has been involved in mapping and measuring the wild honeybush (*Cyclopia intermedia*) resource and is currently busy developing guidelines with the Western Cape government and on the utilisation of the resource. The crop grows in the mountainous regions of the Langkloof in the Eastern Cape, as well as in the mountains of Western Cape. Ms McGregor's team includes student researchers, who engage with landowners and harvesters to record existing knowledge and understanding of use of the wild resource.

Researchers from the Geography Department are playing a key role in the multidisciplinary/multi-institutional Ntabelanga and Laleni Ecological Infrastructure Project (NLIEP) funded by the Department of Environmental Affairs (DEA). Dr Bennie van der Waal chairs the sediment community of practice (COP) which advises on erosion and sediment related issues. Research on river sediment loads and sources is being carried out by Ms Laura Bannatyne and Ms Namso Nyamela.

Emeritus Professor Kate Rowntree leads a team that is addressing community engagement in catchment restoration through a Water Research Commission (WRC) project.

Department of Geography



The Landscape Processes in Antarctic Ecosystems group had Professor Ian Meiklejohn and MSc students Jenna Knox, Tebogo Masebe, and Nicola Wilmot spending the 2016/17 Austral Summer in Antarctica to undertake the fieldwork for their research. Professor Ian Meiklejohn was appointed as Chief Scientist for the summer field season 2016/2017 summer season on the Continent.

Christel Hansen (now a lecturer at the University of Pretoria), Jenna Knox, Tebogo Masebe, and Nicola Wilmot together with Professor Ian Meiklejohn attended and presented papers at the First International Antarctic Workshop on Permafrost at Insubria University, Varese, Italy.



Books/Chapters/Monographs

Lewis, C.

Lewis, C. (2017) Gwernyfed Prior to the Death of David Williams. In: Lewis, C.A. (ed.). *Under the Black Mountains: The History of Gwernyfed since 1600*. UK: Logaston Press. p.1-4. ISBN: 9781910839157.

Lewis, C. (2017) Gwernyfed in the 17th Century. In: Lewis, C.A. (ed.). *Under the Black Mountains: The History of Gwernyfed since 1600*. UK: Logaston Press. p.5-20. ISBN: 9781910839157.

Lewis, C. (2017) Gwernyfed in the 18rh Century. In: Lewis, C.A. (ed.). *Under the Black Mountains: The History of Gwernyfed since 1600.* UK: Logaston Press. p.21-28. ISBN: 9781910839157.

Lewis, C. (2017) Gwernyfed and the Wood family. In: Lewis, C.A. (ed.). *Under the Black Mountains: The History of Gwernyfed since 1600.* UK: Logaston Press. p.29-52. ISBN: 9781910839157.

Lewis, C. (ed.) (2017) Under the Black Mountains: The History of Gwernyfed since 1600. UK: Logaston Press. ISBN: 9781910839157.

Rowntree, K. and Fox, R.C.

Rowntree, K. and Fox, R.C. (2017) Contributing to the agenda for sustainable development through North-South educational partnerships: An analysis of two Linnaeus-Palme staff-student exchanges between Sweden and South Africa. In: Halvorsen, R., Evans, H.C. and Penderis, S. (eds.). *Knowledge for Justice: Critical perspectives from southern Africa-Nordic research partnerships*. Cape Town: African Minds. p.131-146. ISBN: 9781928331643.

Other Publications

Van Der Waal, B.

Lunderstedt, K.E., Mtati, N., Ntshudu, M.E., Powell, M., Weyer, D.J. and Van Der Waal, B. (2017) Participatory mapping for the restoration and SLM plan for T35A-E: Workshop Report 1: Tribal Area: Batlokoa. In: Powell, M. (ed.). *NLEIP: Ntabelanga and Lalini Ecological Infrastructure Project.* South Africa: Department of Environmental Affairs.

Peer Reviewed Non-Subsidy-Earning Journal Research Publications

Foster, I.D.L.

Foster, I.D.L., Boardman, J., Collins, A.L., Copeland-Phillips, R., Kuhn,

As usual, a large contingent from the Department of Geography attended the Annual Geography Students Conference, at Mpumalanga University in Mbombela.



Professor Ian Meiklejohn, Head of Department



Roxanne Starkey sampling as part of her MSc on the honeybush industry Photo: Department of Geography

N., Mighall, T.M., Pulley, S. and **Rowntree**, **K**. (2017) The potential for gamma-emitting radionuclides to contribute to an understanding of erosion processes in South Africa. *Proceedings of the International Association of Hydrological Sciences*. 375 (2017). p.29-34.

McGregor, G.

Clark, V.R., Timberlake, J.R., Hyde, M.A., Mapaura, A., Coates Palgrave, M., Wursten, B.T., Ballings, P., Burrows, J.E., Linder, H.P., McGregor, G., Chapano, C., Plowes, D.C.H., Childes, S.L., Dondeyne, S., Muller, T. and Barker, N.P. (2017) A First Comprehensive Account of Floristic Diversity and Endemism on the Nyanga Massif, Manica Highlands (Zimbabwe-Mozambique). *Kirkia.* 19 (1). p.1-53.

Peer Reviewed Subsidy-Earning Journal Research Publications

Bannatyne, L.J., Rowntree, K.M., Van Der Waal, B. and Nyamela, N.

Bannatyne, L.J., Rowntree, K.M., Van Der Waal, B. and Nyamela, N. (2017) Design and implementation of a citizen technician-based suspended sediment monitoring network: Lessons from the Tsitsa River catchment, South Africa. *Water SA*. 43 (3). p.365-377.

Foster, I.D.L.

Mighall, T., Timberlake, S., Martinez-Cortizas, A., Silva-Sanchez, N. and **Foster, I.D.L.** (2017) Did prehistoric and Roman mining and metallurgy have a significant impact on vegetation? *Journal of Archaeological Science: Reports.* 11 (2017). p.613-625.

Department of Geography





Professor Ian Meiklejohn, together with Rhodes University Microbiologist, Dr Gwynneth Matcher flew to Troll Station, Antarctica in December 2017 to undertake research in the Austral Summer field season. Photo: Department of Geography.



Masters students Nicola Wilmot, Jenna Knox and Tebogo Masebe working in Western Dronning Maud Land, Antarctica (January 2017). Photo: Department of Geography.

Collins, A.L., **Foster, I.D.L.**, Gellis, A.C., Porto, P. and Horowitz, A.J. (2017) Sediment source fingerprinting for informing catchment management: Methodological approaches, problems and uncertainty. *Journal of Environmental Management*. 194 (2017). p.1-3.

Evans, R., Collins, A.L., Zhang, Y., **Foster, I.D.L.**, Boardman, J., Sint, H., Lee, M.R.F. and Griffith, B.A. (2017) A comparison of conventional and Cs-137-based estimates of soil erosion rates on arable and grassland across lowland England and Wales. *Earth-Science Reviews*. 173 (2017). p.49-64.

Biddulph, M., Collins, A.L., **Foster, I.D.L.** and Holmes, N. (2017) The scale problem in tackling diffuse water pollution from agriculture: Insights from the Avon Demonstration Test Catchment programme in England. *River Research and Applications*. 33 (2017). p.1527-1538.

Harper, S.E., **Foster, I.D.L.**, Lawler, D.M., Mathers, K.L., McKenzie, M. and Petts, G.E. (2017) The complexities of measuring fine sediment accumulation within gravel-bed rivers. *River Research and Applications*. 33 (2017). p.1575-1584.

Kepe, T.

Hall, R. and **Kepe**, **T**. (2017) Elite capture and state neglect: new evidence on South Africa's land reform. *Review of African Political Economy*: 44 (151). p.122-130.

Meiklejohn, I.

Ansorge, I.J., **Skelton, P.H.**, Bekker, A., de Bruyn, P.J.N., Butterworth, D., Cilliers, P., Cowan, D.A., **Dorrington, R.A.**, **Froneman, P.W.**, **Meiklejohn, I.** and *et al.*(2017) Exploring South Africa's southern frontier: A 20-year vision for polar research through the South African National Antarctic Programme. *South African Journal of Science*. 113 (5/6). p.1-7.

Miller, J.K. and Rowntree, K.M.

Reinwarth, B., **Miller, J.K.**, Glotzbach, C., **Rowntree, K.M.** and Baade, J. (2017) Applying regularized logistic regression (RLR) for the discrimination of sediment facies in reservoirs based on composite fingerprints. *Journal of Soils and Sediments*. 17 (2017). p.1777-1795.

Pulley, S. and Foster, I.D.L.

Pulley, S., Foster, I.D.L. and Collins, A.L. (2017) The impact of catchment source group classification on the accuracy of sediment fingerprinting outputs. *Journal of Environmental Management*. 194 (2017). p.16-26.

Rowntree, K. and Foster, I.D.L.

Manjoro, M., **Rowntree, K.**, Kakembo, V., **Foster, I.D.L**. and Collins, A.L. (2017) Use of sediment source fingerprinting to assess the role of subsurface erosion in the supply of fine sediment in a degraded catchment in the Eastern Cape, South Africa. *Journal of Environmental Management*. 194 (2017). p.27-41.

Rowntree, K.M., Van Der Waal, B. and Pulley, S.

Rowntree, K.M., Van Der Waal, B. and Pulley, S. (2017) Magnetic susceptibility as a simple tracer for fluvial sediment source ascription during storm events. *Journal of Environmental Management*. 194 (2017). p.54-62.

Van Der Waal, B.

Mander, M., Jewitt, G., Dini, J., Glenday, J., Blignaut, J., Hughes, C., Marais, C., Maze, K., **Van Der Waal, B.** and Mills, A. (2017) Modelling potential hydrological returns from investing in ecological infrastructure: Case studies from the Baviaanskloof-Tsitsikamma and uMngeni catchments, South Africa. *Ecosystem Services*. 27 (2017). p.261-271.

Shackleton, R.T., Angelstam, P., **Van Der Waal**, **B**. and Elbakidze, M. (2017) Progress made in managing and valuing ecosystem services: a horizon scan of gaps in research, management and governance. *Ecosystem Services*. 27 (2017). p.232-241.

Van Der Waal, B. and Rowntree, K.

Van Der Waal, B. and Rowntree, K. (2017) Landscape Connectivity in the Upper Mzimvubu River Catchment: An Assessment of Anthropogenic Influences on Sediment Connectivity. *Land Degradation* & Development. (2017). p.1-11.

Van Der Waal, B., Foster, I.D.L. and Rowntree, K.

Pulley, S., Van Der Waal, B., Collins, A.L., Foster, I.D.L. and Rowntree, K. (2017) Are source groups always appropriate when sediment fingerprinting? The direct comparison of source and sediment samples as a methodological step. *River Research and Applications*. (2017). p.1-11.



Research in the Department of Geology continued growing with the staff complement reaching stability. Student numbers continue to grow and reach record levels, with a large Honours intake for 2017.



MSc Exploration Geology students with lecturers from 2017. BACK ROW: L-R: A. Soro, T. Mutilifa; J. van den Berg; T. Mapholi; G. Rabali; R. Kankomba; M. Chilekwa; E. Busane. FRONT ROW: L-R: L. Poignant-Molina; L. Botha; Professor S. Prevec; Dr. L Longridge; Professor J. Harmer; A. Goddard; Professor H Tsikos; F. Gelber. Photo: Department of Geology.

Research fields in the Department are varied and include, amongst others: tectono-metamorphic evolution, Rare Earth Element and related critical metal deposits, Petrogenesis and crustal evolution, Sedimentology and stratigraphic sequences in southern Africa and globally, Ground Water Resources, Petrology of Karoo basalts, mafic intrusions and associated high grade metamorphic rocks, ancient biogeochemistry, oceanic sedimentary ore deposits, palaeoceanography, analytical methods, and palaeobiology.

Postgraduates / Graduations

At the 2017 graduation ceremony, the Department graduated a PhD, five (5) research MSc students, two (2) MSc graduates from the Department's Exploration Geology MSc programme and two (2) from the coursework MSc in Economic Geology.

In addition, the Department graduated ten (10) Honours students and forty-eight (48) students who successfully read for their bachelor's degrees.

Distinguished Visitors / International Visits

Ellam, R.M.

Professor RM Ellam. Scottish Universities Environmental Research Center (SUERC), East Kilbride, Scotland. To take

up a Hugh Kelly Visiting Fellowship in the Geology Department (including teaching, collaboration and public talks). September 2017.

Grosch, E.G.

EG Grosch. Norwegian Polar Institute, Tromos, Norway. Dr Tamer Abu-Alam Thutuka Research visitor. September 2017.

Tsikos, H.

Tsikos, **H**. University of Tasmania, Hobart, Australia. Presented workshop on Fe and Mn ore deposits for the SEG student chapter at the Department of Earth Science, University of Tasmania. 8 - 11 June 2017.

Kazerouni, A.

Kazerouni, A. Nelson Mandela University, Geology Department- Port Elizabeth, South Africa, Visiting lecturer for Honours course in Sedimentary basin analysis. July-August 2017.

Significant Research Aligned Events

The ground-breaking palaeontological work of one of the Department of Geology's Research Associates, Dr Rob Gess continued with papers in the high impact journals Nature and PLoS ONE. Most of these published findings are for work done locally around Grahamstown, highlighting the importance of the region's Geology in understanding global questions.

Department of Geology



Confidently identifying oceanic crust in the rock record older than 2.5 billion-years-ago, in a period of Earth history known as the Archaean, has been a major challenge for geologists. A paper by Grosch and Slama (2017) considered this unresolved question by using an innovative approach, as well as an integrated field, geochemical and state-of the-art geochronological techniques. They conducted a detailed study of a meta-volcanic and volcano-sedimentary rocks of the Kromberg volcanic sequence in the Barberton Greenstone Belt, of Mpumalanga Province of South Africa.

U-Pb dating of detrital zircons by Laser-Ablation Inductively-Coupled Plasma Mass Spectrometry (LA-ICPMS), indicated a gabbroic oceanic source area for the ancient seafloor sediments at the top of the volcanic sequence, very different to the U-Pb zircon age distribution and provenance area of the underlying Noisy Formation conglomerates. Trace element geochemistry of the mafic volcanic rocks in the Kromberg sequence where compared globally to other greenstone belt rocks and indicated a deep, primitive mantle signature. Evidence presented in support of the Kromberg representing oceanic crust, implies that modern-style oceanic spreading centers, where oceanic crust is created was developed by 3.33 billion-years-ago.

PUBLICATIONS

Distinguished Visitors

Ellam, R.M.

Professor RM Ellam. Scottish Universities Environmental Research Center (SUERC), East Kilbride, Scotland. *To take up a Hugh Kelly Visiting Fellowship in the Geology Department (including teaching, collaboration and public talks)*. September 2017.

Grosch, E.G.

EG Grosch. Norwegian Polar Institute, Tromos, Norway. *Dr Tamer Abu-Alam Thutuka Research visitor*. September 2017.

International Visits

Tsikos, H.

Tsikos, H. University of Tasmania, Hobart, Australia. *Presented workshop* on Fe and Mn ore deposits for the SEG student chapter at the Department of Earth Science, University of Tasmania. 8 - 11 June 2017.

Peer Reviewed Non-Subsidy-Earning Journal Research Publications

Mcloughlin, N.

Mcloughlin, N. (2017) Fossil eukaryotes: Fungal origins? *Nature Ecology* & *Evolution*. 1 (0147). p.1-2.

Moore, A.

Moore, A., Cotterill, F.P.D. and Key, R.M. (2017) A Geomorphic and Geological Framework for the Interpretation of Species Diversity and Endemism in the Manica Highlands. *Kirkia*. 19 (1). p.54-69.

The Kromberg sequence of mafic-ultramafic rocks most likely formed at a mid-ocean ridge system in small-scale oceanic basin. Subsequently, a fragmented slice of Kromberg oceanic crust was accreted horizontally on top of the Noisy Formation sedimentary sequence. The paper of Grosch and Slama (2017) was published in GEOLOGY, the top ranked international journal for the field of Geology. The work was considered ground-breaking by international reviewers because it provided robust field and petrological evidence for crustal processes on the early Earth as far back as 3.33 billion-years ago that may have been similar to modern-style plate tectonics. It also means that South Africa is home to the oldest, best preserved fragment of oceanic crust on Earth, that clearly requires further scientific investigation as it holds the key to understanding how the early Earth worked.



Professor Ian Meiklejohn, Head of Department

Rowntree, K.

Foster, I.D.L., Boardman, J., Collins, A.L., Copeland-Phillips, R., Kuhn, N., Mighall, T.M., Pulley, S. and Rowntree, K. (2017) The potential for gamma-emitting radionuclides to contribute to an understanding of erosion processes in South Africa. *Proceedings of the International Association of Hydrological Sciences.* 375 (2017). p.29-34.

Peer Reviewed Subsidy-Earning Journal Research Publications

Costin, G.

Johannes Giebel, R., Gauert, C.D.K., Marks, M.A.W., **Costin, G.** and Markl, G. (2017) Multi-stage formation of REE minerals in the Palabora Carbonatite Complex, South Africa. *American Mineralogist.* 102 (6). p.1218-1233.

Chithambo, M.L. and Costin, G. (2017) Temperature-dependence of time-resolved optically stimulated luminescence and composition heterogeneity of synthetic α -Al2O3:C. *Journal of Luminescence*. 182 (2017). p.252-262.

Costin, G. and Yao, Y.

Munteanu, M., Wilson, A.H., **Costin, G., Yao, Y.**, Lum, J.E., Jiang, S.Y., Jourdan, F., Chunnett, G. and Cioaca, M.E. (2017) The Mafic-Ultramafic Dykes in the Yanbian Terrane (Sichuan Province, SW China): Record of Magma Differentiation and Emplacement in the Emeishan Large Igneous Province. *Journal of Petrology.* 58 (3). p.513-538.

Gess, R.W.

Gess, R.W. and Trinajstic, K.M. (2017) New morphological information on, and species of placoderm fish *Africanaspis* (Arthrodira, Placodermi)

Department of Geology



from the Late Devonian of South Africa. PLoS ONE. 12(4): e0173169.

Scholtz, S., **Gess**, **R.W**. (2017) Oldest known naiaditid bivalve from the high-latitude Late Devonian (Famennian) of South Africa offers clues to survival strategies following the Hangenberg mass extinction. *Palaeogeography, Palaeoclimatology, Palaeoecology.* 471 (2017) 31-39.

Coates, M.I., **Gess**, **R.W**., Finarelli, J.A., Criswell, K.E. and Tietjen, K. (2017) A symmoriiform chondrichthyan braincase and the origin of chimaeroid fishes. *Nature*. 541: 208-211.

Grosch, E.G.

Grosch, E.G. and Slama, J. (2017) Evidence for 3.3-billion-year-old oceanic crust in the Barberton greenstone belt, South Africa. *Geology.* 45 (8). p.695-698.

Harmer, R.E.

McDonald, I., Harmer, R.E., Holwell D.A., Hughes H.S.R., Boyce A.J. (2017). Cu-Ni-PGE mineralisation at the Aurora Project and potential for a new PGE province in the Northern Bushveld Main Zone. *Ore Geology Reviews.* 80, 1135-1159.

Tanner, D., McDonald, I., **Harmer**, **R.E.** and Hughes, H.S.R. (2017) Abstracts: Suphide melt evolution in the Volspruit project: the most primitive, yet most contaminated platinum-group element (PGE) deposit in the bushveld complex? *Transactions of the Institutions of Mining and Metallurgy, Section B: Applied Earth Science.* 126 (2). p.96-97.

McDonald, I., **Harmer, R.E.**, Hughes, H.S.R., Tanner, D. and Holwell, D.A. (2017) Abstracts: Hidden treasure: magmatic and geodynamic factors that influenced the development of Ni-Cu-PGE deposits in the northern bushveld complex. *Transactions of the Institutions of Mining and Metallurgy, Section B: Applied Earth Science.* 126 (2). p.78-79.

Marsh, J.

Moulin, M., Fluteau, F., Courtillot, V., **Marsh**, J., Delpech, G., Quidelleur, X. and Gerard, M. (2017) Eruptive history of the Karoo lava flows and their impact on early Jurassic environmental change. *Journal of Geophysical Research-Solid Earth*. 122 (2017). p.1-35.

Mcloughlin, N.

Qu, Y., Wang, J., Xiao, S., Whitehouse, M., Engdahl, A., Wang, G. and **Mcloughlin**, **N**. (2017) Carbonaceous biosignatures of diverse chemotrophic microbial communities from chert nodules of the Ediacaran Doushantuo Formation. *Precambrian Research*. 290 (2017). p.184-196.

Pedersen, L.E.R., Staudigel, H., **McIoughlin**, **N.**, Whitehouse, M.J. and Strauss, H. (2017) A multiple sulfur isotope study through the volcanic section of the Troodos ophiolite. *Chemical Geology*. 468 (2017). p.49-62.

Brasier, A.T., McIlory, D. and **McIoughlin**, **N**. (2017) Contributions of Professor Martin Brasier to the study of early life, stratigraphy and biogeochemistry. *Geological Society Special Publication*. 448 (2017). p.1-17.

Moore, A.

Moore, A. (2017) Quantitative Modelling of the Apparent Decoupling of Mg# and Ni in Kimberlitic Olivine Margins: Comment on Cordier *et al.* (Journal of Petrology, 65, 1775-1796, 2015). *Journal of Petrology.* 58 (2). p.385-390.

Oonk, P.B.H. and Tsikos, H.

Konhauser, K., Planavsky, N.J., Hardisty, D., Robbins, L.J., Warchola, T.J., Haugaard, R., Lalonde, S.V., Partin, C.A., **Oonk, P.B.H.**, **Tsikos**, **H.**, Lyons, T.W., Bekker, A. and Johnson, C.M. (2017) Iron formations: A global record of Neoarchaean to Palaeoproterozoicenvironmental history. *Earth-Science Reviews*. 172 (2017). p.140-177.

Oonk, P.B.H., Tsikos, H. and Fryer, L.

Oonk, P.B.H., Tsikos, H., Mason, P.R.D., Henkel, S., Staubwasser, M., Fryer, L., Poulton, S. and Williams, H. (2017) Fraction-specific controls on the trace element distribution in iron formations: Implications for trace metal stable isotope proxies. *Chemical Geology*. 474 (2017). p.17-32.

Prevec, S.A.

Maier, W.D., **Prevec**, **S.A.**, Scoates, J.S., Wall, C.J., Barnes, S.J. and Gomwe, T. (2017) The Uitkomst intrusion and Nkomati Ni-Cu-Cr-PGE deposit, South Africa: trace element geochemistry, Nd isotopes and high-precision geochronology. *Mineralium Deposita*. (2017). p.1-22.

Scoon, R.N. and Costin, G.

Scoon, R.N., Costin, G. and Gräbe, P.J. (2017) Geology and Origin of the Vanadiferous Fe-Ti Oxide-rich Kennedy's Vale Discordant Body, Eastern Limb of the Bushveld Complex, South Africa. *South African Journal of Geology*. 120 (2). p.251-270.

Tsikos, H.

Kampouroglou, E., **Tsikos**, **H**. and Economou-Eliopoulos, M. (2017) Carbonate stable isotope constraints on sources of arsenic contamination in Neogene tufas and travertines of Attica, Greece. *Open Geosciences*. 9 (2017). p.577-592.

Peer-reviewed Proceedings

Kazerouni, A.

Kazerouni, A. Risk assesment review of heavy metal accumulations (Cu, cr, ni, pb and zn) in s. brevis-bushehr coast area-iran. *17th International Multidisciplinary Scientific GeoConference SGEM 2017*. Albena. Bulgaria. July 2017.

Kazerouni, A. GIS-Application for Environmental Management in Mining Areas on the Example of the Molteno Coal Field, Eastern Cape. *17th International Multidisciplinary Scientific GeoConference SGEM 2017*. Albena. Bulgaria. July 2017.

Research Papers Presented at Academic/Scientific Conferences (Non-peer-reviewed Proceedings)

Adeola, S. I.

Adeola, S. I. Geochemical characteristics of clay minerals in kaolinitic clay deposits in the Eastern Cape, South Africa. *Eighth Interdisciplinary Postgraduate Conference (IPGC)*. Rhodes University, Grahamstown, South Africa, Oral presentation, September 2017.

Arunachellan, Y. and Prevec, S.A.

Arunachellan, Y. and Prevec, S.A. Constraints on mineralisation in the MG 1 and 3 chromitites, Bushveld Complex, South Africa. *Igneous and Metamorphic Studies Group 9th Annual Conference (IMSG)*. Glenburn Lodge, Muldersdrift, Johannesburg. South Africa. January 2017.

Büttner, S.H. and Moloto, T.

Büttner, S.H., Glodny, J., **Moloto, T.**, Wiedenbeck, M., Chuwa, G. (2017) Fluid sources in the Twangiza-Namoya Gold Belt (South Kivu, DRC): Evidence from tourmaline compositions and B- and Rb-Sr isotope data. *9th Igneous and Metamorphic Studies Group Conference: IMSG 2017.* Book of Abstracts, Johannesburg, South Africa.

De Bruyn, J.A. and Prevec, S.A.

De Bruyn, J.A. and **Prevec, S.A.** Impacts, pseudotachylites, and melting: the enigma of the Drury Township Intrusion, Canada. *Igneous and Metamorphic Studies Group 9th Annual Conference (IMSG)*. Glenburn Lodge, Muldersdrift, Johannesburg. South Africa. January 2017.

Gess, R.

Gess, R.W. (2017) Estuarine fish breeding grounds: a comparison of the Famennian aged Waterloo Farm lagerstätten and contemporary systems. *14th International Symposium on Early and Lower Vertebrates*. Checiny, Poland, 3-8 July 2017. Ichthyolith Issues Special Publication 13.

Grosch, E.G.

Grosch, E.G. Petrochronology in constraining early Archean Earth processes and environments: Barberton greenstone belt, South Africa. *European Geophysical Union Annual General Meeting.* Vienna Convention Centre, Vienna. Austria. April 2017.



Grosch, E.G. and Mcloughlin, N.

Grosch, **E.G.** and **Mcloughlin**, **N**. Was the Archean subseafloor of the Barberton greenstone belt a habitat for early life? *Goldschmidt Geochemistry Conference Paris Convention Centre*. Paris. France. August 2017.

Kazerouni, A.

Kazerouni, A. Extending the Life of Reservoirs: Sustainable Sediment Management for Dams and Run-of-River Hydropower. *Eighth Interdisciplinary Postgraduate Conference (IPGC)*. Rhodes University, Grahamstown, South Africa, Oral presentation, September 2017.

Kazerouni, A. Pyrite Formation in the Water Column and Sediments in an Alkaline, Saline, Meteorite Crater Lake Tswaing, South Africa. *Goldsmidth Conference*. Paris, France, Poster presentation, August 2017.

Kazerouni, A. Diagenetic controls on development of carbonate pore systems in Upper Elliot Formation, Karoo Supergroup (South Africa). *Mountjoy Carbonate Research Conference*. Austin, Texas, USA, Poster presentation, June 2017.

Harmer, R.E.

Harmer, R.E. The Bulhoek Carbonatite Complex, South Africa: Evidence for magmatic crystallization of dolomite at low pressures and the petrogenetic implications. *International Seminar on Carbonatites-Alkaline Rocks and Associated Economic Mineral Deposits*. Vadodara and Kadipani, Gujarat, India. December, 2017.

Johanessen, K. and Mcloughlin, N.

Johanessen, K. and Mcloughlin, N. Biogenicity of Fe-oxyhydroxide filaments in silicified low-temperature hydrothermal deposits. *Goldschmidt Geochemistry Conference*. Paris Convention Centre, Paris. France. August 2017.

Mhlanga, X.R. and Tsikos, H.

Mhlanga, X.R., Tsikos, H., Lee, B., Rouxel, O.J., Boyce, A. and Lyons, T.W. Massive marine Mn deposition in the Palaeoproterozoic heralds the Great Oxidation Event. *1st Geobiology Society Conference*. Banff Conference Center, Banff. Canada. June 2017.

Ntantiso, M. and Prevec, S.A.

Ntantiso, M. and Prevec, S.A. Constraints on the emplacement of the Colesberg Sill, Karoo Supergroup. *Igneous and Metamorphic Studies Group 9th Annual Conference (IMSG)*. Glenburn Lodge, Muldersdrift, Johannesburg. South Africa. January 2017.

Ntsaluba, B.I. and Prevec, S.A.

Ntsaluba, B.I. and Prevec, S.A. Petrogenesis of the Mount Ayliff Complex: evidence from Cr spinel geochemistry. *Igneous and Metamorphic Studies Group 9th Annual Conference (IMSG)*. Glenburn Lodge, Muldersdrift, Johannesburg. South Africa. January 2017.

Oonk, P.B.H. and Tsikos, H.

Lantink, M., **Oonk**, P.B.H., Floor, G., **Tsikos**, H. and Mason, P.R.D. Fe isotopes in primary hematite constrain marine redox conditions at the base of the 2.4 Ga Hotazel Formation. *Goldschmidt 2017*. Le Palais des Congrès de Paris, Paris. France. August 2017.

Prevec, S.A.

Prevec, S.A. Contamination of mafic magmas: the role of hydration, oxidation, and alkalis. *Igneous and Metamorphic Studies Group 9th Annual Conference (IMSG)*. Glenburn Lodge, Muldersdrift, Johannesburg. South Africa. January 2017.

Schmeldt, G. and Büttner, S.H.

Schmeldt, G., Büttner, S.H. (2017) Petrogenetic relationships between the Koenap Formation migmatites and the Swartoup Granodiorite (central Namaqua Metamorphic Complex). *9th Igneous and Metamorphic Studies Group Conference: IMSG 2017.* Book of Abstracts, Johannesburg, South Africa.

Tsikos, H.

Aoki, S., Sakata, S., Nakada, R., Kashiwabara, T., Ohno, T., Takahashi, Y., **Tsikos, H.** and Komiya, T. Transitional-element compositions at

whole-rock and micro scale of the Banded Iron Formations: Implications for secular variations of bioessential elements in the ocean and their influences on biological evolutions. *JpGU-AGU Meeting 2017*. Makuhari Messe, Chiba. Japan. May 2017.

Aoki, S., Sakata, S., Nakada, R., Kashiwabara, T., Ohno, T., Takahashi, Y., **Tsikos**, **H**. and Komiya, T. The petrographical and geochemical characteristics of the BIFs in the Hotazel Formation from Transvaal Supergroup: Implications for redox and hydrothermal contributions in their depositional environments. *JpGU-AGU Meeting 2017*. Makuhari Messe, Chiba. Japan. May 2017.

Tsikos, H., Mhlanga, X.R. and Oonk, P.B.H.

Tsikos, H., Mhlanga, X.R. and Oonk, P.B.H. Palaeoprotorozoic banded iron formation (BIF)-hosted manganese deposits: myth or reality? *FUTORES II.* Rydges Townsville Hotel, Townsville. Australia. June 2017.



During 2017 all staff members remained actively engaged in research and publication. Highlights of the year included the publication of the first critical history of Rhodes University by Distinguished Professor Emeritus, Paul Maylam. The book, bearing the title *Rhodes University, 1904-2016: An Intellectual, Political and Cultural History*, was launched at a well-attended function at the Eden Grove Lecture Theatre on 28 September 2017.



Professor Gary Baines was awarded the Vice-Chancellor's Book Award for his monograph *South Africa's 'Border War': Contested narratives and Conflicting Memories* (Bloomsbury).

Postgraduates / Graduations

Twenty-nine (29) Postgraduate students were registered in the History Department in 2017. These included fifteen (15) PhDs, seven (7) MAs, and seven (7) Honours students.

As is evident from the record below, our Postgraduate students are encouraged to attend and present papers at conferences. Thus, Calvin Jordan presented a paper based on his MA research at the Southern African Historical Society's 26th Biennial Conference at the University Witwatersrand in June 2017.

Three (3) PhDs were awarded at the 2017 graduation. These were:

- Eric Kelly for his thesis titled 'A history of the Grahamstown Teachers' Training College, 1894-1975' supervised by Dr Alan Kirkaldy;
- Milner Snell for his thesis 'The making of "loyals" and "rebels": The 1880 Transkei rebellion and the subversion of the chieftaincies of East Griqualand, 1874-1914' supervised by Professor Julie Wells;
- Tapiwa Zimudzi for his thesis 'Information and Propaganda in the Federation of Rhodesia and Nyasaland with special reference to print and radio propaganda for Africans, 1953-1963' supervised by Professor Enocent Msindo.

At the same ceremony, six (6) Masters degrees in History were awarded. Of this bumper 'crop', two (2) were awarded distinctions. The six (6) were Jako Bezuidenhout, Sarah Bruchausen (with distinction), Mikaela Erskog (with distinction), Asa Mudzimu, Nichola Nyachega, and Ntombizikhona Valela.

Distinguished Visitors / International Visits

Dr Nicole Ulrich presented papers on her current research on 'workerism' and colonial migration and travel at the Scottish universities of Glasgow and Edinburgh, respectively.

Professor Gary Baines presented a paper on war veterans as tourists at workshops held in Munich, Germany and Hiroshima, Japan.



Professor Gary Baines, Head of Department

Department of History



PUBLICATIONS

Books/Chapters/Monographs

Baines, G.F.

Baines, G.F. (2017) Memoir Writing as Narrative Therapy: A South African Border War Veteran's Story. In: Dwyer, P. (ed.). *War Stories: The War Memoir in History and Literature*. New York: Berghahn Books. p.252-276. ISBN: 9781785333071.

Baines, G.F. (2017) Commemorating Solomon Mahlangu: The Making and Unmaking of a "Struggle" Icon. In: Miller, K. and Schmahmann, B. (eds.). *Public Art in South Africa: Bronze Warriors and Plastic Presidents (African Expressive Cultures)*. Bloomington and Indianapolis: Indiana University Press. p.118-140. ISBN: 9780253029928.

Maylam, P.

Maylam, P. (2017) *Rhodes University, 1904-2016: An Intellectual, Political and Cultural History.* Grahamstown: Rhodes University, 1904-2016: An Intellectual, Political and Cultural History. ISBN: 9780868106120.

Msindo, E.

Msindo, E. (2017) Settler Rule in Southern Rhodesia, 1890-1979. In: Cavanagh, E. and Veracini, L. (eds.). *The Routledge Handbook of the History of Settler Colonialism*. London: Routledge. p.247-262. ISBN: 9780415742160.

Suttner, R.S.

Suttner, R.S. (2017) *Inside Apartheid's Prison*. Johannesburg: Jacana Media (Pty) Ltd. ISBN: 9781431425174.

Ulrich, N.

Byrne, S., **Ulrich**, **N**. and Van Der Walt, L. (2017) Red, Black and Gold: FOSATU, South African 'Workerism,' 'Syndicalism' and the Nation. In: Webster, E.C. and Pampallis, K. (eds.). *The Unresolved National Question in South Africa: Left Thought Under Apartheid*. Johannesburg: Wits University Press. p.254-273. ISBN: 9781776140220.

Peer Reviewed Non-Subsidy-Earning Journal Research Publications

Baines, G.F.

Baines, **G.F.** (2017) The Vocabulary of the Vietnam War: South African Invocations of an Analogy and its Associated Lessons. *Estonian Yearbook of Military History.* 7 (13). p.227-260.

Wells, J.C.

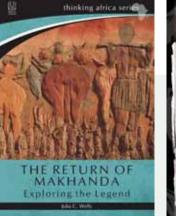
Wells, J.C. (2017) 'deep wounds... left... in hearts and minds': South African Public History. *Public History Review*. 24 (2017), p.1-21.

Peer Reviewed Subsidy-Earning Journal Research Publications

Baines, G.F.

Baines, G.F. (2017) Book Review: An African Volk: The Apartheid Regime and the Search for Survival by Jamie Miller (Oxford: Oxford University Press, 2016) 9780190274832 439pp. *South African Historical Journal.* 69 (4). p.1-5.

Baines, G.F. (2017) Book Review: Vilho Amukwaya Shigwedha, The Aftermath of the Cassinga Massacre: Survivors, Deniers and Injustices (Basel: Basler Afrika Bibliogaphien, 2017) 9783905758801 169pp. *Journal of Namibian studies*. 22 (1). p.105-109.





Jagarnath, V.

Jagarnath, V. (2017) Book Review: Keith Breckenridge (2014) Biometric State: the global politics of identification and surveillance in South Africa, 1850 to the present. Cambridge: Cambridge University Press. *Transformation.* 94 (2017). p.76-78.

Kirkaldy, A.

Kirkaldy, A. (2017) Very Ordinary Communists: The Life of Ivan and Lesley Schermbrucker. *South African Historical Journal*. 69 (3). p.418-451.

Madimu, T.

Madimu, T. (2017) Book Review: Rules For Racial Interactions - Manners Make a Nation: Racial Etiquette in Southern Rhodesia, 1910-1963. By Allison K. Shutt. Rochester, NY: University of Rochester Press, 2015. Pp. xiii+ 245. \$110.00. *Journal of African History.* 58 (3). p.540-542.

Wells, J.C.

Wells, J.C. (2017) Book Review: From Apartheid to Democracy: Deliberating Truth and Reconciliation in South Africa by Katherine Elizabeth Mack. University Park: The Pennsylvania State University Press, 2014. xiv + 156 pp.; illustrations, notes, index; clothbound, \$64.95; paperbound, \$29.95. *Public Historian.* 39 (3). p.133-135.

Wells, J.C. (2017) When the Past Transforms: A Case Study from a Western Cape Wine Farm. *South African Historical Journal.* 69 (2017). p.345-360.

Research Papers Presented at Academic/Scientific Conferences (Non-peer-reviewed Proceedings)

Baines, G.F.

Baines, G.F. Retracing Memories of War: South African Military Veterans as Tourists in Angola. *War Veterans and the World since 1945 International Workshop*. Ludwig-Maximilians-Universität, Munich. Germany. July 2017.

Baines, G.F. Retracing Memories of War: South African Military Veterans as Tourists in Angola. *War Veterans and the World since 1945 International Workshop.* Institute of Peace Studies, Hiroshima City University. Japan. November 2017.

Chinembiri, C.

Chinembiri, **C**. Sharing notions of quality in education in Zimbabwe emerging from student anecdotes, 1976-1979. *PhD conference, CHERTL*. Rhodes University, Grahamstown. South Africa. October 2017.

Jordan, C.D.

Jordan, C.D. The English East India Company at the Cape of Good Hope during the first British occupation, c.1795-1803: Transoceanic

Department of History



An impromptu Imbizo at Dakawa to a National Arts Festival performance at City Hall, Ayanda Nondlwana and his Via Kasi Movers, developed their show *Rhythms of Makhanda* in 2017. It is returning by popular demand in 2018. It went on to win Best Prize at Shukuma Provincial Dance Festival in Port Elizabeth. Photo: Department of History.



Connections and Maritime Networks, and the making of the Maritime Zone. *Disputed Pasts, Fractured Futures and the Work of History'. Hosted by the Department of History, Southern African Historical Society, 26th Biennial Conference.* University Witwatersrand, Johannesburg. South Africa. June 2017.

e Tube

Maylam, P.

Maylam, P. Rhodes, imperialism and sexuality. *Rhodes LGBTQ Forum*. Oxford University, Oxford. UK. February 2017.

Msindo, E.

Msindo, E. Evictions, Migrations and Colonial Medicine in Gokwe from 1950s to 1970. *Biennial Conference of the Southern African Historical Society*. University of Witwatersrand, Johannesburg. South Africa. June 2017.

Msindo, E. Rethinking Political Leadership in Africa: Changes and Continuities Since the Precolonial Era. *Africa and the Question of Leadership*. Adekunle Ajasin University, Akungba-Akoko. Nigeria. November 2017.

Ulrich, N.

Van Der Walt, L., **Ulrich, N.** and Byrne, S. Red, Black and Gold: FOSATU, South African 'Workerism,' 'Syndicalism' and the Nation. *South African Historical Society biennial conference*. University of the Witwatersrand, Johannesburg. South Africa. June 2017. Van Der Walt, L., **Ulrich, N.** and Byrne, S. Presentation. Learning from Radical 1980s Unionism: FOSATU's 'Workerism,' Its Power and Its Limits. *Workshop on 'People's Power,' 'Workers' Control' and Grassroots Politics in South Africa: Rethinking Practices of Self-Organisation and Anti-apartheid Resistance in the 1980s*. Orange Farm Human Rights Advice Centre, Drieziet extension, Orange Farm. South Africa. 24 June 2017.

Ulrich, N. Paper presentation. Will we reach Canaan? The Birth, Death, and Resuscitation of Workers Control and Workerism in South Africa. *Socialist Movements and Theory Seminar*. University of Glasgow, Glasgow. Scotland. 18 - 1 April 2017.

Ulrich, N. Paper presentation. The Providence of Monsters: race, class and travel to the Cape of Good Hope. *Connected Histories of Empire and Struggle: A celebration of Dr Ian Duffield's scholarly career to mark his 80th birthday.* University of Edinburgh, Edinburgh. Scotland. 20 April 2017.

Ulrich, N. Speaker / presenter. Were there ever slaves in Grahamstown? *Community Imbizo: Isikhumbuzo Applied History Unit*. Raglan Road Multi-Purpose Centre, Fingo Village, Grahamstown. South Africa. 3 May 2017.



Department of Human Kinetics & Ergonomics

The department has had a very successful year in the research sphere with a number of publications, which included student co-authors, and national and international collaborators. The number of subsidy earning publications is growing nicely and the department has now gained momentum in this regard.



ESSA-ASHFAS-ErgoAfrica Conference. Photo: Department of HKE.

Postgraduates / Graduations

We had a large cohort of students presenting at local conferences with Kayla McEwan (MSc candidate who presented her honours research work) winning the best paper award at the Cricket South Africa conference held in Cape Town.

Luke Goodenough (PhD candidate who was presenting his MSc work) also won the best student paper award at the 3rd African Symposium on Human Factors and Aviation Safety/13th Ergonomics Society of South Africa Conference/1st Ergo Africa Conference in Johannesburg.

Bennett Ryan, a PhD candidate, was awarded the Student Community Engagement Award for the immense work he has put into the Community Engagement work of the department.

Distinguished Visitors / International Visits

The department welcomed representatives from Cricket South Africa and the Gary Kirsten Academy and Foundation. Greg King, Strength and Conditioning coach for the men's Protea's side, and Russell Clark, the ladies' Protea's Strength and Conditioning Coach presented workshops to students and local schools. They then joined Ryan Cook and Ryan Van Niekerk from the Gary Kirsten Academy and Foundation, respectively, to discuss collaborative research work with Professor Christie's Cricket Research Group.

Andrew Todd continued his international work as a member of the International Ergonomics Association (IEA) committee. He travelled extensively around the world for conferences and meetings to promote Human Factors and Ergonomics.

Significant Research Aligned Events

Department staff were part of the organizing committees of two (2) national conferences, the Cricket South Africa conference and the Ergonomics Society of South Africa conference.



Associate Professor Candice Christie, Head of Department



Peer Reviewed Non-Subsidy-Earning Journal Research Publications

Olagbegi, O.M.

Ayeni, G.O., Abanobi, O.C., Daniel, E.O. and **Olagbegi, O.M.** (2017) Long Lasting Insecticide Treated Net and Factors Limiting Effective Utilization in a High Malaria Incidence County of Wulu, South Sudan. *Texila International Journal of Public Health.* 5 (4). p.1-9.

Ayeni, G.O., Abanobi, O.C., Daniel, E.O., **Olagbegi, O.M.** and Oyewale, M.M. (2017) Pattern and Distribution of Malaria Disease in Wulu- A Typical County in South Sudan. *Texila International Journal of Public Health.* 5 (3). p.1-9.

Olagbegi, O.M., Adegoke, B.O. and Odole, A.C. (2017) Effectiveness of three modes of kinetic-chain exercises on quadriceps muscle strength and thigh girth among individuals with knee osteoarthritis. *Archives of Physiotherapy*. 7 (9). p.1-11.

Daniel, E.O., Amosu, A.M., Ayeni, G.O. and **Olagbegi**, **O.M**. (2017) The Pattern of Prevalence of Severe and Moderate Acute Malnutrition among Under-Five Children of Three Counties in a War-Torn Lakes State South Sudan. *Texila International Journal of Public Health*. 5 (3). p.1-8.

Peer Reviewed Subsidy-Earning Journal Research Publications

Christie, C.J., Elliott, A., Pote, L. and Steenekamp, T.

Christie, C.J., Elliott, A., Pote, L., Steenekamp, T., Billaut, F. and Noakes, T.D. (2017) Effect of expertise on pacing strategies and sprint performance in batsmen. *Journal of Science and Medicine in Sport*. (2017). p.1-5.

Davy, J. and Gobel, M.

Davy, J. and **Gobel**, M. (2017) The effects of extended nap periods on cognitive, physiological and subjective responses under simulated night shift conditions. *Chronobiology International*. (2017). p.1-19.

King, J. and Mattison, M.

King, J. and **Mattison, M.** (2017) An Exploration of the Effects of Cycle Time and Force Variations on Muscle Fatigue during Submaximal Intermittent Isometric Exertions. *Ergonomics SA*. 29 (1). p.36-54.

Olagbegi, O.M. and Christie, C.J.

Olagbegi, O.M., Adegoke, B.O., **Christie**, **C.J.**, Bolarinde, O.S. and Jegede, J.A. (2017) Effects of an Eight-Week Stepladder Exercise Protocol on Lower Limb Muscular Strength of Apparently Healthy Young Adults. *Human Movement.* 18 (3). p.62-68.

Todd, A.

Thatcher, A., Waterson, P., **Todd**, A. and Moray, N. (2017) State of Science: ergonomics and global issues. *Ergonomics*. 61 (2). p.197-213.

Peer-reviewed Proceedings

Ryan, B. and Todd, A.

Ryan, B. and **Todd, A.** ABSTRACT: Unlocking African Football Potential: Acknowledging Athletes as Complex Systems: Human Factors and Ergonomics Approach. *Complex Systems in Sport: International Congress 2017.* FC Barcelona Stadium, Barcelona. Spain. October 2017.

Research Papers Presented at Academic/Scientific Conferences (Non-peer-reviewed Proceedings)

Christie, C.J.

Goble, D. and Christie, C.J. The development of a method for cognitive assessment during prolonged intermittent exercise: a test-retest

hypothesis. *Cricket South Africa conference*. Cape Peninsula University of Technology, Cape Town. South Africa. November 2017.

Davy, J.

Srinivas, S.C., Duxbury, T., Marara, P., Limson, J., Manhanzva, R., Pearse, N.J., Davy, J., Mzizi, T., Tandlich, R. and Hornby, D. Womencentered health promotion for health care challenges. Asia-Pacific University *Engagement Network Conference*. Penang. Malaysia. April 2017.

Goodenough, L.B. and Zschernack, S.

Goodenough, L.B. and Zschernack, S. The effect of submersion in water and breathing modality (assisted breathing and apnea) on different stages of the information processing chain. *3rd African Symposium on Human Factors and Aviation Safety / 13th Ergonomics Society of South Africa Conference / 1st Ergo Africa Conference*. Birchwood Hotel, Johannesburg. South Africa. September 2017.

King, J. and Mattison, M.

King, J. and **Mattison, M.** The Effects of Intermittent Task Parameters during Submaximal Dynamic Exertions on Muscle Fatigue Development. *3rd African Symposium on Human Factors and Aviation Safety / 13th Ergonomics Society of South Africa Conference / 1st Ergo Africa Conference*. Birchwood Hotel, Johannesburg. South Africa. September 2017.

Koekemoer, W.A. and Mattison, M.

Koekemoer, W.A. and Mattison, M. A Pilot Investigation into the Force-EMG Relationship during Isometric, Concentric and Eccentric Muscle Exertions. *3rd African Symposium on Human Factors and Aviation Safety / 13th Ergonomics Society of South Africa Conference / 1st Ergo Africa Conference*. Birchwood Hotel, Johannesburg. South Africa. September 2017.

Mattison, M. and Zschernack, S.

Mattison, M. and Zschernack, S. An Investigation into Different Force Normalization Procedures for Static (Isometric) and Dynamic (Isotonic) Muscle Exertions. *3rd African Symposium on Human Factors and Aviation Safety / 13th Ergonomics Society of South Africa Conference / 1st Ergo Africa Conference*. Birchwood Hotel, Johannesburg. South Africa. September 2017.

McEwan, K., Du Plooy, G.R. and Christie, C.J.

McEwan, K., Du Plooy, G.R. and Christie, C.J. Comparison between combined bowling rate (CBR) and international cricket council (ICC) ranking systems for South African bowlers. *Cricket South Africa*

ESSA-ASHFAS-ErgoAfrica Conference - Luke Goodenough, Best Student Paper.





conference. Cape Peninsula University of Technology, Cape Town. South Africa. November 2017.

McEwan, K., Pote, L. and Christie, C.J.

McEwan, K., Pote, L. and Christie, C.J. The role of pre-match covariates on the outcome of one-day international (ODI) cricket matches. *Cricket South Africa conference*. Cape Peninsula University of Technology, Cape Town. South Africa. November 2017.

Munro, C.E. and Christie, C.J.

Munro, C.E. and Christie, C.J. Research directions for the enhancement of women's cricket. *Cricket South Africa conference*. Cape Peninsula University of Technology, Cape Town. South Africa. November 2017.

Nel, R.

Nel, R. The suitability of ergonomics tools and methods in informal economy research in South Africa: using Warwick junction as an example. *3rd African Symposium on Human Factors and Aviation Safety / 13th Ergonomics Society of South Africa Conference / 1st Ergo Africa Conference*. Birchwood Hotel, Johannesburg. South Africa. September 2017.

Olagbegi, O.M.

Olagbegi, O.M., Adegoke, B.O. and Odole, A.C. Efficacy of combined versus open and closed kinetic chain exercises on selected physical performance indices and health-related quality of life of individuals with knee osteoarthritis. *4th International Conference on Clinical Trials.* San Antonia, Texas. USA. September 2017.

Pote, L. and Christie, C.J.

Pote, L. and **Christie**, C.J. Strength and conditioning practices of university and high school level cricket coaches: a South African context. *Cricket South Africa conference*. Cape Peninsula University of Technology, Cape Town. South Africa. November 2017.

Pote, L. and **Christie**, C.J. A novel intervention program (CricFit) for the strength and conditioning of adolescent cricket players. *Cricket South Africa conference*. Cape Peninsula University of Technology, Cape Town. South Africa. November 2017.

Ryan, B., De Beer, A., Callow, G. and Todd, A.

Ryan, B., De Beer, A., Callow, G. and Todd, A. The application of systems theory to community engagement: an effective tool for sports talent identification and development programs. *3rd African Symposium on Human Factors and Aviation Safety / 13th Ergonomics Society of South Africa Conference / 1st Ergo Africa Conference*. Birchwood Hotel, Johannesburg. South Africa. September 2017.

Searle, H.S., Mattison, M. and Todd, A.

Searle, H.S., Mattison, M. and Todd, A. The Value of Stakeholder Analysis and Social Network Weaving for Ergonomics in Developing Countries. 3rd African Symposium on Human Factors and Aviation Safety / 13th Ergonomics Society of South Africa Conference / 1st Ergo Africa Conference. Birchwood Hotel, Johannesburg. South Africa. September 2017.



Professor Peter Britz continued to lead a THRIP industry research collaboration with Nelson Mandela and Fort Hare Universities to enhance depleted abalone stocks in the Eastern Cape and benefit coastal communities through the seeding of hatchery reared abalone. The project has demonstrated that it is possible to rehabilitate stocks by means of a public private partnership involving reseeding and private security protection. A documentary on the project was flighted on SABC's 50:50 programme on World Environment Day.



The dive team aboard the Rae Bula Matadi, an Angolan fisheries compliance vessel sent to retrieve Ocean Tracking Network (OTN) acoustic receivers in Baia dos Tigres, Southern Angola. Photo: Alexander Winkler.

Dr Amber-Robyn Childs is continuing her research on biology, ecology, physiology and movement behaviour of estuarine and coastal fishes, with implications for fisheries and climate change. Her research also focuses on identifying the causes and consequence of divergent migratory behaviour, habitat connectivity and identification of critical nursery habitats of these fishes at an individual, population and species level through applied and fundamental research.

Research from her and Professor Potts' research lab (*https://www.safisheriesecologyresearchlab.com/*) also involves the biological and social aspects of recreational fisheries. She has recently expanded her research interests into examining behavioural plasticity of individuals through the African Coelacanth Ecosystem Programme (ACEP) funding call investigating fisheries-induced evolution on fish physiology.

Dr Childs recently received her National Research Foundation (NRF) Y-rating, after which she also managed to increase her

research profile through publishing ten (10) manuscripts in 2017. Her research on recreational fisheries has initiated new research collaborations with Professor Andy Danylchuk (USA) and Dr Jake Brownscombe (Canada). Her research was profiled through student and colleague presentations at the 4th International Conference on Fish Telemetry Australia, the 8th World Recreational Fisheries Conference in Canada, and our local South African Science Symposium (SAMSS) in South Africa.

Professor Horst Kaiser continued his research on abalone nutrition, larval rearing and reproduction in collaboration with the South African abalone industry. Other collaborations include research projects with Mtunzini Kob Farm in KwaZulu-Natal, and the University of the Western Cape on aspects of fish health management. We also welcome a new Postdoctoral Research Fellow at the DIFS, Dr Charles Teta, who is working with Professor Kaiser on setting up a laboratory to measure hormone levels in fish and abalone.

Department of Ichthyology & Fisheries Science





Dave Drennan, DIFS head Technical officer handling a Leerfish using best practice methods for Matt Farthings PhD project. Photo: Alexander Winkler.

Dr Wilbert Kadye, involved in freshwater ichthyology, focussed on three ecoregions; the Amatola-Winterberg, the Eastern Zimbabwe Highlands and the Zambezi River freshwater ecoregions. For the Amatola-Winterberg ecoregion, the first research focussed on the trophic ecology of chubbyhead barb *Enteromius anoplus* as part of a MSc project that was completed in December 2017.

The second research focussed on the general ecology and conservation of the endangered Eastern Cape rocky *Sandelia bainsii* as part of a MSc project that was initiated in 2017. For the Eastern Zimbabwe Highlands ecoregion, the research focus was on systematics and taxonomy, and general ecology of Afromontane fishes. Research on the general ecology of fishes was part of an Honours project in 2017, which will be published in 2018. For the Zambezi River ecoregion, the research focus was on the taxonomic revision of a mormyrid fish *Hippopotamyrus ansogii*, which constitute a species complex.

Dr Cliff Jones continued his research projects on integrating aquaculture with other industries, with a focus on water reuse and nutrient recycling. Here he worked with Dr Tom Shipton, researchers from EBRU and collaborating with Professor Mark Laing (UKZN) and South African Breweries. He continued his work in developing abalone feeds with Professor Peter Britz and abalone farm development technologies with Professor Horst Kaiser, working closely with industry partners Marifeed Pty Ltd and HIK Abalone Pty Ltd and Aqunion Pty Ltd. He also continued his aquaculture projects that formed part of The Department of Science and Technology's (DST) *Bio-Innovation Solutions in Support of a Local Sustainable Aquaculture Program*, and this also involved developing a research concept note for the DST. Professor Warren Potts headed his community engagement research program aimed at improving the behaviour of recreational fishers. The group was the first to demonstrate that angler catch and release behaviour can be improved using a diverse array of interventions. He was on the international scientific committee for the 7th World Recreational Fisheries Conference in Canada and is editing the proceedings of the conference, which will appear in "Fisheries Research".

Professor Potts continued with his coastal fish biogeography research in collaboration with the University of Aberystwyth, and further developed his climate change research in the southern Angola and Agulhas Bank environmental hotspots by combining these field observations with laboratory research on the physiology of fishes, with emphasis on the impacts of changing temperature and pH on their growth, development and survival.

Professor Potts, Dr Childs, Dr James (SAIAB) and Dr Bernard (SAIAB) were successful on their application in response to a call for proposals by the African Coelacanth Ecosystem Program. This project aims to examine the impact of exploitation on the physiology of fishes and on their resilience to the impacts of climate change.

Professor Potts also grew his Postgraduate school considerably and is currently supervising seventeen (17) Postgraduate students.

Professorr Sauer was involved in a number of international and regional research projects involved in climate change research. The formation of a marine hotspots network of scientists working in regions where oceans are warming the fastest has resulted in numerous international collaborations; *www.marinehotspots.org.* He participated and led a project for the Benguela Current Commission on ecological risk assessments in South Africa, Namibia and Angola, and led a two-week course in Ocean Governance, in Mauritius, involving delegates from eleven (11) African Nations. He was a guest editor for a special edition of an international journal, published in 2017.

Professor Aswani, associated with the DIFS and the Department of Anthropology, and tasked with establishing our expertise in human ecology, is currently involved in a number of national and international research projects associated with the DIFS.

Professor Aswani, along with Professor Sauer, is a member of Team South Africa and Team Western Indian Ocean in the Global Learning for Local Solutions: Reducing Vulnerability of Marine-dependent Coastal Communities (GULLS) Belmont-Forum funded program. This project is significant because is contributing to understand coastal vulnerability of African communities near "hotspots," or ocean regions experiencing fast warming and which are facing heightened social tensions as a result of these changes.

He is also the Principal Investigator (PI) for an NRF funded project entitled "The human dimension of compliance in South Africa's marine recreational fisheries," and is a co-PI in the



UK funded SOLSTICE four-year R144-million project that focuses on ocean sciences and the collapse of two key fisheries in South African and East African waters that support more than sixty (60) million people.

Professor Cochrane's research in 2017 continued to include investigations into fisheries management and climate change and fisheries at global level and in South and southern Africa. He undertook a review of the benefits and challenges in use of eco-labelling as an incentive to encourage responsible fisheries management at the global scale, which was published as a chapter in the book on *Advances in Fisheries Bioeconomics: Theory and Policy.*

At the national scale he continues to be engaged in working with and, at times, challenging the national fisheries management agency, the Fisheries Branch, Department of Agriculture, Forestry and Fisheries, in efforts to improve the currently tenuous management system in South Africa, Aspects of this work should be published in 2018. Global work on climate change has included contributing to a chapter in a recently published book on the impacts of climate change on fisheries and aquaculture, while at the national and regional scales his research focused on working with Dr Ortega Cisneros on application of the end-to-end Abacus-v2 model to investigate likely impacts of climate change on fisheries in the southern Benguela ecosystem.

Postgraduates / Graduations

The DIFS continues to play a significant role in Postgraduate training with Honours, Masters and PhD students graduating in 2017.

Distinguished Visitors / International Visits

On the invitation of Professor Sauer, Professor Gretta Pecl, the Director for the Centre for Marine Socioecology at the Institute for Marine and Antarctic Studies in Tasmania, visited the DIFS for two (2) months to participate in research projects, run workshops and attend research seminars.

Significant Research Aligned Events

A documentary on the Abalone Ranching project was aired on SABC's 50:50 programme on World Environment Day.

Professor Britz is the Chair of the Aquaculture Association of Southern Africa (AASA) and served as programme co-chair for the hosting of the World Aquaculture Society Symposium in Cape Town; the first time the event was held in Africa.

Dr Childs received her NRF Y-rating. Her research was profiled through student and colleague presentations at the 4th International Conference on Fish Telemetry Australia, the 8th World Recreational Fisheries Conference in Canada, and our local South African Science Symposium (SAMSS) in South Africa.

Professor Potts served on the international scientific committee

for the 7th World Recreational Fisheries Conference in Canada and is editing the proceedings of the conference, which will appear in "Fisheries Research".

Professor Sauer presented a two (2) week course in Ocean Governance in Mauritius, with representation from 11 African countries.

Dr Cliff Jones represented the DIFS and Rhodes University at the following international events:

- Teaching, learning and research information sharing meeting with academics from Austria, Kenya, Malawi and Uganda, University of Natural Resources and Life Sciences (BOKU), Viena, Austria. 30 January 2017 to 3 February 2017.
- Aquaculture curriculum development workshop with colleagues from Kenya, Malawi and Uganda, which was held at Makerere University, Uganda, 28 February 2017 to 3 March 2017.
- Hosted a PhD course-work curriculum writing workshop in Grahamstown, with curriculum developers from Malawi: Professor Jeremiah Kang'ombe (Lilongwe University of Agriculture and Natural Resources, Malawi) and Dr John Kazembe (Lilongwe University of Agriculture and Natural Resources, Malawi). March 2017.
- Hosted an Aquaculture curriculum and teaching session at International Conferences (World Aquaculture Conference, Cape Town, July 2017), and invited and covered the travel costs for the international speakers, from Europe and various Africa countries.
- Participated in a Teaching and Learning workshop as part of the European Commission's Horizon 2020 Program. Brussels, Belgium, 14-15 November 2017.



Professor Warwick Sauer, Head of Department



PUBLICATIONS

Other Publications

Britz, P.J.

Britz, P.J. and Venter, S. (2017) Market driven aquaculture growth. In: Jacka, C. (ed.). SA Maritime Review. Cape Town: More Maximum Media.

Britz, **P.J.** and Venter, S. (2017) Aquaculture Review: South Africa. In: Hargreaves, J. (ed.). *World Aquaculture*. Boca Raton: World Aquaculture Society.

Britz, P.J., Sauer, W.H.H. and Petersen, S.

Britz, **P.J.**, **Sauer**, **W.H.H.**, **Petersen**, **S.**, **Downey-Breedt**, **N.**, Findlay, K., Wilhelm, M.R. and Santos, A.C. (2017) Strengthening the Ability of the Benguela Current Large Marine Ecosystem Countries To Monitor Ecosystem Health - Linkages Between Ecosystem Services Indicators. In: *Project EHB/2016/02*. A Report by Rhodes University for the Benguela Current Convention.

Peer Reviewed Subsidy-Earning Journal Research Publications

Adesola, A.A., Jones, C.L.W. and Shipton, T.

Adesola, A.A., Jones, C.L.W. and Shipton, T. (2017) Dietary lysine requirement of juvenile dusky kob, *Argyrosomus japonicus. Aquaculture Nutrition*. (2017). p.1-8.

Arkhipkin, A.I. and Shaw, P.W.

McKeown, N.J., **Arkhipkin, A.I.** and **Shaw**, **P.W.** (2017) Regional genetic population structure and fine scale genetic cohesion in the Southern blue whiting *Micromesistius australis*. *Fisheries Research*. 185 (2017). p.176-184.

Bennett, R.H.

Bennett, R.H., Reid, K., Gouws, G., Bloomer, P. and Cowley, P.D. (2017) Genetic stock structure of white steenbras *Lithognathus*

lithognathus (Cuvier, 1829), an overexploited fishery species in South African waters . *African Journal of Marine Science*. 39 (1). p.27-41.

Booth, A.J.

Hewitt, A.M., Kock, A.A., Booth, A.J. and Griffiths, C.L. (2017) Trends in sightings and population structure of white sharks, *Carcharodon carcharias*, at Seal Island, False Bay, South Africa, and the emigration of sub adult female sharks approaching maturity. *Environmental Biology of Fishes*. (2017). p.1-16.

Bova, C.S., Halse, S.J. and Potts, W.M.

Bova, C.S., Halse, S.J., Aswani, S. and Potts, W.M. (2017) Assessing a social norms approach for improving recreational fisheries compliance. *Fisheries Management and Ecology.* 24 (2017). p.117-125.

Butler, E.C., Childs, A.R., Parkinson, M.C. and Potts, W.M.

Butler, E.C., Childs, A.R., Parkinson, M.C. and Potts, W.M. (2017) An assessment of the health and survival of fishes caught-and-released in high-energy surf zones during a South African competitive angling event. *Fisheries Research*. 195 (2017). p.152-168.

Butler, E.C., Childs, A.R., Winkler, A.C. and Potts, W.M.

Butler, E.C., Childs, A.R., Winkler, A.C., Milner, M.V. and Potts, W.M. (2017) Evidence for protandry in *Polydactylus quadrifilis* in the Kwanza Estuary, Angola, and its implications for local fisheries. *Environmental Biology of Fishes*. (2017). p.1-13.

Childs, A.R.

Nodo, P., James, N.C., Childs, A.R. and Nakin, M.D.V. (2017) Response of demersal fish assemblages to an extreme flood event in a freshwater-deprived estuary in South Africa. *Marine and Freshwater Research*. (2017). p.1-14.

Sirot, C., Ferraton, F., Panfili, J., **Childs, A.R.**, Guilhaumon, F. and Darnaude, A.M. (2017) ELEMENTR: An R package for reducing elemental data from LA-ICPMS analysis of biological calcified structures. *Methods in Ecology and Evolution*. 8 (2017). p.1659-1667.

The Rae Bula Matadi based in home port of Luanda, is an Angolan fisheries compliance vessel. Here, it is at dock in Tombwa bay, southern Angola before departing for Baia dos Tigres to aid Warren Pott's research team in recovering Ocean Tracking Network acoustic receivers used to track fish and shark migrations in the region's coastal waters.

Photo: Department of Ichthyology & Fisheries Science



Department of Ichthyology & Fisheries Science





Matt Farthing about to measure a leerfish during data collection for his PhD project. Photo: Alexander Winkler.

Bennett, R.H., Cowley, P.D., Childs, A.R., Attwood, C.G., Swart, L. and Naesje, T.F. (2017) Movement patterns of an endangered fishery species, *Lithognathus lithognathus* (Sparidae), and the role of no-take marine protected areas as a management tool. *African Journal of Marine Science*. 39 (4). p.475-489.

Cowley, P.D., Bennett, R.H., Childs, A.R. and Murray, T. (2017) Reflection on the first five years of South Africa's Acoustic Tracking Array Platform (ATAP): status, challenges and opportunities. *African Journal of Marine Science*. 39 (4). p.363-372.

Nodo, P., James, N.C., Childs, A.R. and Nakin, M.D.V. (2017) The impact of river flooding and high flow on the demersal fish assemblages of the freshwater-dominated Great Fish Estuary, South Africa. *African Journal of Marine Science*. 39 (4). p.491-502.

Cochrane, K.L.

Cochrane, K.L. (2017) Food for Thought - An integrated view of fisheries: tunnelling between silos. *ICES Journal of Marine Science*. 74 (3). p.625-634.

Cockroft, A.C.

Sherley, R.B., Botha, P., Underhill, L.G., Ryan, P.G., van Zyl, D., **Cockroft**, **A.C.**, Crawford, R.J.M., Dyer, B.M. and Cook, T.R. (2017) Defining ecologically relevant scales for spatial protection with long-term data on an endangered seabird and local prey availability. *Conservation Biology.* 31 (6). p.1312-1321.

Roberson, L.A., Attwood, C.G., Winker, H., **Cockroft, A.C.** and Van Zyl, D.L. (2017) Potential application of baited remote underwater video to survey abundance of west coast rock lobster *Jasus Ialandii. Fisheries Management and Ecology.* 24 (2017). p.49-61.

Dames, M.H. and Childs, A.R.

Dames, M.H., Cowley, P.D., Childs, A.R., Bennett, R.H., Thorstad, E.B. and Naesje, T.F. (2017) Estuarine and coastal connectivity of an estuarine-dependent fishery species, *Pomadasys commersonnii* (Haemulidae). *African Journal of Marine Science*. 39 (1). p.111-120.

Elston, C.

Elston, C., von Brandis, R.G. and Cowley, P.D. (2017) Dietary composition and prey selectivity of juvenile porcupine rays *Urogymnus asperrimus. Journal of Fish Biology.* 91 (2017). p.429-442.

Gennari, E.

Vermeulen, E., Bouveroux, T., Plon, S., Atkins, S., Chivell, W., Cockcroft, V., Conry, D., **Gennari, E.**, Horbst, S., James, B.S., Kirkman, S., Penry, G., Pistorius, P., Thornton, M., Vargas Fonseca, O.A. and Elwen, S.H. (2017) Indian Ocean humpback dolphin (*Sousa plumbea*) movement patterns along the South African coast. *Aquatic Conservation-Marine and Freshwater Ecosystems (2017)*. p.1-10.

Ryan, L.A., Chapuis, L., Hemmi, J.M., Collin, S.P., McCauley, R.D., Yopak, K.E., **Gennari, E.**, Huveneers, C., Kempster, R.M., Kerr, C.C., Schmidt, C., Egeberg, C.A. and Hart, N. (2017) Effects of auditory and visual stimuli on shark feeding behaviour: the disco effect. *Marine Biology*. (2017). p.1-16.

Götz, A.

Meyer, B., Freier, U., Grimm, V., Groeneveld, J., Hunt, B.P.V., Kerwath, S., Kin, R., Klaas, C., Pakhomov, E., **Götz, A.** and *et al.* (2017) The winter pack-ice zone provides a sheltered but food-poor habitat for larval Antarctic krill. *Nature Ecology & Evolution.* (2017). p.1-14.

Grant, G.N.

Whitfield, A.K., Grant, G.N., Bennett, R.H. and Cowley, P.D. (2017) Causes and consequences of human induced impacts on a ubiquitous estuary-dependent marine fish species. *Reviews in Fish Biology and Fisheries.* (2017). p.1-13.

Grant, G.N., Cowley, P.D., Bennett, R.H., Murray, T. and Whitfield, A.K. (2017) Space use by *Rhabdosargus holubi* in a southern African estuary, with emphasis on fish movements and ecosystem connectivity. *African Journal of Marine Science*. 39 (2). p.135-143.

Grant, G.N. and Childs, A.R.

Grant, G.N., Cowley, P.D., Bennett, R.H., Childs, A.R. and Whitfield, A.K. (2017) Influences of selected geophysical and environmental drivers on the movement patterns of *Rhabdosargus holubi* in a southern African estuary. *Environmental Biology of Fishes*. 100 (2017). p.1265-1283.

Huchzermeyer, K.D.A.

Huchzermeyer, C.F., **Huchzermeyer, K.D.A.**, Christison, K.W., Macey, B.M., Colly, P.A., Hang'ombe, B.M. and Songe, M.M. (2017) First record of epizootic ulcerative syndrome from the Upper Congo catchment: An outbreak in the Bangweulu swamps, Zambia. *Journal of Fish Diseases*. (2017). p.1-8.

Huchzermeyer, K.D.A. and Kaiser, H.

Huchzermeyer, K.D.A., Woodborne, S., Osthoff, G., Hugo, A., Hoffman, A.C., Kaiser, H., Steyl, J.C.A. and Myburgh, J.G. (2017) Pansteatitis in polluted Olifants River impoundments: nutritional perspectives on fish in a eutrophic lake, Lake Loskop, South Africa. *Journal of Fish Diseases.* 40 (2017). p.1665-1680.

Lemahieu, A.

Lemahieu, A., Blaison, A., Crochelet, E., Bertrand, G., Pennober, G. and Soria, M. (2017) Human-shark interactions: The case study of Reunion island in the south-west Indian Ocean. *Ocean & Coastal Management.* 136 (2017). p.73-82.

Midgley, C.

James, N.C., Lamberth, S.J., **Midgley, C.** and Whitfield, A.K. (2017) Resilience of fish assemblages in the Breede Estuary, South Africa, to environmental perturbations. *Environmental Biology of Fishes*. (2017). p.1-18.

Murray, T. and Childs, A.R.

Murray, T., Cowley, P.D., Childs, A.R. and Bennett, R.H. (2017) Philopatry and dispersal of juvenile leervis *Lichia amia* (Teleostei: Carangidae) tagged in a warm-temperate South African estuary. *African Journal of Marine Science*. 39 (1). p.59-68.

Nel, A. and Britz, P.J.

Nel, A., Pletschke, B.I. and Britz, P.J. (2017) The effect of low-level kelp supplementation on digestive enzyme activity levels in cultured



abalone *Haliotis midae* fed formulated feeds. *African Journal of Marine Science*. 39 (2). p.175-182.

Nel, A., Jones, C.L.W., Kemp, J., Robinson, G. and Britz, P.J. Nel, A., Pletschke, B.I., Jones, C.L.W., Kemp, J., Robinson, G. and Britz, P.J. (2017) Effects of kelp *Ecklonia maxima* inclusion in formulated feed on the growth, feed utilisation and gut microbiota of South African abalone *Haliotis midae*. *African Journal of Marine Science*. 39 (2). p.183-192.

Ortega Cisneros, K.

Ortega Cisneros, **K**., de Lecea, A.M., Smit, A.J. and Schoeman, D.S. (2017) Resource utilization and trophic niche width in sandy beach macrobenthos from an oligotrophic coast. *Estuarine Coastal and Shelf Science*. 184 (2017). p.115-125.

Ortega Cisneros, K. and Cochrane, K.L.

Ortega Cisneros, K., Cochrane, K.L. and Fulton, E.A. (2017) An Atlantis model of the southern Benguela upwelling system: Validation, sensitivity analysis and insights into ecosystem functioning. *Ecological Modelling.* 335 (2017). p.49-63.

Potts, W.M.

Leslie, T.D., James, N.C., Potts, W.M. and Rajkaran, A. (2017) The relationship between habitat complexity and nursery provision for an estuarine-dependent fish species in a permanently open South African Estuary. *Estuarine Coastal and Shelf Science*. 198 (2017). p.183-192.

Potts, W.M., De Beer, C.L., Sauer, W.H.H. and Shaw, P.W.

Healey, A.J.E., McKeown, N.J., Potts, W.M., De Beer, C.L., Sauer, W.H.H. and Shaw, P.W. (2017) Phylogeny of the Sepia *officinalis* species complex in the eastern Atlantic extends the known distribution of *Sepia vermiculata* across the Benguela upwelling region. *African Journal of Marine Science*. 39 (3). p.307-313.

Roberts, M.J.

Fennessy, S.T., **Roberts**, **M.J.** and Barlow, R.G. (2016) SYNTHESIS: An editorial synthesis of the ACEP Project: Ecosystems Processes in the KwaZulu-Natal Bight. *African Journal of Marine Science*. 36 (2016). p.217-223.

Shaw, P.W.

Carreira, G.P., **Shaw**, **P.W.**, Goncalves, J.M. and McKeown, N.J. (2017) Congruent Molecular and Morphological Diversity of Macaronesian Limpets: Insights into eco-evolutionary Forces and Tools for Conservation. *Frontiers in Marine Science*. 4 (75). p.1-15.

Joseph, J., Chong, J.L. and **Shaw, P.W.** (2017) Multiple Paternity in Egg Clutches of Green Turtles in Redang Island and Sabah Turtle Islands Park, Malaysia. *Journal of Sustainability Science and Management*. 12 (1). p.12-22.

Braullio de L. Sales, J., da S. Rodrigues Filho, L.F., do S. Ferreira, Y., Carneiro, J., Asp, N.E., **Shaw, P.W.**, Haimovici, M., Markaida, U., Ready, J., Schneider, H. and Sampaio, I. (2017) Divergence of cryptic species of *Doryteuthis plei Blainville*, 1823 (Loliginidae, Cephalopoda) in the Western Atlantic Ocean is associated with the formation of the Caribbean Sea. *Molecular Phylogenetics and Evolution*. 106 (2017). p.44-54.

McKeown, N.J., Hauser, L. and **Shaw**, **P.W.** (2017) Microsatellite genotyping of brown crab *Cancer pagurus* reveals fine scale selection and 'non-chaotic' genetic patchiness within a high gene flow system. *Marine Ecology Progress Series*. 566 (2017). p.91-103.

Soekoe, M.

Maduna, S.N., Rossouw, C., da Silva, C., **Soekoe**, **M.** and Bester-van der Merwe, A.E. (2017) Species identification and comparative population genetics of four coastal houndsharks based on novel NGS-mined microsatellites. *Ecology and Evolution*. 7 (2017). p.1462-1486.

Taylor, G.C.

Taylor, G.C. and Weyl, O.L.F. (2017) Age, growth and reproduction of non-native largemouth bass *Micropterus salmoides* (Lacepede, 1802)

populations in two temperate African impoundments. *Journal of Applied Ichthyology*. 33 (2017). p.767-775.

Taylor, G.C. and Peel, R.A.

Taylor, G.C., Weyl, O.L.F., Hill, J.M., Peel, R.A. and Hay, C.J. (2017) Comparing the fish assemblages and food-web structures of large floodplain rivers. *Freshwater Biology*. 62 (2017). p.1891-1907.

Taylor, G.C., Hill, J.M., Jackson, M.C., Peel, R.A. and Weyl, O.L.F. (2017) Estimating _15N fractionation and adjusting the lipid correction equation using Southern African freshwater fishes. *PLoS One*. 12 (5). p.1-11.

Teta, C.

Teta, C., Ncube, M. and Naik, Y.S. (2017) Heavy metal contamination of water and fish in peri-urban dams around Bulawayo, Zimbabwe. *African Journal of Aquatic Science*. 42 (4). p.351-358.

Towner, A.V. and Booth, A.J.

Irion, D.T., Noble, L.R., **Kock, A.A.**, **Gennari, E.**, Dicken, M.L., Hewitt, A.M., **Towner, A.V.**, **Booth, A.J.**, Smale, M.J. and Cliff, G. (2017) Pessimistic assessment of white shark population status in South Africa: Comment on Andreotti et al. (2016). *Marine Ecology Progress Series*. 577 (2017). p.251-255.

Van Der Walt, K.A.

Van Der Walt, K.A., Makinen, T., Swartz, E.R. and Weyl, O.L.F. (2017) DNA barcoding of South Africa's ornamental freshwater fish - are the names reliable? *African Journal of Aquatic Science*. 42 (2). p.155-160.

Van Der Walt, K.A., Swartz, E.R., Woodford, D.J. and Weyl, O.L.F. (2017) Using genetics to prioritise headwater stream fish populations of the Marico barb, *Enteromius motebensis* Steindachner 1894, for conservation action. *Koedoe*. 59 (1). p.1-7.

Research Papers Presented at Academic/Scientific Conferences (Non-peer-reviewed Proceedings)

Kaiser, H.

Wasserman, R.J., Alexander, M.E., Dalu, T., Ellender, B.R., Kaiser, H. and Weyl, P.S.R. Using functional responses to quantify interaction effects among predators. *Southern African Society of Aquatic Scientist*. Johannesburg. South Africa. June 2017.



Ocean Tracking Network acoustic receivers aboard the Rae Bula Matadi following a full day of diving. Photo: Alexander Winkler.



The Department of Information Systems is particularly interested in the generation of knowledge in the areas of ICT4D, eGovernment, eLearning, IT Project Management, Social Networks, Information Security, and User Experience. Research in these areas have produced one (1) book chapter, three (3) journal articles, and seven (7) conference papers, with aspects of this research being presented locally as well as internationally in Mauritius, Portugal, Indonesia, and Rwanda.



In addition to producing research outputs, staff in the Department of Information Systems contribute to their discipline as journal editors and reviewers, conference reviewers and panel members, and external examiners of theses for other academic institutions.

Postgraduates / Graduations

Postgraduate numbers in the Department include six (6) PhD candidates, sixteen (16) Masters candidates, and a class of thirty-five (35) Honours students. In April 2017, we celebrated the graduation of two (2) PhD students.

Distinguished Visitors / International Visits

Distinguished Visitors to the Department included Dr Adele Botha and Professor Marlien Herselman from the Meraka Institute who participated in research workshops.

Dr Ingrid Sieborger training Makana Municipality staff to use MobiSAM. Photo: Department of Information Systems.

Dr Hannah Thinyane from the United Nations University (Computing and Society) and Associate Professor Caroline Khene continued to collaborate as co-directors of the digital citizen engagement initiative called MobiSAM (Mobile Social Accountability Monitoring) in Makana Municipality. Their collaboration has resulted in being invited in November 2017, to implement a similar initiative for the SAfAIDS NGO over three (3) years, on monitoring access to sexual reproductive health services by adolescent youth in six (6) SADC countries.

Professor Sue Conger from the Satish and Yasmin Gupta College of Business at the University of Dallas has also continued to collaborate with researchers in the department around IT in developing countries. She collaborated with Mr Clement Simuja and Professor Kirstin Krauss.

Ms Brenda Mallinson, a Research Associate of the Department, continues to make a valuable contribution to the research efforts, with a number of publications in the field of eLearning.

Significant Research Aligned Events

Associate Professor Caroline Khene continues to be actively involved in the development of the Open budget portal called VulekaMali over five (5) years, by the South African National Treasury. The portal is to launch in February 2018 and will be instrumental in opening access to key expenditure and performance by national government for advancing transparency and accountability.

The MobiSAM application was released in March 2017 in Makana Municipality for reporting basic service delivery - codirected by Associate Professor Caroline Khene and Dr Hannah Thinyane from the UN University. The aim of the project is to support two-way dialogue between citizens and local government - which has been progressively instrumental in promoting active citizenship and addressing numerous water leaks around Grahamstown during the drought. It has been funded in the past by the Ford Foundation and the Making All Voices Count initiative.



Professor Greg Foster, Acting Head of Department



Books/Chapters/Monographs

Krauss, K.

Krauss, K. (2017) Research Supervision In Information Systems: A Critical Approach. In: McKenna, S., Clarence-Fincham, J., Boughey, C., Wels, H. and van den Heuvel, H. (eds.). *Strengthening Postgraduate Supervision*. Stellenbosch: SUN PRESS. p.173-195. ISBN: 9781928357315.

Concerts, Exhibitions, Performances, Workshops, Events

Mallinson, B.J.

Mallinson, B.J. and Mbogela, S. Presentation. Exploring the Digital Fluency course for academic staff professional development. *Preconference workshop at DETA*. Kigali. Rwanda. 22 August 2017.

Peer Reviewed Subsidy-Earning Journal Research Publications

Baduza, G. and Pade-Khene, C.

Baduza, G. and Pade-Khene, C. (2017) A Needs-ICTD Strategy Alignment Foundation for the Measurement of ICTD Impact: Three Case Studies in South Africa. *African journal of information systems*. 9 (2). p.128-148.

Conger, S. and Simuja, C.

Conger, S., Krauss, K.E.M. and **Simuja, C.** (2017) New Pedagogical Approaches with Technologies. *International Journal of Technology and Human Interaction.* 13 (4). p.62-76.

Mthoko, H. and Pade-Khene, C.

Mthoko, H. and Pade-Khene, C. (2017) Building theory in ICT4D evaluation: A comprehensive approach to assessing outcome and impact. *Information Technology for Development*. (2017). p.1-27.

Pade-Khene, C.

Pade-Khene, C. and Lannon, J. (2017) Learning to Be Sustainable in ICT for Development: A Citizen Engagement Initiative in South Africa. *IFIP Advances in Information and Communication Technology*. 504 (2017). p.475-486.

Peer-reviewed Proceedings

Mallinson, B.J.

Nihuka, K.A. and **Mallinson, B.J.** Enabling Conditions for Successful Integration of Open Educational Resources for Professional Development in a Developing Context Institution. *6th biennial International Conference on Distance Education and Teachers' Training in Africa (DETA): "The Future We Want": Teacher Development for the Transformation of Education in Diverse African Contexts*. Mauritius Institute of Education, Reduit. Mauritius. July 2015.

Mnjama, J.J. and Foster, G.

Mnjama, J.J., Foster, G. and Irwin, B. A Privacy and Security Threat Assessment Framework for Consumer Health Wearables. *2017 Information Security for South Africa*. 54 on Bath, Rosebank, Johannesburg. South Africa. August 2017.

Moongela, H. and McNeill, J.

Moongela, H. and McNeill, J. Perceptions of social media on students' academic engagement in tertiary education. *SAICSIT 2017: Computing for humanity in today's world*. Thaba 'Nchu, Free State. South Africa. September 2017.

Pade-Khene, C., Thinyane, H. and Machiri, M.

Pade-Khene, C., Thinyane, H. and Machiri, M. Building Foundations before Technology: An Operation Model for Digital Citizen Engagement in Resource Constrained Contexts. *17th European Conference on Digital Government (ECDG 2017)*. Military Academy, Lisbon. Portugal. June 2017.

Department of Information Systems



Thinyane, H., Pade-Khene, C. and Mthoko, H.

Thinyane, H., Sieborger, I., Pade-Khene, C. and Mthoko, H. Communicative ecologies and mobile phones: Forging a way to increased citizen engagement. *17th European Conference on Digital Government (ECDG 2017)*. Military Academy, Lisbon. Portugal. June 2017.

Research Papers Presented at Academic/Scientific Conferences (Non-peer-reviewed Proceedings)

Mallinson, B.J.

Mallinson, B.J., Monyemangene, R. and Augusti, M. Modelling Openness in Academic Professional Development: case study of developing the Digital Fluency course at Open University of Tanzania. *International Open Education (OE) Global 2017 Conference*. Cape Town. South Africa. March 2017.

MobiSAM Makana Process Reengineering. Photo: Department of Information Systems.

Monyemangene, R. and **Mallinson, B.J.** Exploring Openness as an approach to Mitigate Gender Inequality in Stem Education. *DETA conference (Distance Education and Teachers Training in Africa.* Kigali. Rwanda. August 2017.

Journalism and Media Studies

The School of Journalism and Media Studies (JMS) celebrated one hundred and three (103) JMS graduates during the 2017 graduation ceremonies, ranging across bachelor degrees in Arts and Journalism, Postgraduate diplomas in Journalism and Media Studies, Media Management and Economics Journalism as well as Masters and Doctoral degrees.



Teachers and scholars from the Andrew W. Mellon funded Media and Social Belonging grant, awarded in 2017. Teachers include Dr Priscilla Boshoff, Professor Anthea Garman, Professor Larry Strelitz, Dr Alette Schoon, Professor Lynette Steenveld (coordinator of the Mellon programme) and Professor Lorenzo Dalvit. Photo: Kyle Prinsloo.

Postgraduates / Graduations

A range of thought-provoking research topics have been added to the university's research commons by the three (3) PhD and eleven (11) Masters Students who graduated. MA graduates, Ahmad Yusuf Jamal and Kayla Roux both achieved distinctions.

In addition two (2) of our staff members, Dr Priscilla Boshoff and Dr Alette Schoon, graduated with their PhDs in 2017.

Distinguished Visitors/International Visits

The School continued using its weekly research seminars as a space for ongoing critical discussions about theoretical issues and changes in the media landscape. We approached academics, researchers, journalists, writers and multimedia specialists to share their experiences and findings. Similarly, to previous years, the format was a series of conversations that aimed to guide, and connect the School to happenings and people in other spaces. Advocate Wim Trengrove SC, one of South Africa's sharpest legal minds, spoke to staff and students about hate speech and South African law.

Professor Sally Hunt, from the English Language and Linguistics Department, discussed "The representation of women in the media - a corpus study" - which emphasised gendered messages via use of language in news media which contribute to hegemonic views of women as second class citizens.

Former Editor-in-Chief of Rolling Stone South Africa, Miles Keylock, joined the department as a Masters student and shared his experience of working as an arts and music writer.

Martina Della Togna discussed her position as first multimedia manager for the Parliament of the Republic of South Africa and her experience as an independent documentary producer and multimedia/social media consultant using the media as a tool for public education, citizen empowerment and sustainable development communications.



Significant Research Aligned Events

The 21st Highway Africa conference was held at the end of August 2017 under the theme "Media, Accountability and Local Governance". The conference was attended by over five hundred (500) delegates and was a historic and momentous one as it brought together, for the first time, the Highway Africa Conference and the South African Communication Association (SACOMM) in the hosting of a dual conference.

SACOMM delegates held their conference at Rhodes University with the separate theme of "Locating the power of communication in a time of radical change" which sought to explore the implications of the 'post-truth' world and how it impinges on the idea of the power of communication right now in South Africa's history.

At Highway Africa, editors, journalists, civil society activists and local government practitioners talked about notions of public and social accountability and the role of citizens, policymakers and journalists. The conference delegates explored the capacity of local media to generate news and information in the public interest, covering the local government to understand the intricacies of policy, budgeting processes, expenditure and operational processes of municipalities.

The South African Reserve Bank Centre for Economic Journalism (SARBCEJ) worked together with Bloomberg, based in New York, and the Gordon Institute of Business Science in Johannesburg, to produce a nineteen (19) day programme called the Bloomberg Media Initiative Africa for African journalists to enhance their skills in business journalism. The initiative, which operates across the continent, aims to increase the number of skilled financial journalists and analysts working in the media in Africa.

Anthea Garman and Gillian Rennie attended the inaugural IABA Africa colloquium hosted by Stellenbosch University, which attracted researchers working on auto/biography from South Africa, other African universities, and universities in Australia and England.

Funding awarded to the Sol Plaatjie Institute (SPI) by UNESCO saw the publication of a seventy-four (74) page booklet in 2017, "A Directory of Community Media and Advertising Trends in Southern Africa". This research conducted by Meli Ncube, Rhodes University MA graduate in Journalism and Media Studies, explores the financial viability of Southern Africa's community media.

Senior students represented the School and worked in the student newsroom at the Menell Media Exchange conference in Johannesburg with the focus of "Truth & Trust: Mapping media's new terrain". The Menell Media Exchange is a flagship programme of Duke University in Durham, North Carolina and is focused on strengthening independent media in South Africa.

Professor Steenveld was awarded funding for a seminar series titled 'Southern Epistemologies: Thinking beyond the abyss for a transformative curriculum' as part of the Andrew W. Mellon Foundation's 30th Anniversary Seminar Program. The seminar series responds to continuing demands for the transformation of South African tertiary education by focusing on the essence of what Universities do: continually problematizing knowledge creation.

In particular, this series offers an approach to knowledge production that is transdisciplinary, enabling participants to see the ways in which different disciplines approach similar broad structural conditions. The selection of the seminars is purposeful, combining the theoretical and philosophical problematization of 'knowledge' as a category, and then its 'application' in fields that are broadly communicative, but in different ways.

A new research programme in Media and Social Belonging received funding from the Andrew W. Mellon Foundation. This programme focuses on the complex relationships between South Africa's changing media environment and its changing political environment with the key question: "What kinds of sociality are constituted by different forms of media and how do these (forms of sociality) speak to issues of social belonging and calls for social change? The core issues of the programme are Coloniality, Digitality and Sociality and the interconnections between them." The programme is led by Professor Lynette Steenveld, and has entailed the teaching of a new core media studies and social theory programme at Postgraduate levels.



Professor Larry Strelitz, Head of Department

School of Journalism & Media Studies



PUBLICATIONS

Books/Chapters/Monographs

Berger, G.

Berger, G. (2017) The Universal Norm of Freedom of Expression -Towards an Unfragmented Internet. In: Kohl, U. (ed.). *The Net and the Nation State: Multidisciplinary Perspectives on Internet Governance.* Cambridge: Cambridge University Press. p.27-38. ISBN: 9781107142947.

Berger, G. (2017) Why the World Became Concerned with Journalistic Safety, and Why the Issue Will Continue to Attract Attention. In: Carlsson, U. and Poyhtari, R. (eds.). *The Assault on Journalism.* Gothenburg: NORDICOM (University of Gothenburg). p.33-43. ISBN: 9789187957512.

Berger, G. (2017) Foreword. In: Frey, E., Rhaman, M. and El Bour, H. (eds.). *Negotiating Journalism: Core Values and Cultural Diversities*. Gothenburg: NORDICOM (University of Gothenburg). p.7-8. ISBN: 9789187957673.

Berger, G. (2017) Expressing the changes: International perspectives on evolutions in the right to free expression. In: Tumber, H. and Waisbord, S. (eds.). *The Routledge Companion to Media and Human Rights*. New York: Routledge: Taylor and Francis. p.17-29. ISBN: 9781138665545.

Berger, G. (2017) Taking stock of contemporary journalism education. In: Goodman, R.S. and Steyn, E. (eds.). *Global Journalism Education in the 21st Century: Challenges and Innovations*. Texas: Knight Centre for Journalism in the Americas. p.245-266. ISBN: 9781587903885.

Garman, A.

Garman, A. and Wasserman, H. (2017) Citizens and journalists: The possibilities of co-creating the democracy we want. In: Garman, A. and Wasserman, H. (eds.). *Media and Citizenship: Between marginalisation and participation*. Cape Town: HSRC Press. p.3-15. ISBN: 9780796925565.

Gordon, J.R.

Du Toit, M. and Gordon, J.R. (2016) *Breathing Spaces*. Durban: UKZN Press. ISBN: 9781869142797.

Mati, S.A.

Houston, G., **Mati, S.A.**, Magidimisha, H., Vivier, E. and Dipholo, M. (2017) *The Other Side of Freedom: Stories of Hope and Loss in the South African Liberation Struggle 1950-1994*. Cape Town: HSRC Press. ISBN: 9780796925572.

Mufamadi, A.E. and Garman, A.

Mufamadi, A.E. and **Garman, A.** (2017) The media, Equal Education and school learners: 'Political listening' in the South African education crisis. In: Garman, A. and Wasserman, H. (eds.). *Media and Citizenship: Between marginalisation and participation*. Cape Town: HSRC Press. p.181-199. ISBN: 9780796925565.

Schoon, A. and Strelitz, L.

Schoon, A. and Strelitz, L. (2017) Mixing with MXit When You're 'Mix': Mobile Phones and Identity in a Small South African Town. In: Willems, W. and Mano, W. (eds.). *Everyday Media Culture in Africa: Audiences and Users*. London: Routledge. p.180-197. ISBN: 9781138202849.

Concerts, Exhibitions, Performances, Workshops, Events

Garman, A.

Garman, A. Convenor. Think!Fest. *National Arts Festival public lecture series*. 1820 Settlers Monument, Grahamstown. South Africa. 30 June - 7 July 2017.



Some of the texts produced by academics in the School of JMS in 2017. Photography lecturer, Jenny Gordon, did the photographic book *Breathing Spaces. Media and Citizenship* was co-edited by Prof Anthea Garman as a collection of the previous Mellon scholarship and some of the research produced. In *The Other Side of Freedom* and *Everyday Media Culture in Media*, lecturers Shepi Mati and Dr Alette Schoon wrote insightful articles, which were included in the books. Photo: Kyle Prinsloo.

Garman, B.D.

Garman, B.D. and Dixie, C. Co-convenor. The Making of a Book. *The Making of a Book*. Fine Art Department, Rhodes, Grahamstown. South Africa. 15 - 22 September 2017.

Gordon, J.R.

Gordon, J.R. Exhibition. *Breathing Spaces: Environmental portraits of South Durban*. National Arts Festival: Monument, Grahamstown. South Africa. 29 June - 9 July 2017.

International Visits

Dugmore, H.

Dugmore, **H**. Third International German Forum - What matters to people global health and innovation? Federal Chancellory, Berlin, Germany. *Innovation in Health Promotion in South Africa*. 21 - 23 February 2017.

Dugmore, **H**. World Conference of Science Journalists, UCLA and USC, San Francisco, USA. *Convener of and speaker on panel: Levelling the Playing Fields - Science Journalism and Big Food.* 26 - 30 October 2017.

Other Publications

Schoon, A.

Schoon, A. (2017). In: *Izolo: mobile diaries of the less connected*. Brighton, UK: The Institute of Development Studies.

Peer Reviewed Non-Subsidy-Earning Journal Research Publications

Berger, G.

Banda, F. and **Berger, G.** (2017) Afterword by UNESCO. *Journalism & Mass Communication Educator*. 72 (3). p.319-321.

Garman, A. and Van Der Merwe, M.

Garman, A. and Van Der Merwe, M. (2017) Riding the Waves: Journalism Education in Post-Apartheid South Africa. *Journalism & Mass Communication Educator.* 72 (3). p.306-318.



Peer Reviewed Subsidy-Earning Journal Research Publications

Amner, R. and Mpofu, N.

Amner, R. and Mpofu, N. (2017) 'Doing things that make you feel valuable': Students' experiences with a critical pedagogy of place in the journalism curriculum at a South African University. *Journal of Educational Studies.* 16 (1). p.1-20.

Boshoff, P. and Prinsloo, J.

Boshoff, P. and Prinsloo, J. (2017) Secrets, lies and redemption. *African Studies*. 76 (1). p.121-139.

Garman, A. and Malila, V.

Garman, A. and Malila, V. (2017) Listening and the Ambiguities of Voice in South African Journalism. *Communicatio.* 43 (1). p.1-16.

Gush, C.

Gush, C. (2017) The Intsomi Project: Using a Communicative Ecology Approach to Create Literacy Activists. *Journal for New Generation Sciences.* 15 (1). p.94-107.

Prinsloo, J.

Prinsloo, J. (2017) GroundWork's Environmental Justice School for Activists - A Praxis-based Curriculum. *Journal for New Generation Sciences*. 15 (1). p.157-175.

Livingstone , S., Lemish , D., Lim , S.S., Bulger , M., Cabello, P., Claro , M., Cabello-Hutt, T., Khalil, J., Kumpulainen, D.r., Nayar , U.S., Nayar , P., Park , J., Tan , M.M., **Prinsloo**, **J.** and Wei, B. (2017) Global Perspectives on Children's Digital Opportunities: An Emerging Research and Policy Agenda. *Pediatrics*. 140 (2). p.137-140.

Research Papers Presented at Academic/Scientific Conferences (Non-peer-reviewed Proceedings)

Amner, R.

Sharma, S., Amner, R., Nagaraju, K., Chhetri, P. and Srinivas, S.C. Concept Paper: Use of Media for Health Communication and Task Shifting to Address the Challenges of AMR in a Rural Health System Strengthening Project. *Highway Africa Annual Conference*. Rhodes University, Grahamstown. South Africa. August 2017.

Boshoff, P.

Boshoff, **P**. Teaching Media Studies: towards a "decoloniality of being". *Teaching & Learning Showcase: Responding to a Changing Higher Education Landscape*. Rhodes University, Grahamstown. South Africa. October 2017.

Boshoff, P. Cops behaving badly: Police in Daily Sun crime narratives. *SACOMM.* Rhodes University, Grahamstown. South Africa. August 2017.

Buthelezi, M.T.

Dalvit, L. and **Buthelezi**, **M.T.** Exploring how mobile phones mediate bonding, bridging and linking social capital in a South African rural area. *IAMCR*. Barahona, Cartagena de Indias. Colombia. July 2017.

Garman, A.

Garman, A. The #Feesmustfall challenge to journalism-as-usual and the demand for social justice via media. *International Association for Media and Communication Research*. Cartagena International Conference Centre, Cartagena. Colombia. July 2017.

Garman, A. #Guptaleaks, scorpions and dungbeetles: The resurgence of independent, outside, investigative journalism in South Africa. *Journalism Education and Research Association of Australia*. Newcastle University, Newcastle. Australia. December 2017.

Garman, A. Anne, Antjie, Anthea: Interlocutors, Intralocutors and Others. *Africa chapter of the Auto/Biography conference*. Stellenbosch Institute for Advanced Study in South Africa, Stellenbosch. South Africa. October 2017.

Garman, B.D.

Garman, B.D. Smashing the genre: can a new generation of African superheroes break out of their generic confines? *International Association of Media Communication Research*. International Convention Centre, Cartagena. Colombia. July 2017.

Rennie, G.

Rennie, **G**. Signs of life in green bubbles: a researcher and her subject use WhatsApp to explore their story. *The Textualities of Auto/Biography: or, the Auto/biogrAfrical.* English Department at Stellenbosch University, Stellenbosch. South Africa. October 2017.

Schoon, A.

Schoon, A. African personhood and digital media technology among hip-hop artists in a town in South Africa. *Strategic Narratives of Technology and Africa*. Museu da Electricidade, Funchal. Portugal. September 2017.

Steenveld, L.

Steenveld, L. Coloniality: the return of the oppressed in media studies. *SACOMM 2017*. Rhodes University, Grahamstown. South Africa. September 2017.



Members of the Law Faculty contributed to the ever-expanding body of knowledge of law on both the national and international planes during 2017. I am pleased to note that the number and quality of research involvement over the last year represent an improvement on our performance of the past few years, and commend staff for their commitment to contribute to the research culture in the Faculty and university.



Professor Brigitte Clark former deputy dean of the faculty at a conference in Amsterdam with Associate Professor Helena van Coller. Photo: Faculty of Law.

Postgraduates / Graduations

One (1) LLM and one (1) PhD candidate met the requirements for the award of their degrees during the course of 2017.

Distinguished Visitors / International Visits and Significant Research Aligned Events

Five (5) Visiting Professors shared their knowledge, expertise and enthusiasm for the law, profession and legal education with the Faculty and its students in the past year, with engagement in lectures and discussions with staff and students.

Professor Donald Nicolson contributed to a successful orientation programme for penultimate year LLB students in February 2017.

Mr Max Boqwana delivered a lecture entitled 'The development of jurisprudence under the Zuma administration: A critical review' to a fully packed Moot Room on 2 March 2017 eliciting much discussion. Judge Nambitha Dambuza of the Supreme Court of Appeal delivered a public lecture that elicited much discussion on the Traditional Courts Bill, entitled 'The traditional Courts Bill: the devil is in the detail' on 3 April 2017.

Advocate Wim Trengove SC delivered his public lecture entitled 'Is the Government at War with the Banks: A Discussion of The Minister Of Finance *v* Oakbay Investments' on 18 September 2017, sharing his insights in his customarily accessible way.

Judge Clive Plasket debunked the mystery surrounding 'judicial deference' in his public lecture on 10 October 2017 in a lecture entitled 'Judicial Review, Administrative Power and Deference: A View from the Bench'.

The Faculty was honoured to host Professor Thaddeus Metz, an A-rated philosopher from University of Johannesburg who presented a seminar on 'Ubuntu and legal practice' in October 2017.

Associate Professor Helena van Coller was on academic leave during 2017. She spent her time productively. She delivered a guest lecture on administrative Law and good governance in South Africa at the Faculty of Law, Hasselt University, Belgium. She also worked as a visiting researcher at the Faculty of Canon Law, KU Leuven Belgium, as part of a Coimbra Group Universities grant for Young African Researchers for a period of three months. She was also rated by the National Research Foundation (NRF) as a Y2 researcher.



Professor Rosaan Krüger, Dean of Faculty

Faculty of Law

PUBLICATIONS

Books/Chapters/Monographs

Jabavu, P.

Jabavu, P. (2017) Reduction and Apportionment of Damages. In: Loubser, N.M. and Midgely, J.R. (eds.). *The Law of Delict in South Africa*. 3rd Ed. Cape Town: Oxford University Press. p.528-540. ISBN: 9780190411657.

Jabavu, P. (2017) Remedies. In: Loubser, N.M. and Midgely, J.R. (eds.). *The Law of Delict in South Africa*. 3rd Ed. Cape Town: Oxford University Press. p.485-527. ISBN: 9780190411657.

Kruger, R. and Mcconnachie, C.J.C.

Kruger, R. and Mcconnachie, C.J.C. (2017) The Impact of the Constitution on Learners' Rights. In: Boezaart, T. (ed.). *Child Law in South Africa*. 2nd Ed. Cape Town: Juta & Co. p.534-574. ISBN: 9781485120889.

Nwauche, E.S.

Nwauche, E.S. (2017) *The Protection of Traditional Cultural Expressions in Africa.* Switzerland: Springer International Publishing. ISBN: 9783319572307.

Concerts, Exhibitions, Performances, Workshops, Events

Mashinini, T.N.

Mashinini, T.N. Participant. *Big Data, Artificial Intelligence, Block-Chain & Contemporary Issues in Technology and Law.* Kramer Law Building, Cape Town. South Africa. 1 November 2017.

Mzolo, N.

Mzolo, **N**. Participant. The review of the Academic Monitoring & Support programme in terms of student performance among different faculties. Challenges for the sustainability of the programme. *5th Academic Monitoring & Support Colloquium*. Unite Building, Durban. South Africa. 24 November 2017.

Nwauche, E.S.

Nwauche, E.S. Participant. *3rd Meeting of The Working Group to Develop the African Union Model Law on the Protection of Cultural Property and Heritage*. Mafuma Hotel, Lilongwe. Malawi. 24 - 30 August 2017.

Nwauche, E.S. Participant. *Fifth Annual Conference on Law and Religion in Africa*. International University of Rabat, Rabat. Morocco. 13 - 17 May 2017.

Rahim, S.

Rahim, S. Participant. International Business Conference: PhD Research. *International Business Conference*. Dar es Salaam. Tanzania. 24 - 27 September 2017.

Rahim, S. Presenter. BEE and ESD Workshop / Q&A session. *PURCO Annual Conference*. ICC East London, East London. South Africa. 26 October 2017.

Rahim, S. Lecturer. Law of contract for entrepreneurs. *PDEM Programme: Rhodes Business School.* Rhodes Business School, Grahamstown. South Africa. 10 March 2017.

Rahim, S. Presenter. *Regulating monopoly, oligopoly and mergers in the South African economy.* MBA Programme: Rhodes Business School. Rhodes Business School, Grahamstown. South Africa. 27 January 2017.



Peer Reviewed Subsidy-Earning Journal Research Publications

Dzedze, L.

Dzedze, L. (2017) Time on their Side? A Review of the Four-Year LLB as a Tool for the Transformation of the Legal Profession. *Speculum Juris*. 31 (1). p.107-119.

Glover, G.

Glover, G. (2017) Contractual exemptions and remedies in respect of the warranty against eviction in sale. *Tydskrif vir die Suid-Afrikaanse Reg. Special Edition (2017)*. p.276-291.

Glover, G. (2017) University protests, specific performance, and the public/private-law divide. *South African Law Journal.* 134 (2017). p.466-480.

Kruuse, H.

Mwambene, L. and **Kruuse**, **H**. (2017) The thin edge of the wedge: ukuthwala, alienation and consent. *South African Journal on Human Rights*. 33 (1). p.25-45.

Rooney, J.

Rooney, J. (2017) Class actions and public interest standing in South Africa: practical and participatory perspectives. *South African Journal on Human Rights*. 33 (3). p.406-428.

Tsele, M.

Tsele, M. (2017) Disclosure in Centre for Child Law v the Governing Body of Hoërskool Fochville. *Potchefstroomse elektroniese regsblad/ Potchefstroom electronic law journal*. 20 (2017). p.1-20.

Van Coller, H.

Van Coller, H. (2017) Religious Ministers - Working for God or Working for the Church? Universal Church of the Kingdom of God v Myeni and Others. Oxford Journal of Law and Religion. 6 (1). p.187-193.

Van Coller, H. (2017) Geloofsinstellings en die hersieningsbevoegdheid van die howe. *LitNet Akademies.* 14 (3). p.991-1039.

Van Coller, H. (2017) Regsgeskille en die kerk: lesse te leer uit die saak van Johannes Fortuin en die Church of Christ Mission. *LitNet Akademies*. 14 (3). p.592-617.

Van Coller, H. (2017) The Church, the Bishop, and the Missing Money: A Reflection on the Case of Bishop Ngewu and the Anglican Church of Southern Africa. *Oxford Journal of Law and Religion*. 6 (3). p.610-618.

Van Coller, H. (2017) Administrative Law. *Annual Survey of South African Law.* 2015 (1). p.51-76.



Peer-reviewed Proceedings

Van Coller, H.

Van Coller, H. Burial Rights: Protecting the Religious and Cultural Heritage of Communities in South Africa. *Fourth Conference on Law and Religion in Africa: 'Religious Pluralism, Heritage, and Social Development in Africa'.* Capital Hotel, Addis Ababa. Ethiopia. May 2016.

Research Papers Presented at Academic/Scientific Conferences (Non-peer-reviewed Proceedings)

Campbell, J.

Campbell, J. Decolonising the law clinic curriculum in post-colonial countries: what does this mean? *9th Worldwide Conference of the Global Alliance for Justice Education (GAJE): Breaking Down Walls: The Transformative Power of Justice Education.* Instituto Tecnológico de Estudios Superiores de Monterrey, Puebla. Mexico. December 2017.

Campbell, J. Decolonising (clinical) legal education: what can this mean? *South African Law Deans Association (SALDA) Conference: The decolonisation and Africanisation of Legal Education in South Africa.* University of Johannesburg, Johannesburg. South Africa. October 2017.

Campbell, J. Short-term credit: recent developments and the new limits on the cost of micro-loans. *Law Teachers Conference*. University of Namibia, Swakopmund. Namibia. January 2017.

Glover, G.

Glover, G. University protests, specific performance, and the public/private-law divide. *The Private Law and Social Justice Conference*. Nelson Mandela University, Port Elizabeth. South Africa. August 2017.

Jabavu, P.

Jabavu, P. Compensation Without Borders: Towards equitable compensation for migrant miners. *Law Teachers Conference*. University of Namibia, Swakopmund. Namibia. January 2017.

Kruger, R.

Kruger, **R**. Locally rooted and globally relevant: hate speech in the human rights law curriculum. *Decolonisation and Africanisation of Legal Education in South Africa Conference (Hosted by SALDA)*. University of Johannesburg, Johannesburg. South Africa. October 2017.

Kruuse, H.

Kruuse, H. Vuku'zenzele (Arise or Act): Lawyers And Access To Justice In South Africa. *Lawyers and Access to Justice Symposium*. National University of Singapore, Singapore. June 2017.

Kruuse, **H**. The professional and ethical role of the legal practitioner in contemporary South Africa. *Sociology of the Professions Workshop*. University of Pretoria, Pretoria. South Africa. September 2017.

Kruuse, **H**. and Genty, P. The State's Role in the Regulation and Provision of Legal Services in South Africa and the United States: Supporting, Nudging or Interfering? *Regulation of Legal and Judicial Services Conference*. Fordham Law School, New York. United States. December 2017.

Nwauche, E.S.

Nwauche, E.S. The exceptionalism of customary law. *Symposium Celebrating Teaching and Research of Prof T Bennet and C Himonga*. University of Cape Town, Cape Town. South Africa. March 2017.

Rahim, S.

Rahim, S. Regulatory update: B-BBEE and ESD Framework, Codes and Scorecards. *PURCO Annual Conference*. ICC East London, East London. South Africa. October 2017.

Rahim, S. Addressing the challenges of supply chain transformation in Higher Education. *PURCO Annual Conference*. ICC East London, East London. South Africa. October 2017.

Van Coller, H.

Van Coller, H. Challenging the separation between church and state in religious employment disputes in South Africa. *Annual (LARSN) Law and Religion Scholars Network Conference*. Centre for Law and Religion, VU University, Amsterdam. Netherlands. May 2017.

Van Coller, H. The right to bury - striking a balance between Religious Rights of Communities, Private Rights and the Public Interest. *(SLTSA) Society of Law Teachers of Southern Africa Conference*. University of Namibia, Swakopmund. Namibia. January 2017.

Van Coller, H. Rituele Slagting: 'n Godsdienstige Reg? 'n Oorsig van belangrike wêreldtendense binne hierdie kontroversiële debat en implikasies vir godsdiens gemeenskappe in Suid-Afrika. [Ritual Slaughter: a Religious Right? An overview of global trends and implications for religious communities in South Africa]. *Annual Symposium of the SA Akademie vir Wetenskap en Kuns, Pretoria.* Engelenburghuis, Pretoria. South Africa. September 2017.



Literary Studies in English

Staff research interests in the Department range widely, and include areas such as popular African culture, transnational literature of the African, Latin American and South Asian diasporas, spoken word poetry, South African crime and detective fiction, Dante's *Inferno*, postcolonial white shame, critical race theory, the interface between paleontology and literature, and ecocriticism and the lives of animals.

Postgraduate students are exploring such diverse topics as narratology and computer games, Afrofuturism and science fiction, African postmodernism and online narrative formats, queer sexualities in African short fiction, African child-centred narratives and trauma theory, and Afropolitanism, transgression and post-realism in contemporary South African fiction.

In 2017, two (2) major research projects were launched in the Department, after prestigious Andrew W. Mellon Foundation grants were awarded in 2016.

Dr Lynda Gichanda Spencer's and Dr Minesh Dass' *"Urban Connections in African Imaginaries"* (UCAPI) project includes associates from the Universities of Stellenbosch, Pretoria, Ashesi, Dar es Salaam, Makerere, the Witwatersrand, and the Federal University of Ebony.

Associate Professor Sam Naidu's *"Intersecting Diasporas"* (ID) project entails collaborative research and teaching engagements with Teresa Carrillo, Professor of Latina/Latino Studies at the College of Ethnic Studies at San Francisco University, and joint publications with Dr Marzia Milazzo of Vanderbilt University.

Both of these projects have generated a number of Postdoctoral Research Fellowships in the Department, together with funding for Postgraduate students from Honours to doctoral level, and for visiting scholars or writers-in-residence.

In addition, Dr Aretha Phiri began her Iso Lomso Fellowship at the University of Stellenbosch's Institute for Advanced Study, spending the fourth term participating in seminars, workshops organised for the scholars from across the African continent, and elsewhere who are involved in this programme.

Dr Deborah Seddon continued her research into South African oral or spoken word poetry, a project funded by the British Academy by means of a Newton Advanced Fellowship. The latter project will ultimately result in the production of an edited collection, a monograph, and an online digital archive, in collaboration with colleagues at Queen Mary University of London.

Dr Spencer and Professor Ashleigh Harris (Uppsala University, Sweden) were also awarded funding from STINT/NRF for a



Professor M Neelika Jayawardane and Dr Sharlene Khan at the first African Feminisms Conference at Rhodes University in 2017. Photo: Thando Njovane.

research project on Contemporary African Texts and Contexts: Decolonising the Archive, Genre and Method.

Postgraduates / Graduations

Dr Seddon and Associate Professor Naidu, together with Professor Robbie Van Niekerk of Institute of Social and Economic Research (ISER), were instrumental in successfully motivating for the award of an Honorary Doctorate to the famous Jamaican/British dub poet Linton Kwesi Johnson (LKJ), whose poems have long been taught in the Department at undergraduate level.

Dr Seddon and Yolisa Kenqu, a PhD candidate in our Department, were also involved in the hugely successful evening of tributes and readings held at the National English Literary Museum (NELM) to honour LKJ - an evening which was 'capped' by the poet's recitation of one of his poems.

One (1) PhD in English was awarded to Jyoti Singh, whose thesis was entitled "William Blake's Animal Symbols: Tensions and Intersections between Silence and Allegory in Eighteenth-Century Attitudes towards Animals". Supervisor: Professor Dan Wylie.

Department of Literary Studies in English



A total of seven (7) MA students graduated in 2017, two (2) *Cum Laude*, and one (1) jointly supervised MFA student, also *Cum Laude*. The students who received distinctions were the following:

- Edley, Chris. Riding into Myth: Manifest Destiny, Nietzschean Ethics and the Creation of a New Western Frontier Mythology in Cormac McCarthy's *Blood Meridian*. Supervisor: Professor Gareth Cornwall.
- Sulter, Philip. "We've tamed the world by framing it": Islam, 'Justifiable Warfare,' and Situational Responses to the War on Terror in Selected Post-9/11 Novels, Films and Television. Supervisors: Dr Deborah Seddon and Dr Minesh Dass.
- Sawyer, Kathleen. Beastly Tales: A Modern Legacy. Co-Supervisor: Dr Sue Marais (with Professor Dominic Thorburn of the Department of Fine Art).

Honours: a cohort of sixteen (16) students, no less than eleven (11) graduated with distinctions - a remarkable achievement given the prolonged disruptions to the academic programme the previous year.

Distinguished Visitors / International Visits

Two (2) international scholars visited the Department in 2017:

- Dr Ranka Primorac (University of Southampton, UK) presented monograph writing workshops, research seminars and a master class on popular literature and culture in Africa during her residency from July to August 2017 as an UCAPI visiting scholar.
- Dr Marzia Milazzo, a Postdoctoral Research Fellow in the "Intersecting Diasporas" project, completed a monograph manuscript entitled *Colourblind Tools: Narrating Racial Power in the Americas and South Africa*, and presented a paper entitled "'Still dangerous to be black in the world': Rediscovering the Ordinariness of Racism in Post-Apartheid Fiction" at the *Fixions 2017* conference organised at Rhodes University in July 2017.

In addition, two (2) UCAPI writers-in-residence were hosted by the Department: the poet Gabeba Baderoon, and Jolyn Phillips, author of the recently published collection of short stories, *Tjieng Tjang Tjerries*.



Manthipe Moila and Pumla Gqola at the first African Feminisms Conference at Rhodes University in 2017. Photo: Thando Njovane.

Significant Research Aligned Events

Dr Spencer co-organised the (Re)thinking African Feminisms Colloquium at Rhodes in July 2017, and Dr Dass co-ordinated the Postgraduate colloquium entitled "Speculative Freedoms and Alternative Futures: Afro Sci-Fi, Fantasy and Speculative Fiction" in the Department in September 2017.

Twelve (12) papers were delivered at conferences by staff members, six (6) by Postdoctoral Research Fellows, and sixteen (16) by PhD, MA and Honours students. The fact that so many Postgraduate students were keen to present their work at such forums is encouraging for the future research outputs of the Department.

Moreover, no less than five (5) Postgraduate students published articles in peer-reviewed academic journals in 2017.



Dr Sue Marais, Head of Department

Department of Literary Studies in English



PUBLICATIONS

Books/Chapters/Monographs

Naidu, S.

Naidu, S. and le Roux, E. (2017) *A Survey of South African Crime Fiction: Critical Analysis and Publishing History.* Durban: University of KwaZulu-Natal Press. ISBN: 9781869143558.

Naidu, S. (2017) Introduction. In: Naidu, S. (ed.). *Sherlock Holmes in Context: Crime Files*. UK: Palgrave Macmillan. p.1-5. ISBN: 9781137555946.

Naidu, S. (2017) A "Horrific Breakdown of Reason": Holmes and the Postcolonial Anti-Detective Novel, *Lost Ground*. In: Naidu, S. (ed.). *Sherlock Holmes in Context: Crime Files*. UK: Palgrave Macmillan. p.115-131. ISBN: 9781137555946.

Naidu, S. (ed.) (2017) *Sherlock Holmes in Context: Crime Files.* UK: Palgrave Macmillan. ISBN: 9781137555946.

Naidu, S. and Van Der Wielen, K.

Naidu, S. and Van Der Wielen, K. (2017) Poison and Antidote: Evil and Hero-Villain Binary in Deon Meyer's Post-Apartheid Crime Thriller, *Devil's Peak*. In: Effron, M. and Johnson, B. (eds.). *The Function of Evil Across Disciplinary Contexts*. USA: Lexingon Books. p.117-129. ISBN: 9781498533416.

Phillips, W.D.

Phillips, W.D. (2017) South African Ecocriticism: Landscapes, Animals, and Environmental Justice. In: *Oxford Handbook of Ecocriticism*. UK: Oxford Handbooks Online. p.1-23. ISBN: 9780199935338.

Phillips, W.D. (2017) Collapse, Resilience, Stability and Sustainability in Margaret Atwood's MaddAddam Trilogy. In: Johns-Putra, A., Parham, J. and Squire, L. (eds.). *Literature and Sustainability: Concept, Text and Culture*. UK: Manchester University Press. p.139-158. ISBN: 9780719099670.

Wylie, D.A.

Wylie, D.A. (2017) Kabbo Sings the Animals. In: Woodward, W. and McHugh, S. (eds.). *Indigenous Creatures, Native Knowledges and the Arts*. UK: Palgrave Macmillan. p.35-57. ISBN: 9783319568737.

Peer Reviewed Subsidy-Earning Journal Research Publications

Dass, M.

Dass, M. (2017) Cosmopolitanism and the Unfollowable Routines and Rituals in Ishtiyaq Shukri's *The Silent Minaret. Journal of Literary Studies.* 33 (1). p.94-107.

Dass, M. (2017) "Wishy-washy liberalism" and "the art of getting lost" in Ivan Vladislavic's *Double Negative. English in Africa.* 44 (3), p.9-30.

Dass, M. (2017) "[A]II just surface and veneer": The Challenge of Seeing and Reading in Ishtiyaq Shukri's *I See You. Safundi: Journal of South African and American studies*. 18 (4). p.349-364.

Du Preez, J.B.

Du Preez, J.B. (2017) Liminality and Alternative Femininity in Sol T. Plaatje's *Mhudi. English in Africa.* 44 (2). p.41-63.

Haith, C.

Haith, C. (2017) The Complexities of Silence in Buhle Ngaba's *The Girl Without a Sound* in the Context of Contemporary South African Tertiary Education Protest. *Current Writing.* 29 (2). p.111-120.

Laue, K.A.B.

Laue, K.A.B. (2017) Reclaiming the Status of Human: Gender and Protest in Zoë Wicomb's Short Stories. *Scrutiny2*. 22 (2). p.18-32.

Marais, S.

Marais, S. (2017) "The economies of repetition": The Market, the Artistic, and the Genocidal in Ivan Vladislavic's "Curiouser". *Journal of Commonwealth Literature*. 52 (1). p.27-41.

McCarthy, K.A.

McCarthy, K.A. (2017) Untangling Nemesis and Echo from John Banville's *Narcissistic Shroud. Journal of Literary Studies.* 33 (1). p.108-120.

Naidu, S.

Naidu, S. (2017) Book Review: *Losing the Plot. Crime, Reality and Fiction in Postapartheid Writing.* Leon de Kock. Johannesburg: Wits University Press, 2016. 288 pp. EAN: 978-1-86814-964-3. Tydskrif vir Letterkunde. 54 (2). p.180-182.

Phiri, A.

Phiri, A. (2017) Lost in Translation: Re-reading the Contemporary Afrodiasporic Condition in Taiye Selasi's Ghana Must Go. *European Journal of English Studies.* 21 (2). p.144-158.

Spencer, L.G.

Moonsamy, N. and **Spencer**, **L.G**. (2017) "Not the story you wanted to hear": Reading Chick-lit in J.M. Coetzee's *Summertime*. *Social Dynamics - A Journal of African Studies*. 43 (3). p.435-450.

Tembo, M.N.

Tembo, **M.N.** (2017) Publicizing Private Lives in a Rainbow Nation: The Year in South Africa. *Biography - An Interdisciplinary Quarterly.* 40 (4). p.657-663.

Wylie, D.A.

Wylie, D.A. (2017) Book Review: Learning Zulu: A Secret History of Language in South Africa. Mark Sanders. Johannesburg: Wits University Press, 2016. 191pp. EAN: 978-1-86814-870-7. *Tydskrif vir Letterkunde*. 54 (2). p.182-186.

Xaba, M. and Du Preez, J.B.

Xaba, M. and Du Preez, J.B. (2017) Interview: Tongues of their Mothers: The Language of Writing. *Tydskrif vir Letterkunde*. 54 (2). p.136-145.

Research Papers Presented at Academic/Scientific Conferences (Non-peer-reviewed Proceedings)

Leff, C.W.

Leff, C.W. Walking through it: Re-defining an African Cosmopolitanism in Vladislavic's *Portrait with Keys. The English Academy of Southern Africa 2017 International Conference: Decolonial Turns, Postcolonial Shifts and Cultural Connections.* Cape Peninsula University of Technology, Cape Town. South Africa. September 2017.

Mason, P.

Mason, P. Hegemonic and Counter-hegemonic Representations of Masculinity and Gender Relations in Three Post-apartheid Novels and a Zimbabwean Novella. *Cadbury Conference: Marriage in Africa*. University of Birmingham, Birmingham. United Kingdom. May 2017.

Naidu, S. and Thorpe, A.

Naidu, S. and Thorpe, A. "I don't belong nowhere really": The Figure of the London Migrant in Dan Jacobson's *A Long Way from London* and Jean Rhys' *Let Them Call It Jazz. The English Academy of Southern Africa 2017 International Conference: Decolonial Turns, Postcolonial Shifts and Cultural Connections.* Cape Peninsula University of Technology, Cape Town. South Africa. September 2017.

Naidu, S

Naidu, S. In Search of the "Goodlife": Crossing the Mexican-USA Border and the Human-nature Border in Graciela Limon's *The River Flows North. Literature and Ecology Conference.* Rhodes University, Grahamstown. South Africa. October 2017.



During 2017, the Department of Management continued to integrate the development of research thinking and skills into its teaching, particularly at the fourth-year level where students are exposed to a research methodology module and produce a research report. The Department also offers a structured research component on the Masters and PhD programme.

Postgraduates / Graduations

During 2017, ten (10) masters students and four (4) PhD students were registered in the Department. Two (2) students will graduate with their masters degrees and one (1) with their PhD at the 2018 graduation ceremony.

Distinguished Visitors / International Visits

Distinguished visitors included Professor H Ulrike and Professor A Lasar from the University of Applied sciences, Osnabrueck.

International visits by staff members of the Department took place during the year. This included Mr Bakker to Utrecht University, Professor Louw to the Shanghai University of Business and Economics, Utrecht University and to the University of Applied Sciences, Osnabrueck, and Mr Louw to



Books/Chapters/Monographs

Amos, T.L.

Amos, T.L. (2017) Leadership. In: Hellriegel, D., Slocum, J.W., Jackson, S.E., Louw, L., Staude G., Amos, T., Klopper, H.B., Louw, M., Oosthuizen, T., Perks, S. and Zindiye, S. (eds). *Management 5th Edition*. Cape Town: Oxford University Press Southern Africa (Pty) Ltd. p.333-369. ISBN: 9780199077366.

Amos, T.L (2017) Motivation. In: Hellriegel, D., Slocum, J.W., Jackson, S.E., Louw, L., Staude G., Amos, T., Klopper, H.B., Louw, M., Oosthuizen, T., Perks, S. and Zindiye, S (eds). *Management (5th edition)*. Cape Town: Oxford University Press Southern Africa (Pty) Ltd. p.333-369. ISBN: 9780199077366.

Louw, L.

Louw, L. (2017) Managerial Competencies. In: Hellriegel, D., Slocum, J.W., Jackson, S.E., Louw, L., Staude G., Amos, T., Klopper, H.B., Louw, M., Oosthuizen, T., Perks, S. and Zindiye, S (eds). *Management (5th edition)*. Cape Town: Oxford University Press Southern Africa (Pty) Ltd. p.333-369. ISBN: 9780199077366.

the Shanghai University of Business and Economics and Utrecht University.

Significant Research Aligned Events

Staff of the Department contributed a number of chapters to textbooks in various areas. They also presented their research at local and international conferences and published their research work in various journals.



Mr Trevor Amos, Head of Department

Louw, L. (2017) Evolution of managerial thought. In: Hellriegel, D., Slocum, J.W., Jackson, S.E., Louw, L., Staude G., Amos, T., Klopper, H.B., Louw, M., Oosthuizen, T., Perks, S. and Zindiye, S (eds). *Management (5th edition).* Cape Town: Oxford University Press Southern Africa (Pty) Ltd. p.333-369. ISBN: 9780199077366.

Muriithi, S. and Louw, L. (2017) The Kenyan Banking Industry: Challenges and Sustainability. In: Ahmed, A. (ed.). *Managing Knowledge and Innovation for Business Sustainability in Africa*. Basingstoke: Palgrave Macmillan. p.197-222. ISBN: 9783319410890.

Louw, M.

Louw, M. (2017) Culture and diversity. In: Hellriegel, D., Slocum, J.W., Jackson, S.E., Louw, L., Staude G., Amos, T., Klopper, H.B., Louw, M., Oosthuizen, T., Perks, S. and Zindiye, S (eds). Management (5th edition). Cape Town: Oxford University Press Southern Africa (Pty) Ltd. p.333-369. ISBN: 9780199077366.

Louw, M. (2017) Organisational communication. In: Hellriegel, D., Slocum, J.W., Jackson, S.E., Louw, L., Staude G., Amos, T., Klopper, H.B., Louw, M., Oosthuizen, T., Perks, S. and Zindiye, S (eds). *Management (5th edition)*. Cape Town: Oxford University Press Southern Africa (Pty) Ltd. p.333-369. ISBN: 9780199077366.

Department of Management





Management (5th Edition). Hellriegel, D, Slocum, JW, Jackson, SE, Louw, L, Staude G, Amos, T, Klopper, HB, Louw, M, Oosthuizen, T, Perks, S and Zindiye, S (eds). Cape Town: Oxford University Press Southern Africa (Pty) Ltd. ISBN: 9780199077366.

Louw, M.J. and Amos, T.L. (2017) International Human Resource Management. In: Aregbeshola, R. (ed.). *Global business management*. Cape Town: Juta & Co. p.197-215. ISBN: 9781485125174.

Louw, M.J. and Amos, T.L.

Louw, M.J. and Amos, T.L. (2017) International Human Resource Management. In: Aregbeshola, R. (ed.). *Global business management*. Cape Town: Juta & Co. p.197-215. ISBN: 9781485125174.

Mayer, C.H.

Mayer, C.H. and Flotman, A.P. (2017) Constructing identity: Implications for reflexive HRM. In: Mahadevan, J. and Mayer, C.H. (eds.). *Muslim Minorities, Workplace Diversity and Reflexive HRM*. New York: Routledge. p.61-76. ISBN: 9781472479723.

Mayer, C.H. and Tonelli, L. (2017) Dream on-There is no Salvation!: Transforming Shame in the South African Workplace through Personal and Organisational Strategies. In: Vanderheiden, E. and Mayer, C.H. (eds.). *The Value of Shame: Exploring a Health Resource in Cultural Contexts.* Switzerland: Springer International Publishing. p.135-156. ISBN: 9783319530994.

Mayer, C.H. (2017) Shame - "A Soul Feeding Emotion": Archetypal Work and the Transformation of the Shadow of Shame in a Group Development Process. In: Vanderheiden, E. and Mayer, C.H. (eds.). *The Value of Shame: Exploring a Health Resource in Cultural Contexts.* Switzerland: Springer International Publishing. p.277-302. ISBN: 9783319530994.

Vanderheiden, E. and **Mayer, C.H.** (2017) An Introduction to the Value of Shame-Exploring a Health Resource in Cultural Contexts. In: Vanderheiden, E. and Mayer, C.H. (eds.). *The Value of Shame: Exploring a Health Resource in Cultural Contexts*. Switzerland: Springer International Publishing. p.1-32. ISBN: 9783319530994.

Mahadevan, J. and Mayer, C.H. (ed.) (2017) *Muslim Minorities, Workplace Diversity and Reflexive HRM*. New York: Routledge. ISBN: 9781472479723.

Distinguished Visitors

Ulrike, H. and Lasar, A.

Professor H Ulrike and Professor A Lasar. University of Applied Sciences, Osnabrueck, Grahamstown, South Africa. *Study tour*. February 2017.

International Visits

Bakker, H.P.

Bakker, H.P. School of Economics, Utrecht University, Utrecht, Netherlands. *Entrepreneurial marketing*. 11 - 15 July 2017.

Louw, L.

Louw, L. Shanghai University of Business and Economics, Shanghai, China. *International Event management Studies programme*. 22 May -1 June 2017.

Louw, L. School of Economics, Utrecht University, Utrecht, Netherlands. *Personal leadership development in a globalised world.* 3 - 7 July 2017.

Louw, L. Hochschule Osnabrueck, University of Applied Sciences, Osnabrueck, Germany. *Block week*. 23 - 27 October 2017.

Louw, M.J.

Louw, M.J. Shanghai University of Business and Economics, Shanghai, China. *International Event Management Studies Programme*. 22 May -1 June 2017.

Louw, M.J. Shool of Economics, Utrecht University, Utrecht, Netherlands. *Personal leadership development in a globalised world.* 3 - 7 July 2017.

Peer Reviewed Subsidy-Earning Journal Research Publications

Louw, L. and Muriithi, S.M.

Louw, L., Muriithi, S.M. and Radloff, S.J. (2017) The relationship between transformational leadership and leadership effectiveness in Kenyan indigenous banks. *SA Journal of Human Resource Management*. 15 (2017). p.1-11.

Mayer, C.H.

du Toit, A., Viviers, R., **Mayer, C.H.** and Visser, D. (2017) Emotional intelligence and leadership in a South African financial services institution. *South African Journal of Labour Relations*. 41 (2017). p.1-14.

Mayer, C.H., Viviers, R., Oosthuizen, R. and Surtee, S. (2017) 'Juggling the Glass Balls...' Workplace Spirituality in Women Leaders. *South African Journal of Higher Education*. 31 (5). p.189-205.

Mayer, C.H. and Viviers, R. (2017) "Can One Put Faith and Work in the Same Sentence?" Faith Development and Vocation of a Female Leader in the Engineering Profession. *Journal of Religion & Health*. (2017). p.1-15.

Mayer, C.H. and Viviers, R. (2017) Experiences of shame by race and culture: An exploratory study. *Journal of Psychology in Africa*. 27 (4). p.362-366.

Mayer, C.H. (2017) A 'Derailed' Agenda? Black Women's Voices on Workplace Transformation. *Journal of International Women's Studies*. 18 (4). p.144-163.

Mayer, C.H., Boness, C.M. and Louw, L.

Mayer, C.H., Boness, C.M. and Louw, L. (2017) Perceptions of Chinese and Tanzanian employees regarding intercultural collaboration. *SA Journal of Human Resource Management*. 15 (2017). p.1-11.

Owusu Ansah, M.

Owusu Ansah, M. (2017) A Comparison of Price Effect and Country of Origin Effect on Consumer Counterfeit Products Purchase. *Journal of Social Sciences*. 13 (4). p.216-228.



Peer-reviewed Proceedings

Owusu Ansah, M.

Owusu Ansah, M. Non-Price Factors on Consumer Counterfeit Products Purchase. *11th International Business Conference*. White Sands Hotel, Dar es Salaam. Tanzania. September 2017.

Research Papers Presented at Academic/Scientific Conferences (Non-peer-reviewed Proceedings)

Geyser, F.B., Louw, M.J. and Louw, L.

Geyser, F.B., Louw, M.J. and Louw, L. An Exploration of the Entrepreneurial Intentions of Chinese Immigrants in the Retail Sector in Maputo. *29th SAIMS Conference*. Kopano Nokeng, Bloemfontein. South Africa. September 2017.

Mayer, C.H., Boness, C.M. and Louw, L.

Mayer, C.H., Boness, C.M. and Louw, L. Chinese managers' views on cooperating with Tanzanian employees in a Chinese organisation in Dar-Es-Salaam, Tanzania. *15th European Congress of Psychology*. Amsterdam. Netherlands. July 2017.

Owusu Ansah, M.

Owusu Ansah, M. Analysis of the Proudly South African Campaign on Textile Products: Evidence from Gauteng Province. *The Department of Trade and Industry (the dti): Economic Research Advisory Network (ERAN) Second Annual Conference*. Bloemfontein. South Africa. March 2017.

Owusu Ansah, M. Examining Export Campaign activities in Gauteng Province of South Africa: Application of the Elaboration Likelihood model. *The Department of Trade and Industry (the dti): Economic Research Advisory Network (ERAN) Second Annual Conference*. Bloemfontein. South Africa. March 2017.



Department of Mathemathics (Pure & Applied)

The department is engaged in a number of active areas of research in mathematics and applied mathematics.

Particular focus areas include:

- Functional analysis including measure theory and martingales;
- Algebraic graph theory;
- Geometric control, particularly invariant optimal control problems on matrix Lie groups (of low dimension), primarily in aspects regarding controllability, geometry of extremals, stability and integrability;
- Computational and analytical relativity, and in particular calculation of gravitational waves from black hole interactions and the study of fluid solutions to the Einstein equations.

Postgraduates / Graduations

The department supervised three (3) Masters and four (4) PhD students across both the Mathematics and Applied Maths divisions.

Catherine McLean submitted her thesis in December and has since been awarded her degree for her thesis studying optimal control problems on the Engel group, supervised by Dr Remsing. We are delighted that Dr McLean elected to remain at Rhodes in 2018 as a lecturer.

We have had the pleasure of hosting four (4) Postdoctoral Research Fellows in the department, active across a variety of disciplines.

Dr Ganguly and Dr Stevens have been active in the Numerical Relativity group, funded by the Claude Leon Foundation and NRF Centre of Excellence in Mathematics and Statistical Sciences, respectively.

Dr Jissy Nsonde-Nsaye obtained an National Research Foundation (NRF) grant to work with Dr Pinchuck on topics in analysis and measure theory.

Former Rhodes PhD student, Dr Dennis Barrett has been funded by the NRF for continued work with Dr Remsing on optimal control theory.

Distinguished Visitors / International Visits

Our academic staff made research visits to India, Germany, Hungary, Romania, Slovenia, Australia, China and the United Kingdom. We also received guests from collaborators in Hungary, Germany and the United States who participated in our local seminar series for staff and students.

Dr Andriantiana presented at the International Combinatorics conference in Melbourne. Dr Remsing and Dr Barrett presented their work at the Conference on Geometry in Plzen. Professor Pollney was an invited speaker at the first BRICS Association of Gravitation, Astrophysics and Cosmology in Yangzhou.

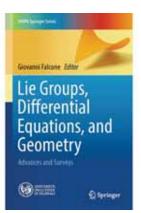
Significant Research Aligned Events

The department formalized its participation in the National Astrophysics and Space Sciences Program (NASSP) as an associate member of the Cape Town node. Our participation provides opportunities to offer graduate projects as part of the program, as well as opportunities to offer graduate courses in astrophysics.

We continue to actively use its local computer cluster and has become one of the most active users at the Centre for High Performance Computing (CHPC) in Cape Town.



Professor Denis Pollney, Head of Department



Remsing, C.C. and Biggs, R. (2017) Invariant Control Systems on Lie Groups. In: Falcone, G. (ed.). *Lie Groups, Differential Equations, and Geometry: Advances and Surveys.* Switzerland: Springer International Publishing. p.127-181. ISBN: 9783319621814.



PUBLICATIONS

Books/Chapters/Monographs

Andriantiana, E.O.D.

Andriantiana, E.O.D. (2017) Bounds of the Estrada Index and the Laplacian Estrada Index. In: Gutman, I., Furtula, B., Das, K.C., Milovanovic, E. and Milovanovic, I. (eds.). *Bounds in Chemical Graph Theory - Mainstreams*. Kragujevac: University of Kragujevac and Faculty of Science Kragujevac. p.23-52. ISBN: 9788660090449.

Remsing, C.C.

Remsing, C.C. and Biggs, R. (2017) Invariant Control Systems on Lie Groups. In: Falcone, G. (ed.). *Lie Groups, Differential Equations, and Geometry: Advances and Surveys*. Switzerland: Springer International Publishing. p.127-181. ISBN: 9783319621814.

Peer Reviewed Non-Subsidy-Earning Journal Research Publications

Remsing, C.C.

Remsing, C.C. and Biggs, R. (2017) Invariant control systems on Lie groups: A short survey. *Extracta Mathematicae*. 32 (2). p.213-238.

Peer Reviewed Subsidy-Earning Journal Research Publications

Andriantiana, E.O.D.

Andriantiana, E.O.D., Wagner, S. and Wang, H. (2017) Extremal problems for trees with given segment sequence. *Discrete Applied Mathematics*. 220 (2017). p.20-34.

Bartlett, C.E. and Remsing, C.C.

Bartlett, C.E., Biggs, R. and **Remsing**, C.C. (2017) Control systems on nilpotent Lie groups of dimension <= 4: Equivalence and classification. *Differential Geometry and its Applications*. 54 (2017). p.282-297.

Bartlett, C.E., Biggs, R. and Remsing, C.C.

Bartlett, C.E., Biggs, R. and Remsing, C.C. (2017) A few remarks on quadratic Hamilton-Poisson systems on the Heisenberg Lie-Poisson space. *Acta Mathematica Universitatis Comenianae*. LXXXVI (1). p.73-79.

Bishop, N.T.

Sheik Amamuddy, O., Bishop, N.T. and Tastan Bishop, O. (2017) Improving fold resistance prediction of HIV-1 against protease and reverse transcriptase inhibitors using artificial neural networks. *BMC Bioinformatics*. 18 (369). p.1-7.

Burton, M.H.

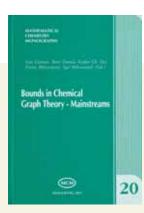
Gama, R., Van Dyk, J.S., Burton, M.H. and Pletschke, B.I. (2017) Using an artificial neural network to predict the optimal conditions for enzymatic hydrolysis of apple pomace. *3 Biotech*. 7 (2017). p.1-10.

Ganguly, A.

Cruz, M., **Ganguly, A.**, Gannouji, R., Leon, G. and Saridakis, E.N. (2017) Global structure of static spherically symmetric solutions surrounded by quintessence. *Classical and Quantum Gravity.* 34 (2017). p.1-35.

Hees, A.

Delva, P., Hees, A. and Wolf, P. (2017) Clocks in Space for Tests of



Andriantiana, E.O.D. (2017) Bounds of the Estrada Index and the Laplacian Estrada Index. In: Gutman, I., Furtula, B., Das, K.C., Milovanovic, E. and Milovanovic, I. (eds.). *Bounds in Chemical GraphTheory - Mainstreams*. Kragujevac: University of Kragujevac and Faculty of Science Kragujevac. p.23-52. ISBN: 9788660090449

Fundamental Physics. *Space Science Reviews*. 212 (2017). p.1385-1421.

Manjunath, G.

Manjunath, G. (2017) Evolving Network Model That Almost Regenerates Epileptic Data. *Neural Computation*. 29 (4). p.937-967. Murali. V.

Makamba, B.B. and **Murali**, V. (2017) On Preferential Sylow Fuzzy Subgroups. *Quaestiones Mathematicae*. 40 (7). p.967-972.

Makamba, B.B. and **Murali**, **V**. (2017) A class of fuzzy subgroups of finite reflection groups. *Journal of Intelligent & Fuzzy Systems*. 33 (2017). p.979-983.

Nkonkobe, S. and Murali, V.

Nkonkobe, **S.** and **Murali**, **V**. (2017) A study of a family of generating functions of Nelsen-Schmidt type and some identities on restricted barred preferential arrangements. *Discrete Mathematics*. 340 (2017). p.1122-1128.

Pinchuck, A.L.

Kempgens, **P**. and **Pinchuck**, **A.L**. (2017) The density matrix theory of triple-quantum filtered COSY (TQF-COSY) NMR experiments applied to an AX system of spins S=1: An example of passive coupling in two-dimensional NMR spectroscopy. *Concepts in Magnetic Resonance Part A*. 44A (e21384). p.318-330.

Remsing, C.C.

Biggs, R. and **Remsing, C.C.** (2017) A note on the Equivalence of Control Systems on Lie groups. *Buletinul Academiei de Stiinte a Republicii Moldova. Matematica*. 3 (85). p.63-73.

Stevens, C.

Beyer, F., Frauendiener, J., **Stevens**, **C**. and Whale, B. (2017) Numerical initial boundary value problem for the generalized conformal field equations. *Physical Review D*. 96 (8). p.1-27.

Research Papers Presented at Academic/Scientific Conferences (Nonpeer-reviewed Proceedings)

Andriantiana, E.O.D.

Andriantiana, E.O.D., Wagner, S. and Wang, H. Subtrees and independent subsets in unicyclic graphs and unicyclic graphs with fixed segment sequence. *The 5th International Combinatorics Conference*. Monash University, Melbourne. Australia. December 2017.

Andriantiana, E.O.D., Wagner, S. and Wang, H. Subtrees and independent subsets in unicyclic graphs and unicyclic graphs with fixed segment sequence. *Southern Africa Mathematical Sciences*



Association (SAMSA) Annual Conference 2017. Lush Garden Hotel, Arusha. Tanzania. November 2017.

Bishop, N.T.

Bishop, **N.T.** Current status of gravitational wave observations. *HEASA* 2017. Wits University, Cape Town. South Africa. October 2017.

Bishop, **N.T.** The numerical calculation of gravitational waves. *SANUM* 2017. University of the Witwatersrand, Johannesburg. South Africa. March 2017.

Bishop, **N.T.** Locating a LIGO site in South Africa. *14th Astroparticle Physics International Forum.* Spier Wine Estate, Stellenbosch. South Africa. November 2017.

Bishop, N.T., Pollney, D. and Stevens, C.

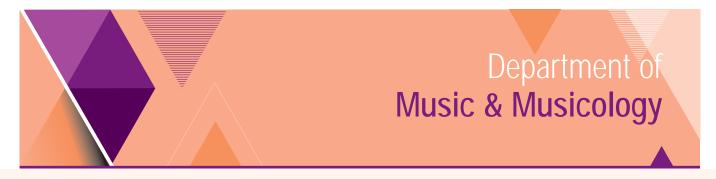
Bishop, N.T., Pollney, D., Reisswig, C. and Stevens, C. Characteristic extraction and matching innumerical relativity. *29th International Texas Symposium on Relativistic Astrophysics*. Cape Town International Conference Centre, Cape Town. South Africa. December 2017.

Remsing, C.C. and Barrett, D.I.

Remsing, C.C. and **Barrett, D.I.** Nonholonomic Riemannian structures on Lie groups. *Conference on Geometry: Theory and Applications*. University of West Bohemia, Plzen. Czech Republic. June 2017.

Pollney, D.

Pollney D. The New Era of Gravitational Wave Astronomy, *First Symposium of the BRICS Association of Gravity, Astrophysics and Cosmology.* Yangzhou, China, November 2017.



The Department of Music and Musicology had a productive year in 2017. The research and creative outputs reached new heights in 2017, with the Department producing close to double the number of publications published in 2016.



The performance highlight of the year was undoubtedly the Gala symphony concert performed in the Guy Butler Theatre, Settler's Monument. The Rhodes University (RU) Orchestra conducted by David Scarr was joined by RU Vocalists and the RU Choir for the performance. The programme included compositions by two (2) prominent South African composers: *Hymn of the Creator* (Ushaka) by J.S. Mzilikazi Khumalo (vocal soloists Nosiviwe Mqwebedu, Njabulo Mthimkhulu, Jo-Nette Le Kay, Sibusiso Mkhize and Sibabalwa Yoko); and *City Slickers* by Grant McLachlan (RU Orchestra).

Other highlights included the Rachmaninoff Piano Concerto No. 2 (soloist Catherine Foxcroft), Mozart Clarinet Concerto (soloist Mieke Struwig) and Mozart Lacrimosa from the Requiem (RU Choir and RU Vocalists). The proceeds from the concert contribute exclusively to the Department of Music and Musicology's funding initiative, the BMus 1st year scholarship (R20 000). The recipient of the scholarship in 2018 will be local Grahamstown resident Mr Xolani Madlabathi.

Gala concert performance Windband conducted by Lindsay Johnston. Photo: Department of Music & Musicology.

Postgraduates / Graduations

The Department of Music and Musicology is proud to have graduated five (5) BMus Honours students, one (1) BA Honours student and three (3) MMus students in 2017.

Distinguished Visitors / International Visits

The Department of Music and Musicology continued to host Dr Eric Otchere (Ghana) as a Postdoctoral Research Fellow. During this time, Dr Otchere published two (2) peer-reviewed journal articles, and assisted in the Department and at the International Library of African Music (ILAM) with lectures in Ethnomusicology.

The Department of Music and Musicology was privileged to provide a platform to several internationally acclaimed performers including Blessing Chimanga (Zimbabwe marimbas/vocalist), Petronel Malan (US pianist), Christian Bester (US baritone) in collaboration with RU staff members

Department of Music & Musicology

Jo-Nette Lekay (soprano) and Catherine Foxcroft (piano), and Liesl Stoltz (SA flautist) accompanied by Catherine Foxcroft.

The Department hosted the 11th National Grahamstown Music Competition, an annual event designed to provide young musicians at junior, secondary and Tertiary levels across South Africa an opportunity to rub shoulders in the performance arena. The high standards of performance were an inspiration to all.



Concerts, Exhibitions, Performances, Workshops, Events

Foxcroft, C.

Foxcroft, C. Chamber partner. Flute Duo (Liesl Stoltz flute) (Catherine Foxcroft piano). *Chamber duo*. Beethoven Room, Rhodes University, Grahamstown. South Africa. 21 February 2017.

Foxcroft, C. Accompanist. Soprano (Jo-Nette LeKay); Baritone (Christian Bester); Accompanist (Catherine Foxcroft). *American Art Songs and Opera*. Beethoven Room, Rhodes University, Grahamstown. South Africa. 14 March 2017.

Foxcroft, C. Soloist. Rachmaninoff Piano Concerto No 21st mvt. *RU Symphony Orchestra GALA Concert*. Guy Butler Hall, Settler's Monument, Grahamstown. South Africa. 27 September 2017.

Ramanna, N. and Thorpe, C.J.

Ramanna, N. and Thorpe, C.J. Performer. Concert. *Latin jazz at the Lowlander*. The Lowlander, Grahamstown. South Africa. 4 October 2017.

Thorpe, C.J. and Ramanna, N.

Thorpe, C.J. and Ramanna, N. Pianist. Performance. *Christopher Thorpe MMUS Public Recital 1*. Beethoven Room, Grahamstown. South Africa. 9 December 2017.

Thorpe, C.J. and Ramanna, N. composer/pianist. Performance. *Christopher Thorpe MMUS Public Recital 2*. Beethoven Room, Grahamstown. South Africa. 11 December 2017.

Peer Reviewed Non-Subsidy-Earning Journal Research Publications

Otchere, E.D.

Otchere, E.D. (2017) Toward a "Culturally Responsive Music Curriculum": Harnessing the Power of Ghanaian Popular Music in Ghana's Public Education Sector. *Ghana Studies.* 20 (1). p.93-110.

Peer Reviewed Subsidy-Earning Journal Research Publications

Brukman, J.

Brukman, J. (2017) "Creative Ethnomusicology" and African Art Music: A Close Musical Reading of Wood and Clay, Kundi Dreams and Umrhubhe Geeste by Anthony Caplan. *African Music: Journal of the International Library of African Music.* 10 (3). p.142-163.

Brukman, J. (2017) Bernard Smith van der Linde (1935-2015): A Life in Musicology. *SAMUS: South African Music Studies (Formerly South Africa Journal of Musicology)*. 36/37 (2017). p.1-25.



Associate Professor Catherine Foxcroft, Head of Department



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Gala concert dress rehearsal Cellists Lindsay Johnston and Kwazi Mkula. Photo: Department of Music & Musicology.

Brukman, J. (2016) Shifts and Turns in Paul Hanmer's Nachtroep: A Close Musical Analysis. *World of Music-New Series*. 5 (2). p.47-65.

Otchere, E.D.

Otchere, **E.D**. (2017) 'In a World of Their Own': Memory and Identity in the Fishing Songs of a Migrant Ewe Community in Ghana. *African Music: Journal of the International Library of African Music*. 10 (3). p.7-22.

Ramanna, N.

Ramanna, N. (2016) Discursive Flows in South African Jazz Studies - Texts, Contexts, and Subtexts. *World of Music-New Series*. 5 (2). p.7-29.

Research Papers Presented at Academic/Scientific Conferences (Nonpeer-reviewed Proceedings)

Brukman, J.

Brukman, J. The Life of Winnie Madikizela-Mandela through the lens of "Winnie: The Opera" by Bongani Ndodana-Breen. *Performing History*. University of Auckland, Auckland. New Zealand. December 2017.

International Library of African Music

ILAM staff has been involved in a wide range of research activities, from providing core services to the community far and wide, to maintaining a research agenda which includes students, community engagement, and mentoring novice researchers and research students.



Distinguished Visitors/International Visits

In 2017, ILAM hosted several visitors of international standing. First was Ludwig Goransson who visited ILAM early in 2017 to acquaint himself with ILAM recordings. Goransson composed the score for the hit film, Black Panther, and was inspired by the music he encountered here at ILAM.

Another visitor, Dr Sylvia Nannyonga-Tamusuza from Makerere University in Kampala, the archivist at the world famous Klaus Wachsmann music archive. This archive is nearly equal in status to ILAM. During her visit to ILAM in September 2017, she spoke to students on archival practices within a 'decolonial' paradigm. She also gave a talk entitled, "Dialogic Archival Documentation: Decolonizing the Archive to Repatriate the Past to Present Indigenous Users".

Another guest was Albert Bisaso Ssempeke. Bisaso is a member of a family of musicians who possess a vast repertoire of Ugandan royal court music. Bisaso's family has played a leading role in conserving and reviving the music after Idi Amin's tenure. Idi Amin intended to remove all vestiges of royal rule in the 1970s. Bisaso spent two (2) months at Rhodes University, and Nelson Mandela University, where he taught university students, gave two (2) performances in Grahamstown and Port Elizabeth, and participated in ILAM's community music projects at Joza schools. Following this visit Bisaso went to perform and teach at Museum Africa and the Windybrow Theatre in Johannesburg. His visit was significant in that it falls in line with ILAM's vision for developing a network of African traditional musicians connected to ILAM.

Other guests were: Stefan Franke from Germany, the manager of an online resource called 'Sympathetic Resonances'. His project is aimed at developing a learning platform for mbira music. (*https://www.sympathetic-resonances.org/about* and *https://www.facebook.com/ctepah.pranckhe.3/posts/13015 8120925158*).

Sebastian Bergstrom, jazz pianist from Sweden, Siegfried Kutterer, avant garde composer from Switzerland, and Noah Gorman, a microtonal composer from Canada, visited ILAM to experience the collections first hand.

African Humanities Programme (AHP) Fellows, Daines Sanga from Tanzania and Emmanuel Saboro from Ghana were here from October until December 2017. Daines focused on the performances of uHehe women in Tanzania and Emmanuel on the memories of internal slavery in northern Ghana during the second half of the nineteenth century. Their visit allowed the opportunity to initiate a mentoring relationship especially with regard to publishing. The mentoring continues.



Another visitor was Noel Lobley from the University of Virginia (UVa), whose purpose was to investigate and discuss terms for collaboration between our institutions and students. UVa students and staff will be visiting ILAM as of July 2018 to develop this relationship further.

Community Engagement

Ongoing and extending beyond borders of Grahamstown in Keiskammahoek is an older project brought over from the music department, and the New Brighton jazz project continues. ILAM is involved in Sakhuluntu as well as Access Music Project! in Joza, Grahamstown.

Postgraduates

Currently there are five (5) Masters degree students and two (2) Doctoral students. Postgraduate students must attend two (2) seminars per week where they discuss their research and progress.

Research Associate: Dave Dargie

Professor Dargie contributed to a dossier for the South African Department of Arts and Culture and UNESCO to have umngqokolo declared World Intangible Cultural Heritage.

PUBLICATIONS

Concerts, Exhibitions, Performances, Workshops, Events

Dargie, D.

Dargie, **D**. Presentation. Xhosa overtone singing: two leading singers of umngqokolo ngomqangi were brought from Ngqoko. *Mini-Symposium organised by Professor Bernhard Bleibinger of Fort Hare University.* East London. South Africa. 20 September 2017.

Dargie, **D**. Digitised recordings. Field recordings: 48 audio CDs, 1 CD ROM (with photos), 15 DVDs and 24 Handbooks. *Dave Dargie Collection*. ILAM, Rhodes University, Grahamstown. South Africa. 20 September 2017.

Dargie, **D**. Part of group led by Professor Dr Tiago de Oliveira Pinto. Put together a dossier of video recordings for this purpose, working with the last three surviving singers of the extraordinary *umngqokolo ngomqangi* technique, plus a six other singers who know the simpler style called *umngqokolo nje*, at Ngqoko village near Lady Frere in the Eastern Cape. *Transcultural Music*. Franz Liszt Music University, Weimar. Germany. 13 September 2017.

Other Publications

Dargie, D.

Dargie, **D**. (2017) A large (A5) booklet describing how traditional Thembu Xhosa musicians speak and think about their music, with a comprehensive glossary of Xhosa musical terms. In: *Xhosa Music Terminology*. Grahamstown, South Africa: ILAM, Rhodes University. Arrangement of videos onto DVD, plus writing a handbook entitled "Umngqokolo Dossier Recordings 2017: Handbook Guide to the DVD". The handbook consists of thirty-four (34) pages, including score transcriptions, photographs.

ILAM publications

Bow Music Conference Proceedings: This conference was held early in 2016 at the University of KwaZulu-Natal. The proceedings were published in collaboration with Sazi Dlamini from UKZN who served as the editor.

A second publication is the album entitled, "Listen all around". The album was produced in collaboration with *Dust to Digital* and curated by leading ethnomusicologist, Alex Perullo. *Dust to Digital* is a renowned publisher of academically curated music albums. This album is a collection of dance songs recorded by Hugh Tracey between 1950 and 1957.



Dr Lee Watkins, Head of Department

Peer Reviewed Subsidy-Earning Journal Research Publications

Thram, D.

Thram, D. (2017) Jennifer W. Kyker, Oliver Mtukudzi Living Tuku Music in Zimbabwe. Bloomington: Indiana University Press. African Music: Journal of the International Library of African Music. 10 (3). p.173-175.

Thram, D. (2017) Gavin Steingo, Kwaito's Promise: Music and the Aesthetics of Freedom in South Africa. Chicago and London: University of Chicago Press. *African Music: Journal of the International Library of African Music.* 10 (3). p.164-166.

Tracey, A.

Tracey, A. (2017) Performer, Scholar, Teacher, Mentor. *South African Music Studies*. 34/35. 2017. p.146-170.

Watkins, L.

Watkins, L. (2017) Editor. *African Music: Journal of the International Library of African Music.* 10 (3). pp.190.

Research Papers Presented at Academic/Scientific Conferences (Nonpeer-reviewed Proceedings)

Thram, D.

Thram, D. Postcolonial issues and answers: the Hugh Tracey Collection and the conflicting motivations and methods of a colonial 'pioneer' in



the study of African music - on panel: Sacrosanct Objects and Early Colonial Field Collections. *ACASA 17th Triennial Symposium on African Art.* University of Ghana, Institute of African Studies, Accra. Ghana. August 2017.

Thram, D. The Hugh Tracey Collection: post-colonial issues and implications for music heritage sustainability. *ANIMUSIC Congress* 2017. Porto. Portugal. August 2017.

Thram, **D**. Postcolonial issues for colonial music archives: the Hugh Tracey Collection and 21st century archival ethics. *IASA (International Association of Sound and Audio-visual Archives)* 48th Annual Conference. Ethnological Museum, Berlin. Germany. September 2017.

Thram, D. Invited Talk, Heritage Month Event, University of Venda. Title: "Digital return of John Blackings field recordings to their communities of origin: Importance to the Connecting Culture and Childhood Project". September 2017.

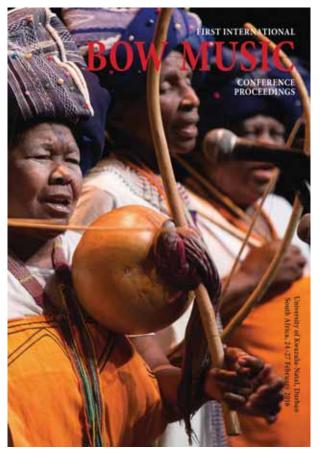
Watkins, L.

Watkins, L. South African Cultural Observatory (SACO). Topic: The relationship between research, intangible cultural heritage and social and economic development: A possible solution to the intractable problem of rural poverty in the Eastern Cape. Johannesburg. May 2017.

Watkins, L. Ife Summer Institute/institute of Advanced Studies, Obafemi Awolowo University, Ile Ife, Nigeria. *Topic: An introduction to my assessments of African Humanities Programme applications*. 24 July -5 August 2017.

Watkins, L. South African Society for Research in Music (SASRIM). Topic: Paradigms anyone? *An Afro-logical analysis of contemporary South African rap music.* North-West University. South Africa. 31 August -2 September 2017.

Watkins, L. Sharing Cultures. Topic: Combining the conservation of intangible cultural heritage with scholarship and the world of business: The case of the International Library of African Music (ILAM). Barcelos, Portugal. September 2017.





The Faculty of Pharmacy continued to contribute significantly to the University's research outputs. The award of one (1) PharmD and one (1) PhD was made at the graduation ceremony.

Dr Tandlich was promoted to Associate Professor and Dr Ngqwala was promoted to Senior lecturer.

Professor Santy Daya was appointed as the new Dean of the Faculty.

The faculty has four (4) divisions, all of which are engaged in research. The Pharmaceutics division led by Dr Khamanga, who together with Professor Walker are engaged in high quality formulation research.

The Pharmaceutical Chemistry Division led by Dr Tandlich is engaged in water treatment and antimalarial research, while the Pharmacology Division is involved in antibiotics in the food chain under Dr Walsh.

The Pharmacy Practice division under the leadership of Ms Irwin is involved in pharmaceutical patient care research.

As the recipient of their 2016 Distinguished Teaching Award, Dr Goosen delivered an invited plenary lecture at the conference of the Academy of Pharmaceutical Sciences of South Africa and the Pharmaceutical Society of South Africa, held in Johannesburg, July 2017.



Books/Chapters/Monographs

Kanfer, I.

Kanfer, I. (2017) South Africa. In: Kanfer, I. (ed.). *Bioequivalence Requirements in Various Global Jurisdictions: AAPS Advances in the Pharmaceutical Sciences Series - Volume 28.* Switzerland: Springer International Publishing. p.229-268. ISBN: 9783319680774.

Kanfer, I. (ed.) (2017) *Bioequivalence Requirements in Various Global Jurisdictions: AAPS Advances in the Pharmaceutical Sciences Series* - *Volume 28.* Switzerland: Springer International Publishing. ISBN: 9783319680774.

Madikizela, P.

Madikizela, P. and Laubscher, R. (2017) A Food Crop Fertilizer From Latrine Pit Faecal Sludge After Anaerobic Digestion and Pasteurization. In: Tandlich, R. (ed.). *Novel Approaches to Rainwater Harvesting*. New York: Nova Science Publishers, Inc. p.103-122. ISBN: 9781634858267. A fourth year Research Methodologies Poster Session was organised by Dr Ngqwala. This is a new course which was introduced in 2017 with a research component.

Distinguished Visitors/International Visits

Peter Thomson from the Department of Pharmaceutical Services, Health Sciences Centre, Winnipeg, Manitoba, visited our PharmD students in late March 2017. He did site visits in Port Elizabeth, East London and Mthatha to assist them on their ward rounds.

Professor Beverley Glass from James Cook University, Queensland, Australia visited us and delieved lectures to our third and fourth year students.



Professor Santy Daya, Dean of Faculty

Madikizela, P. and Tandlich, R.

Madikizela, P., Tandlich, R. and Laubscher, R. (2017) Cost Effective Way of Managing Pit Latrine Faecal Sludge: A Review. In: Tandlich, R. (ed.). *Novel Approaches to Rainwater Harvesting*. New York: Nova Science Publishers, Inc. p.63-101. ISBN: 9781634858267.

Ncube, M., Tandlich, R., Nicholson, T.J., Ngqwala, N.P. and Wilhelmi, B.S.

Khaldi, H., **Ncube, M.**, **Tandlich, R.**, **Nicholson, T.J.**, **Ngqwala**, **N.P.**, **Wilhelmi, B.S.** and Maatoug, M. (2017) Quantification of Triclosan in Sewage Sludge Matrices from South African and Algeria. In: Tandlich, R. (ed.). *Novel Approaches to Rainwater Harvesting*. New York: Nova Science Publishers, Inc. p.47-61. ISBN: 9781634858267.

Patnala, S. and Kanfer, I.

Patnala, S. and Kanfer, I. (2017) Sceletium Plant Species: Alkaloidal Components, Chemistry and Ethnopharmacology. In: Georgiev, V.

Faculty of Pharmacy



The 4th Year Pharmacy students research Methodologies Poster Day organised by Dr N Ngqwala. Photo: Faculty of Pharmacy.

and Pavlov, A. (eds.). *Alkaloids: Alternatives in Synthesis, Modification and Application.* Croatia: InTech. p.85-101. ISBN: 9789535133919.

Zuma, B.M. and Tandlich, R.

Zuma, B.M. and Tandlich, R. (2017) Modifications and Monitoring of the Laboratory Scale Greywater Filter Tower Treatment System. In: Tandlich, R. (ed.). *Novel Approaches to Rainwater Harvesting*. New York: Nova Science Publishers, Inc. p.123-156. ISBN: 9781634858267.

International Visits

Tandlich, R.

Tandlich, R. University of Zilina, Slovakia, Zilina. *Starting of collaboration in the field of disaster and crisis management.* 22 March 2017.

Veale, C.G.L.

Veale, C.G.L. University of Edinburgh, Edinburgh, Scotland. *Research Visit.* 9 - 22 July 2017.

Peer Reviewed Non-Subsidy-Earning Journal Research Publications

Dube, C.S., Ncube, M. and Tandlich, R.

Khaldi, H., Maatoug, M., **Dube, C.S., Ncube, M., Tandlich, R.**, Heilmeier, H., **Laubscher, R.** and Dellal, A. (2017) Efficiency of Wastewater Treatment by a Mixture of Sludge and Microalgae. *Journal of Fundamental and Applied Sciences*. 9 (3). p.1454-1472.

Peer Reviewed Subsidy-Earning Journal Research Publications

Bobbins, A.C., Manhanzva, R. and Srinivas, S.C.

Bobbins, A.C., Manhanzva, R., Bhandankar, M. and **Srinivas, S.C.** (2017) Balanced nutrition and hand hygiene for children in South Africa. *Health Promotion International.* (2017). p.1-11.

Kanfer, I.

Tiffner, K.I., **Kanfer**, I., Augustin, T., Rami, R., Raney, S.G. and Sinner, F. (2017) A comprehensive approach to qualify and validate the essential parameters of an in vitro release test (IVRT) method for acyclovir cream, 5%. *International Journal of Pharmaceutics*. (2017). p.1-11.

Kanfer, I., Rath, S., Purazi, P. and Mudyahoto, N.A.

Kanfer, I., Rath, S., Purazi, P. and Mudyahoto, N.A. (2017) *In Vitro* Release Testing of Semi-Solid Dosage Forms. *Dissolution Technologies*. (2017). p.52-60.

Magwenzi, F. and Veale, C.G.L.

Magwenzi, F., Khanye, S.D. and Veale, C.G.L. (2017) Unexpected transformations of 3-(bromoacetyl)coumarin provides new evidence for the mechanism of thiol mediated dehalogenation of α -halocarbonyls. *Tetrahedron Letters.* 58 (2017). p.968-972.

Manhanzva, R., Marara, P., Duxbury, T., Bobbins, A.C. and Srinivas, S.C.

Manhanzva, R., Marara, P., Duxbury, T., Bobbins, A.C., Pearse, N.J., Hoel, E., Mzizi, T. and Srinivas, S.C. (2017) Gender and leadership for health literacy to combat the epidemic rise of Non-Communicable Diseases. *Health Care for Women International.* 38 (3). p.833-847.

Marimwe, C. and Dowse, R.

Marimwe, C. and Dowse, R. (2017) Development of an Item Bank of health literacy questions appropriate for limited literacy public sector patients in South Africa. *Journal of Communication in Healthcare*. (2017). p.1-12.

Mukozhiwa, S.Y., Khamanga, S.M.M. and Walker, R.B. Mukozhiwa, S.Y., Khamanga, S.M.M. and Walker, R.B. (2017) The use of experimental design for the development of a capillary zone electrophoresis method for the quantitation of captopril. *Pharmazie*. 72 (2017). p.518-524.

Ncube, M., Nondlazi, S., Zvidzayi, K.M. and Tandlich, R. Ncube, M., Nondlazi, S., Zvidzayi, K.M., Tandlich, R., Wilhelmi, B.S. and Turki, D. (2017) Solubilisation of Triclosan with Sodium Deoxycholate and Sodium Lithocholate under Laboratory Conditions. *Fresenius Environmental Bulletin.* 26 (12). p.7003-7007.

Ngqwala, N.P., Srinivas, S.C., Tandlich, R. and Oosthuizen, R. Ngqwala, N.P., Srinivas, S.C., Tandlich, R., Pyle, D.M. and Oosthuizen, R. (2017) Participatory Multi-Stakeholder Platforms in Disaster Management in South Africa. *Journal of Disaster Research.* 12 (6). p.1192-1202.

Nondlazi, S., Ngqwala, N.P. and Tandlich, R. Nondlazi, S., Ngqwala, N.P., Zuma, B.M. and Tandlich, R. (2017)

Faculty of Pharmacy





As the recipient of their 2016 Distinguished Teaching Award, Dr E Goosen delivered an invited plenary lecture at the conference of the Academy of Pharmaceutical Sciences of South Africa and the Pharmaceutical Society of South Africa, held in Johannesburg in July 2017.

Photo: Faculty of Pharmacy.

Investigating the viability and performance of the pilot scale fly ash/lime filter tower for onsite greywater treatment. *Desalination and Water Treatment*. 91 (2017). p.349-364.

Olawode, E.O. and Tandlich, R.

Olawode, E.O., Tandlich, R., Prinsloo, E., Isaacs, M., Hoppe, H.C., Seldon, R., Warner, D., Steenkamp, V., and Kaye, P.T. (2016) Synthesis and biological evaluation of (E)-cinnamic acid, (E)-2-styrylthiazole and (E)-2-[2-(naphthalen-1-yl)vinyl]thiazole derivatives. *Arkivoc*. (2016). p.284-296.

Tandlich, R.

Al-Ismaili, A.M., Ahmed, M., Al-Busaidi, A., Al-Adawi, S., **Tandlich**, **R**. and Al-Amri, M. (2017) Extended use of grey water for irrigating home gardens in an arid environment. *Environmental Science and Pollution Research*. 24 (2017). p.13650-13658.

Veale, C.G.L.

Veale, C.G.L., Krause, R.W.M. and Sewry, J. (2017) Blending problembased learning and peer-led team learning, in an open ended 'homegrown' pharmaceutical chemistry case study. *Chemistry Education Research and Practice*. (2017). p.1-12.

Pudumo, J., Chaudhary, S.K., Chen, W., Viljoen, A., Vermaak, I. and **Veale, C.G.L**. (2017) HPTLC fingerprinting of Croton gratissimus leaf extract with Preparative HPLC-MS-isolated marker compounds. *South African Journal of Botany*. (2017). p.1-5.

Verbeeck, R.K. and Kanfer, I.

Verbeeck, R.K., Kanfer, I., Lobenberg, R., Abrahamsson, B., Cristofoletti, R., Groot, D.W., Langguth, P., Polli, J.E., Parr, A., Shah, V.P., Mehta, M. and Dressman, J.B. (2017) Biowaiver Monographs for Immediate-Release Solid Oral Dosage Forms: Enalapril. *Journal of Pharmaceutical Sciences.* 106 (8). p.1933-1943.

Walker, R.B.

Nkanga Isalomboto, C., Krause, R.W.M., Siwe Noundou, X. and Walker, R.B. (2017) Preparation and characterization of isoniazidloaded crude soybean lecithin liposomes. *International Journal of Pharmaceutics*. 526 (2017). p.466-473.

Peer-reviewed Proceedings

Nhokodi, T., Nqowana, T., Dube, C.S. and Tandlich, R.

Nhokodi, T., Nqowana, T., Dube, C.S. and Tandlich, R. Identification of Bacteria in Rainwater Samples from Makana Local Municipality in South Africa. *9th Air and Water Components of the Environment conference*. University of Babes-Bolayi, Cluj-Napoca. Romania. March 2017.

Nqowana, T., Dube, C.S. and Tandlich, R.

Nqowana, T., Dube, C.S. and Tandlich, R. Monitoring of Potable Water Quality in Makana Local Municipality, South Africa. *9th Air and Water Components of the Environment conference*. University Babes-Bolayi, Cluj-Napoca. Romania. March 2017.

Research Papers Presented at Academic/Scientific Conferences (Non-peer-reviewed Proceedings)

Chirenda, T.G., Tandlich, R. and Srinivas, S.C.

Chirenda, T.G., Tandlich, R., Srinivas, S.C., Frith, K.A. and Nnamani, C.U. Legislation, Vulnerability and Disaster Risk Management of Waterborne Diseases in Zimbabwe. *2017 Annual TIEMS conference*. Ukraine Hotel, Kyiv. Ukraine. December 2017.

Goosen, E.D.

Goosen, E.D. Invited Plenary Lecture as the recipient of the 2016 Distinguished Teaching Award of the Academy of Pharmaceutical Sciences of South Africa: "What does Lobola have to do with Teaching Pharmaceutical Chemistry?" *The conference of the Academy of Pharmaceutical Sciences of South Africa and the Pharmaceutical Society of South Africa.* Indaba Hotel and Conference Centre, Johannesburg. South Africa. July 2017.

Irwin, Y.L.

Irwin, Y.L. The Chemistry of Essential oils reviewed. *AromaSA Congress*. Salt Rock Hotel, KwaZulu-Natal. South Africa. August 2017.

Krele, V., Ngqwala, N.P. and Tandlich, R.

Krele, V., Ngqwala, N.P. and Tandlich, R. School/community-based vegetable gardens: a promising approach to enhance schools and community participation towards a sustainable living to overcome food insecurity. *2017 Annual TIEMS conference*. Ukraine Hotel, Kyiv. Ukraine. December 2017.

Madikizela, P., Laubscher, R., Tandlich, R. and Ngqwala, N.P. Madikizela, P., Laubscher, R., Tandlich, R. and Ngqwala, N.P. Optimising biogas recovery from pit latrine faecal sludge. *5th International Conference on Sustainable Solid Waste Management.* Aegli Zappiou, Athens. Greece. June 2017.

Manhanzva, R., Sharma, S., Tandlich, R. and Srinivas, S.C. Manhanzva, R., Sharma, S., Nagaraju, K., Tandlich, R. and Srinivas, S.C. Use of ABC analysis on the procurement of Antimicrobials in the Makana District. *2017 Public Health Association of South Africa Conference*. Indaba Hotel, Spa and Conference Centre, Johannesburg. South Africa. September 2017.

Manhanzva, R., Tandlich, R. and Srinivas, S.C.

Manhanzva, R., Tandlich, R. and Srinivas, S.C. Community engagement to address Antimicrobial resistance program at a local district hospital. *Community Engagement Conference - Community Engagement: Towards Social and Epistemic Justice*. Durban University of Technology, Durban. South Africa. May 2017.



Marimwe, C. and Dowse, R.

Marimwe, C. and Dowse, R. Development of a health literacy measure for limited literacy patients: the South African Health Literacy Test (SAHLT). *International Conference on Communication in Healthcare* & Health Literacy Annual Research Conference. Baltimore, USA. October 2017.

Ngqwala, N.P. and Tandlich, R.

Chifunda, E., Ngqwala, N.P. and Tandlich, R. Hazards from microbial contamination in a rural area of South Africa. *ADAPT Think tank*. Gavin Reilly Postgraduate Village, Grahamstown. South Africa. May 2017.

Nicholson, T.J., Tandlich, R., Ngqwala, N.P. and Wisch, M. Nicholson, T.J., Tandlich, R., Ngqwala, N.P. and Wisch, M. An energy, water and disease disaster management module: a technoeconomic feasibility analysis. *2017 Annual conference of the Disaster Management Institute of Southern Africa*. Vulindlela Accommodation and Conference Centre, Port Elizabeth. South Africa. September 2017.

Olawode, E.O. and Tandlich, R.

Olawode, E.O., Cambray, G. and Tandlich, R. Profiling selected South African, Zambian and Slovakian honeys using Fourier Transformed Infrared (FT-IR) and Nuclear Magnetic Resonance (NMR) spectroscopies. *Conference on the 65th Anniversary of the Faculty of Pharmacy of Comenius University, Bratislava, Slovakia/46th EuroCongress on Drug Synthesis and Analysis.* Faculty of Pharmacy of Comenius University, Bratislava. Slovakia. September 2017.

Rusere, J. and Tandlich, R.

Rusere, J. and **Tandlich**, **R**. Disaster management implications of HIV/TB co-infections in Namibia and Botswana. *2017 Annual TIEMS conference*. Ukraine Hotel, Kyiv. Ukraine. December 2017.

Sharma, S. and Srinivas, S.C.

Sharma, S., Amner, R., Nagaraju, K., Chhetri, P. and Srinivas, S.C. Concept Paper: Use of Media for Health Communication and Task Shifting to Address the Challenges of AMR in a Rural Health System Strengthening Project. *Highway Africa Annual Conference*. Rhodes University, Grahamstown. South Africa. August 2017.

Sharma, S., Manhanzva, R., Tandlich, R. and Srinivas, S.C. Sharma, S., Nagaraju, K., Manhanzva, R., Tandlich, R. and Srinivas, S.C. Antibiotic Procurement at a District Community Centre. *The* 2017 Public Health Association of South Africa Conference. Indaba Hotel, Spa and Conference Centre, Johannesburg. South Africa. September 2017.

Sharma, S., Srinivas, S.C., Tandlich, R. and Chigumete, T.G. Pearse, N.J., Sharma, S., Srinivas, S.C., Tandlich, R., Chigumete, T.G., Nagaraju, K. and Mzizi, T. Culturally-sensitive and contextspecific workplace health promotion on physical activity for the support staff at Rhodes University. *Thirteenth Ergonomics Society of South Africa Conference/ First ErgoAfrica Conference/Third African Symposium on Human Factors and Aviation Safety.* Birchwood Hotel, Johannesburg. South Africa. September 2017.

Srinivas, S.C., Duxbury , T., Marara, P., Manhanzva, R. and Tandlich, R.

Srinivas, S.C., Duxbury, T., Marara, P., Limson, J., Manhanzva, R., Pearse, N.J., Davy, J., Mzizi, T., Tandlich, R. and Hornby, D. Women-centered health promotion for health care challenges. *Asia-Pacific University Engagement Network Conference*. Penang. Malaysia. April 2017.

Tandlich, R.

Malema, S., Ubomba-Jaswa, E., Abia, A.L.K., Kahinda, J.M. and **Tandlich, R.** Antimicrobial resistant diarrheagenic *Escherichia coli* isolated from in-use roof rainwater harvesting tanks in Eastern Cape, South Africa. *6th International Conference on Environment, Chemistry and Biology.* University of Queensland, Brisbane. Australia. November 2017.

Tandlich, R. and Luyt, C.D.

Nqowana, T., Paphitis, S., Tandlich, R. and Luyt, C.D. A communitybased water monitoring, treatment and disaster management program in Grahamstown using the improved Hydrogen Sulphide test kit. *Community Engagement: Towards Social And Epistemic Justice*. DUT, Durban. South Africa. May 2017.

Tandlich, R., Vhiriri, E.P., Ngqwala, N.P. and Srinivas, S.C. Tandlich, R., Angala, A.N., Vhiriri, E.P., Ngqwala, N.P. and Srinivas, S.C. Disaster vulnerability assessment for the Kingdom of Bhutan's population. *2nd Multi/Interdisciplinary research Conference*. University of Namibia, Windhoek. Namibia. July 2017.

Veale, C.G.L.

Veale, C.G.L. Blending problem-based learning and peer-led team learning, in an open-ended homegrown pharmaceutical chemistry case study. *Teaching and Learning Showcase*. Rhodes University, Grahamstown. South Africa. October 2017.

Veale, C.G.L. Targeting the HOP-HSP90 PPI through mass spectrometry guided fragment-based drug discovery. *Marine natural Products Symposium*. University of the Western Cape, Cape Town. South Africa. August 2017.

Veale, C.G.L. Targeting HOP through mass spectrometry guided fragment-based drug discovery. *Centre for Chemico- and Biomedicinal Research Symposium*. Rhodes University, Grahamstown. South Africa. June 2017.



Patnala, S. and Kanfer, I. (2017) Sceletium Plant Species: Alkaloidal Components, Chemistry and Ethnopharmacology. In: Georgiev, V. and Pavlov, A. (eds.). *Alkaloids: Alternatives in Synthesis, Modification and Application*. Croatia: InTech. p.85-101. ISBN: 9789535133919



The Philosophy Department was at the centre of a momentous historical event in South Africa. Both the Department and the affiliated Allan Gray Centre for Leadership Ethics (AGCLE) made significant research contributions that were recognised (inter)nationally.



Significant Research Aligned Events

The Department of Philosophy hosted the annual meeting of the Philosophical Society of Southern Africa (PSSA), January 16-18 2017. Around eighty (80) speakers gave talks, in addition to a keynote address by Charles Mills of City University of New York (CUNY) and a plenary session on the PSSA itself. Roughly, one-third of the talks given were related to African philosophy, while another third focussed on social and political philosophy.

The conference itself went off without a hitch, although events at the conference were historical for the PSSA. The challenge made at the plenary session, which was that the PSSA should be disbanded to make space for an alternative conference and philosophical body, and the subsequent discussion at the AGM, led to a turmoil of resignations and a re-thinking of the PSSA.

Dr Uchenna Okeja was promoted to Associate Professor. He also was a recipient of the prestigious Iso Lomso Fellowship from the Stellenbosch Institute for Advanced Study. The

AGLE and Goedgedacht Forum for Social Reflection event. Photo: Allan Grey Centre for Leadership Ethics (AGCLE).

fellowship aims to support scholars to become established researchers in their discipline. During the fellowship period, Uchenna will spend time at Harvard University and the University of Toronto. He also received a fellowship from the Neubauer Collegium at the University of Chicago and a senior fellowship from Justitia Amplificata Centre for Advanced Studies at Goethe-Universität Frankfurt and Freie Universität Berlin.



Professor Marius Vermaak, Head of Department

Department of Philosophy



Books/Chapters/Monographs

Alloggio, S.

Alloggio, S. and Thomas, K. (2017) El olvido de la responsalidad: Hannah Arendt y el trabajo de (desarmar la) resistencia psíquica postapartheid. In: Martín, L.G. (ed.). *El pasado es hoy. Investigaciones y debates sobre las herencias criminales.* Mar del Plata (Argentina): Eudem. p.221-233. ISBN: 9789871921782.

Bloom, L.

Bloom, L. (2017) *The Principle of Non-Contradiction in Plato's Republic: an argument for form.* Lexington Press. ISBN: 9780739190234.

Jones, W

Jones, W. (2017) Philosophy, Progress, and Identity. In Blackford, R., and Broderick, D. (eds.), *Philosophy's Future: The Problem of Philosophical Progress*. pp. 227-39. Wiley Blackwell. ISBN: 9781119210085.

Pityana, B.N.

Pityana, **B.N**. (2017) Leadership and Ethics in Higher Education: Some perspectives from experience. In: Singh, D. and Stuckelberger, C. (eds.). *Ethics in Higher Education: Values-driven Leaders for the Future*. Geneva: Switzerland: Globethics. p.133-161. ISBN: 9782889311644.

Tabensky, P.

Tabensky, P. (2017) Inattentiveness to Place: The Case of South African Philosophy. In: Janz, B.B. (ed.). *Place, Space and Hermeneutics*. Switzerland: Springer International Publishing. p.505-518. ISBN: 9783319522128.

Concerts, Exhibitions, Performances, Workshops, Events

Alloggio, S.

Alloggio, S. Review panelist. Evaluation of applications. *Japan/South African NRF Research Collaboration*. National Research Foundation, Pretoria. South Africa. 7 December 2017.

Bloom, L.

Bloom, L. "Recollection" Keynote address, Workshop on Laurence Bloom's *The Principle of Non-Contradiction in Plato's Republic*. University of the Witwatersrand, Johannesburg, South Africa. June 2017.

Jones, W

Jones, W. 'Trying to Think Through Moral Deference'. *Responsibility, Knowledge and Power Workshop.* University of Johannesburg. 18-19 August 2017.

Kelland, L.

Kelland, L. and Donaldson, N. Co-Presenter. Gender dynamics. *Student Leadership Orientation*. Barratt Lecture Hall 2, Grahamstown. South Africa. 2 - 3 February 2017.

Okeja, U.

Okeja, **U**. Invited Discussant: Workshop on Global Normative Political Theory, London School of Economics and Political Science, London. 15 December 2017.

Okeja, U. Invited Discussant: Workshop on 'What is Orientation in Global Thinking: A Kantian Inquiry'. Goethe University Frankfurt 8 December 2017.

Okeja, U. Invited Seminar Paper: Preference and Immigration, Philosophy Colloquium. Goethe University Frankfurt, 4 December 2017.



AGCLE and Goedgedacht Forum for Social Reflection event. Photo: Allan Grey Centre for Leadership Ethics (AGCLE).

Okeja, **U**. Panellist Author meets Critics Panel on - 'Groundwork for the Practice of the Good Life' by Omedi Ochieng. *African Studies Association convention*. Chicago, 16-18 November 2017.

Okeja, U. Keynote Lecture Engaging with African Philosophy: Ubuntu and Justice. *Preconference event of the Annual Human Development and Capability Association conference*. Cape Town 5 September 2017.

Okeja, U. Keynote Lecture from Postmetaphysical Thinking to Postsecularism: The 'Self' and Authenticity in a Non-Ideal World. *Conference: "Transforming Encounters and Critical Reflection: African Thought, Critical Theory, and Liberation Theology in Dialogue".* North West University, Potchefstroom, South Africa, 17 - 18 August 2017.

Okeja, U. Invited Paper African political Philosophy between Reconstruction and Practical Relevance. Stellenbosch Institute for Advanced Study Seminar Series. Stellenbosch, South Africa, August 31 2017.

Okeja, U. Public Lecture Implicit Bias, Philosophy and Cultural Universals. Carroll University Waukesha, USA, 3 May 2017.

Okeja, U. Invited Discussant Thinking Across Borders: Engaging African and Western Political and Philosophical Thinking. University of Chicago, USA, 27 - 28 April 2017.

Peer Reviewed Subsidy-Earning Journal Research Publications

Dewhurst, T.

Dewhurst, T. (2017) What We Really Think About Knowledge: It's a Mental State. *Philosophia*. 45 (2017). p.595-605.

Dewhurst, **T**. (2017) Disjunctivism and the Epistemological Holy Grail. *Pacific Philosophical Quarterly*. 98 (S1). p.599-618.

Kelland, L.

Kelland, L., Paphitis, S. and Macleod, C. (2017) A contemporary phenomenology of menstruation: Understanding the body in situation and as situation in public health interventions to address menstruation-related challenges. *Women's Studies in International Forum.* 63 (2017). p.33-41.

Okeja, U.

Okeja, U. (2017) Reverse migration, brain drain and global justice. *South African Journal of Philosophy.* 36 (1). p.133-143.

Okeja, **U**. (2017) The moral challenge of expatriate employment in developing countries. *Etikk i Praksis*. 11 (2). p.65-77.



Okeja, **U**. (2017) Introduction: Globalizing or Transcending Global Justice? *Philosophical Papers*. 46 (1). p.1-11.

Okeja, **U**. (2017) Evaluating Societies Morally: The Case of Development and 'Developing' Societies. *Analyse und Kritik: Zeitschrift fur Sozialtheorie*. 39 (2). p.241-264.

Okeja, U. (2017) Book Review: Ontologized Ethics: New Essays in African Meta-Ethics by Elvis Imafidon and John Ayotunde Isola Bewaji (eds), Lexington Books/Rowman and Littlefield, 2014. *Philosophical Papers.* 46 (3). p.463-469.

Other Publications

Okeja, **U**. (2017) African Passport: A Case for Open Borders? In: *The Conversation Africa*. June 26.

Research Papers Presented at Academic/Scientific Conferences (Non-peer-reviewed Proceedings)

Alloggio, S.

Alloggio, S. Levinas' dutiful sons: some speculative/decolonial deadlocks within Lyotard and Derrida's primacy of the ethical. *4th Annual International Conference of the Centre for Phenomenology in South Africa Justice and the Other.* Crawford's, Chintsa. South Africa. March 2017.

Alloggio, S. White synecdoches: a preliminary analysis of white South African philosophy today. *Black August International Cultural and Intellectual Festival and the Inauguration of the Azanian Philosophical Society.* UNISA, Pretoria. South Africa. August 2017.

Kelland, L.

Kelland, L. Thinking through the Relevance of Western Philosophy in an African Context. *Philosophical Society of Southern Africa Annual Conference*. Rhodes University, Grahamstown. South Africa. January 2017.

Tabensky, P.

Tabensky, P. Existential Conversations. *Well-Being Economy Festival.* University of Pretoria, Pretoria. South Africa. November 2017.

Tabensky, P. Rebellion and Revolution. *4th Annual International Conference of the Centre for Phenomenology in South Africa.* University of Fort Hare, Chintsa. South Africa. March 2017.

Tabensky, P. Camus and Fanon on Violence. *International Society for African Philosophy and Studies (ISAPS)*. University of Vienna, Vienna. Austria. July 2017.

Tabensky, P. The Revolutionary Impetus. *The Critiques of Violence*. University of Leuven, Leuven. Belgium. May 2017.



Bruce B. Janz Editor

Place, Space and Hermeneutics

2 Springer

Tabensky, P. (2017) Inattentiveness to Place: The Case of South African Philosophy. In: Janz, B.B. (ed.). *Place, Space and Hermeneutics*. Switzerland: Springer International Publishing. p.505-518. ISBN: 9783319522128

Department of Physics and Electronics

The research life in the department is healthy. The department has active research in Experimental Solid State Physics, Nuclear Physics, Theoretical physics, Electronics and Radio Astronomy. Various members of staff served on national and international research panels and have continued to benefit from productive collaborations with colleagues elsewhere. According to research statistics released last year, the department performance with regards to research outputs was commendable.



Students who received prizes for meritorious oral and poster presentations at the 15th International Conference on Luminescence and Electron Spin Resonance organised in September 2017 in Cape Town by the Rhodes University Luminescence Research Group. Photo: George Philipas.

South Africa has now become established as a hub of the Square Kilometre Array (SKA) radio telescope. The SKA will be the most advanced radio telescope of its kind. The Centre for Radio Astronomy Techniques & Technologies headed by Professor Oleg Smirnov continues to make significant headway in their research programme in this regard.

Postgraduates / Graduations

We were pleased to congratulate seven (7) students who graduated with a BSc, four (4) with a BSc (Honours), six (6) with an MSc and one (1) with a PhD. At Honours level, the department awards a meritorious prize, the Basil Schönland prize, to the best student in the Physics Honours class provided the student obtains a first class pass in their final examination. The prize for 2017 was awarded to Ms. Katharine James.

Significant Research Aligned Events

The Luminescence Research Laboratory, headed by Professor M L Chithambo, hosted the 15th International Conference on Luminescence and Electron Spin Resonance Dating (LED2017) between 11 - 15 September 2017 in Cape Town, South Africa. This was the first time the conference was held in Africa.

The LED series of meetings are held every three (3) years.

The meeting in Cape Town, hosted by Rhodes University, followed LED conferences held in Canada (2014), Poland (2011) and China (2008). The conference is a forum for presentation and discussion of the latest developments in applications, instrumentation and fundamentals of use of natural materials such as minerals and synthetically developed ones in dating and assessing natural radioactivity. This area of study, otherwise called retrospective dosimetry is interdisciplinary and attracts participation by experts and students from such diverse areas as physics, geology, geography, chemistry and engineering.



Professor Makaiko Liwiro Chithambo, Head of Department

Department of Physics and Electronics



International Visits

Chithambo, M.L.

Chithambo, M.L. Technical University of Denmark, Roskilde, Denmark. *Research visit.* 7 - 16 February 2017.

Medved, A.J.M.

Medved, A.J.M. Ben Gurion University, Beer Sheva, Israel. *Research Collaboration in Theoretical Physics*. 18 November - 28 December 2017.

Medved, A.J.M. Ben Gurion University, Beer Sheva, Israel. *Research Collaboration in Theoretical Physics*. 12 June - 27 July 2017.

Nsengiyumva, S.

Nsengiyumva, S. University of Poitiers, Poitiers, France. *Research visit at the University of Poitiers*. 8 May - 8 June 2017.

Peer Reviewed Non-Subsidy-Earning Journal Research Publications

Aniyan, A.

Mosiane, O., Oozeer, N., **Aniyan, A.** and Bassett, B.A. (2017) Radio Frequency Interference Detection using Machine Learning. *IOP Conference Series: Materials Science and Engineering*. 198 (2017). p.1-4.

Bernardi, G. and Smirnov, O.

Bernardi, G., Venturi, T., Cassano, R., Brunetti, G., Dallacasa, D., Fanaroff, B., Hugo, B., Makhatini, S., Oozeer, N., Smirnov, O. and *et al.* (2017) A MeerKAT View on Galaxy Clusters. *PoS - Proceedings of Science.* (2017). p.1-6.

Deane, R.

Deane, R. (2017) Extragalactic VLBI surveys in the MeerKAT era. *PoS* - *Proceedings of Science*. (2017). p.1-10.

Deane, R. and Heywood, I.

Deane, R., Obreschkow, D. and Heywood, I. (2017) Gravitationally Lensed HI with MeerKAT. *PoS - Proceedings of Science*. (2017). p.1-6.

Deane, R., Heywood, I. and Smirnov, O.

Blyth, S.L., Baker, A.J., Holwerda, B.W., Bassett, B.A., Bershady, M.A., Briggs, F.H., **Deane, R.**, **Heywood, I.**, **Smirnov, O.** and *et al.* (2017) LADUMA: Looking At the Distant Universe with the MeerKAT Array. *PoS - Proceedings of Science.* (2017). p.1-9.

Deane, R., Heywood, I., Smirnov, O. and Tasse, C.

Jarvis, M.J., Taylor, A.R., Agudo, I., Allison, J.R., **Deane**, **R.**, Frank, B., **Heywood**, **I.**, **Smirnov**, **O.**, **Tasse**, **C.** and *et al.* (2017) The MeerKAT International GHz Tiered Extragalactic Exploration (MIGHTEE) Survey. *PoS - Proceedings of Science.* (2017). p.1-16.

Deane, R., Makhathini, S. and Smirnov, O.

Knowles, K., Sievers, J., Baker, A., Hughes, J.P., Basu, K., Sommer, M.W., **Deane**, **R.**, **Makhathini**, **S.**, **Smirnov**, **O**. and *et al.* (2017) MERGHERS: An SZ-selected cluster survey with MeerKAT. *PoS* -*Proceedings of Science.* (2017). p.1-10.

Heywood, I. and Jozsa, G.I.G.

Santos, M.G., Bull, P., Camera, S., Chen, S., Fonseca, J., **Heywood**, I., Hilton, M., Jarvis, M., **Jozsa, G.I.G.** and *et al.* (2017) A Large Sky Survey with MeerKAT. *PoS - Proceedings of Science*. (2017). p.1-14.



Ms Sindi Teyise with Dr Marcellin Atemkeng at graduation lunch 2017. Photo: Department of Physics & Electronics.

Jozsa, G.I.G.

Kraan-Korteweg, R.C., Elson, E.C., Blyth, S.L., Carignan, C., Frank, B.S., Jarrett, T.H., Cluver, M.E., Serra, P. and **Jozsa, G.I.G.** (2017) Towards a Full Census of the Obscure(d) Vela Supercluster using MeerKAT. *PoS - Proceedings of Science*. (2017). p.1-9.

Jozsa, G.I.G., Wong, O.I., Mauch, T., Schawinski, K., Sengupta, C., Masters, K.L., Urry, M., Lintott, C.J., Simmons, B.D., Kaviraj, S. and Kamphuis, P. (2017) Blue Early Type Galaxies with the MeerKAT. *PoS - Proceedings of Science*. (2017). p.1-6.

Peer Reviewed Subsidy-Earning Journal Research Publications

Abdalla, F.B.

Etherington, J., Thomas, D., Maraston, C., Seville-Noarbe, I., Bechtol, K., Pforr, J., Pellegrini, P., Gschwend, J., Rosell, A.C., **Abdalla, F.B.** and *et al.* (2017) Environmental dependence of the galaxy stellar mass function in the Dark Energy Survey Science Verification Data. *Monthly Notices of the Royal Astronomical Society.* 466 (1). p.228-247.

Delubac, T., Raichoor, A., Comparat, J., Jouvel, S., Kneib, J.P., Yeche, C., Zou, H., Brownstein, J.R., **Abdalla, F.B.**, Dawson, K. and *et al.* (2017) The SDSS-IV eBOSS: Emission line galaxy catalogues at z = 0.8 and study of systematic errors in the angular clustering. *Monthly Notices of the Royal Astronomical Society.* 465 (2). p.1831-1846.

Tie, S.S., Martini, P., Mudd, D., Ostrovski, F., Reed, S.L., Lidman, C., Kochanek, C., Davis, T.M., Sharp, R., **Abdalla, F.B.** and *et al.* (2017) A Study of Quasar Selection in the Supernova Fields of the Dark Energy Survey. *Astronomical Journal.* 153 (3). p.1-13.

Doctor, Z., Kessler, R., Chen, H.Y., Farr, B., Finley, D.A., Foley, R.J., Goldstein, D.A., Holz, D.E., Kim, A.G., **Abdalla**, **F.B.** and *et al.* (2017) A Search for Kilonovae in the Dark Energy Survey. *Astrophysical Journal.* 837 (1). p.1-17.

Hansen, T.T., Simon, J.D., Marshall, J.L., Li, T.S., Carollo, D., DePoy, D.L., Nagasawa, D.Q., Bernstein, R.A., Drlica-Wagner, A., **Abdalla, F.B.** and *et al.* (2017) An r-process Enhanced Star in the Dward Galaxy Tucana III*. *Astrophysical Journal.* 838 (1). p.1-12.

Lin, H., Buckley-Geer, E., Agnello, A., Ostrovski, F., McMahon, R.G., Nord, B., Kuropatkin, N., Tucker, D.L., Treu, T., **Abdalla**, **F.B.** and *et al.* (2017) Discovery of the Lensed Quasar System DES J0408-5354. *Astrophysical Journal Letters*. 838 (2). p.1-13.



Gerdes, D.W., Sako, M., Zhang, K., Khain, T., Becker, J.C., Annis, J., Wester, W., Bernstein, G.M., Scheibner, C., **Abdalla**, **F.B.** and *et al.* (2017) Discovery and Physical Characterization of a Large Scattered Disk Object at 92 au. *Astrophysical Journal Letters*. 839 (1). p.1-13.

Luque, E., Pieres, A., Santiago, B., Yanny, B., Vivas, A.K., Queiroz, A., Drlica-Wagner, A., Morganson, E., Balbinot, E., **Abdalla, F.B.** and *et al.* (2017) The Dark Engergy Survey view of the Sagittarius stream: discovery of two faint stellar system candidates. *Monthly Notices of the Royal Astronomical Society*. 468 (2017). p.97-108.

Palmese, A., Hartley, W., Tarsitano, F., Conselice, C.J., Lahav, O., Allam, S., Annis, J., Lin, H., Soares-Santos, M., Abdalla, F.B. and *et al.* (2017) Evidence for Dynamically Driven Formation of the GW170817 Neutron Star binary in NGC 4993. *Astrophysical Journal Letters.* 849 (2). p.1-9.

McLeod, M., Balan, S.T. and **Abdalla**, **F.B**. (2017) A joint analysis for cosmology and photometric redshift calibration using cross-correlations. *Monthly Notices of the Royal Astronomical Society*. 466 (3). p.3558-3568.

Diehl, H.T., Buckley-Geer, E.J., Lindgren, K.A., Nord, B., Gaitsch, H., Lin, H., Allam, S., Collett, T.E., Furlanetto, C., **Abdalla**, F.B. and *et al.* (2017) The DES Bright Arcs Survey: Hundreds of Candidate Strongly Lensed Galaxy Systems from the Dark Energy Survey Science Verification and Year 1 Observations. *Astrophysical Journal Supplement Series.* 232 (1). p.1-28.

Albert, A., Anderson, B., Bechtol, K., Drlica-Wagner, A., Meyer, M., Sanchez-Conde, M., Strigari, L., Wood, M., Abbott, T.M.C., **Abdalla**, **F.B.** and *et al.* (2017) Searching for Dark Matter Annihilation in Recently Discovered Milky Way Satellites with Fermi-Lat. *Astrophysical Journal.* 834 (110). p.1-15.

Agnello, A., Lin, H., Buckley-Geer, L., Treu, T., Bonvin, V., Courbin, F., Lemon, C., Morishita, B., Amara, A., **Abdalla**, **F.B.** and *et al.* (2017) Models of the strongly lensed quasar DES J0408 - 5353. *Monthly Notices of the Royal Astronomical Society.* 472 (2017). p.4038-4050.

Aniyan, A. and Thorat, K.

Aniyan, A. and Thorat, K. (2017) Classifying Radio Galaxies with the Convolutional Neural Network. *Astrophysical Journal Supplement Series*. 230 (2). p.1-15.

Asad, K.M.B. and Abdalla, F.B.

Patil, A.H., Yatawatta, S., Koopmans, L.V.E., de Bruyn, A.G., Brentjens, M.A., Zaroubi, S., **Asad, K.M.B.**, Hatef, M., Jelic, V., **Abdalla, F.B.** and *et al.* (2017) Upper Limits on the 21 cm Epoch of Reionization Power Spectrum from One Night with LOFAR. *Astrophysical Journal.* 838 (1). p.1-17.

Bernardi, G.

McKinley, B., Tingay, S.J., Carretti, E., Ellis, S., Bland-Hawthorn, J., Morganti, R., Line, J., McDonald, M., Veilleux, S., **Bernardi, G.** and *et al.* (2017) The jet/wind outflow in Centaurus A: a local laboratory for AGN feedback. *Monthly Notices of the Royal Astronomical Society.* (2017). p.1-17.

deBoer, D.R., Parsons, A.R., Aguirre, J.E., Alexander, P., Ali , Z.S., Beardsley, A.P., **Bernardi, G.**, Bowman, J.D., Bradley, R.F., Carilli, C.L. and *et al.* (2017) Hydrogen Epoch of Reionization Array (HERA). *Publications of the Astronomical Society of the Pacific.* 129 (045001). p.1-27.

Brown, S., Vernstrom, T., Carretti, E., Dolag, K., Gaensler, B.M., Staveley-Smith, L., **Bernardi, G.**, Haverkorn, M., Kesteven, M. and Poppi, S. (2017) Limiting magnetic fields in the cosmic web with diffuse radio emission. *Monthly Notices of the Royal Astronomical Society.* 468 (4). p.4246-4253.

Acedo, E.D., Trott, C.M., Wayth, R.B., Fagnoni, N., **Bernardi, G.**, Wakley, B., Koopmans, L.V.E., Faulkner, A.J. and de Vaale, J.G.B. (2017) Spectral performance of SKA Log-periodic Antennas I: mitigating spectral artefacts in SKA1-LOW 21 cm cosmology experiments. *Monthly Notices of the Royal Astronomical Society.* 469 (3). p.2662-2671.

Govoni, F., Murgia, M., Vacca, V., Loi, F., Girardi, M., Gastaldello, F., Giovannini, G., Feretti, L., Paladino, R., **Bernardi, G.** and *et al.* (2017) Sardinia Radio Telescope observations of Abell 194 The intra-cluster magnetic field power spectrum. *Astronomy and Astrophysics*. 603 (A122). p.1-29.

Feng, L., Vaulin, R., Hewitt, J.N., Remillard, R., Kaplan, D.L., Murphy, T., Kudryavtseva, N., Hancock, P., **Bernardi, G.**, Bowman, J.D. and *et al.* (2017) A Matched Filter Technique for Slow Radio Transient Detection and First Demonstration with the Murchison Widefield Array. *Astronomical Journal.* 153 (3). p.1-16.

Bryan, K.L.H. and Medved, A.J.M.

Bryan, K.L.H. and Medved, A.J.M. (2017) Realistic Clocks for a Universe Without Time. *Foundations of Physics*. (2017). p.1-12.

Bryan, K.L.H. and Medved, A.J.M. (2017) Black Holes and Information: A New Take on an Old Paradox. *Advances in High Energy Physics*. (2017). p.1-8.

Chithambo, M.L.

Chithambo, M.L., Wako, A.H. and Finch, A. (2017) Thermoluminescence of SrAl2O4:Eu2+, Dy3+: Kinetic analysis of a composite-peak. *Radiation Measurements.* 97 (2017). p.1-13.

Mathevula, L.E., Noto, L.L., Mothudi, B.M., **Chithambo**, **M.L.** and Dhlamini, M.S. (2017) Structural and optical properties of sol-gel derived α-Fe2O3 nanoparticles. *Journal of Luminescence*. 192 (2017). p.879-887.

Chithambo, M.L. and Costin, G. (2017) Temperature-dependence of time-resolved optically stimulated luminescence and composition heterogeneity of synthetic α -Al2O3:C. *Journal of Luminescence*. 182 (2017). p.252-262.

Chithambo, M.L. (2017) Thermoluminescence of the main peak in SrAl2O4:Eu2+, Dy3+: Spectral and kinetics features of secondary emission detected in the ultra-violet region. *Radiation Measurements*. 96 (2017). p.29-41.

Chithambo, M.L. and Niyonzima, P.

Chithambo, M.L. and Niyonzima, P. (2017) Radioluminescence of annealed synthetic quartz. *Radiation Measurements*. 106 (2017). p.35-39.

Chithambo, M.L., Seneza, C. and Kalita, J.M.

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Deane, R.

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Dr Zama Katamzi-Joseph (second from left) and Dr John Bosco Habarurema (fourth from left) enjoying coconut juice at a workshop on Kenya. Photo: George Philipas.



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Aniyan, A.

Staats, K., Pantridge, E., Cavaglia, M., Milovanov, I. and **Aniyan**, **A**. TensorFlow Enabled Genetic Programming. *GECCO '17 Genetic and Evolutionary Computation Conference*. Berlin. Germany. July 2017.

Smirnov, O.

Ludick, D.J., Carozzi, T., Davidson, D.B. and **Smirnov, O.** Full-wave analysis of the expanded very large array. *2017 International Conference on Electromagnetics in Advanced Applications (ICEAA)*. Verona. Italy. September 2017.



Department of Political & International Studies

Staff and students in the Department contributed in various ways to keeping our Department a place of intellectual inquiry and vigorous debate.

To keep our Department active in terms of research, we organised regular research-orientated events. Two (2) key ongoing events are:

- Weekly seminar series: Throughout the year, we arrange Friday lunchtime seminars where staff, Postgraduate students and visitors share their research.
- Annual Teach-In: The focus of the Teach-In in 2017 was *The Post-American World* - a lively topic which our visiting speakers tackled adeptly.

We are very happy with our research outputs this year. Our staff, students and associates published four (4) edited books (three (3) of which were edited by our new Associate Professor Alex Amtaika) and thirteen (13) subsidy-earning journal articles. We also presented twenty-two (22) papers at national and international conferences - all while running a very busy undergraduate and Postgraduate teaching programme.

Postgraduates / Graduations

Our graduation ceremony was a very special one as we graduated more Postgraduates than we ever have in the history of our Department. Included among our graduates were four (4) PhD graduates: our own staff member, Dr Siphokazi Magadla, Dr Grace Idahosa, Dr Mike Mavura and Dr Ronald Chipaike. In addition to these PhDs, six (6) students graduated with their Postgraduate Diploma in International Studies, twenty-eight (28) obtained the Honours degrees and eleven (11) their MA degrees.

Distinguished Visitors / International Visits

We were happy to welcome Professor Maria Regina Soares de Lima, our Nelson Mandela Visiting Professor for 2016 and 2017. She taught a course on Brazilian Foreign Policy to our Postgraduate students.

We were also privileged to have other visiting lecturers contribute to our Postgraduate programme: Professor Steven Friedman from the University of Johannesburg taught a course entitled "The Broken Bargain? SA's Contested New Order"; Dr Isaias Chachine presented a course entitled "Community, Justice and Freedom"; and Colombian scholar Fabio Diaz taught a course on "Public Policy: Design and Evaluation."

We also welcomed visitors from Ghana and Gauteng to give of their expertise to our Diploma and Honours programmes regarding questions of peace and conflict as they affect our African continent.

Significant Research Aligned Events

In September 2017, Dr Siphokazi Magadla worked with colleagues from Nelson Mandela University and the University of Cape Town to put together the colloquium, *Celebrating 30 years of Ifi Amadiume's 'Male Daughters, Female Husbands: Gender and Sex in an African Society'*. This very well attended event-stimulated debate about Amadiume's intellectual contribution to gender studies. The contributions to this conference are now being put together to appear as a special issue in the *Journal of Contemporary African Studies*.

Another significant event was our Department's participation in a regional colloquium organised by the South African Association of Political Studies in October 2017. Our Department was able to send ten (10) Postgraduate students to this colloquium. This event provided an opportunity for students to share their research with colleagues from other universities in the Eastern Cape.



Dr Sally Matthews, Head of Department



Books/Chapters/Monographs

Amtaika, A.

Amtaika, A. (2017) Socio-Economic Development Theories in Africa: Policies and Realities. In: Amtaika, A. (ed.). *Socio-Economic Development in Africa: Challenges and Dimensions*. Austin, Texas: Pan African University Press. p.19-54. ISBN: 9781943533268.

Amtaika, A. (2017) Is the Private Sector a Partner of the State in Socio-Economic Development or a Subordinate? The Marxian and Neo-Liberal Viewpoints. In: Amtaika, A. (ed.). *Socio-Economic Development in Africa: Challenges and Dimensions*. Austin, Texas: Pan African University Press. p.55-87. ISBN: 9781943533268.

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Amtaika, A. (2017) Water Reticulation in Rural Households of the Villages of the Vulindlela Tribal District in KwaZulu-Natal: A Burden for Women. In: Amtaika, A. (ed.). *Culture, Democracy and Development*



Students and staff members in the Department setting off for the 2017 SAAPS regional colloquium. Photo: Department of Political and International Studies.

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Matthews, S.

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Matthews, S. and Nqaba, P.

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Nqaba, P.

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Concerts, Exhibitions, Performances, Workshops, Events

Atta-Asamoah, A., Lock, E. and Gardiner, R.C.

Atta-Asamoah, A., Lock, E. and Gardiner, R.C. Panel Discussion. Understanding African Insurgencies today. *International Panel Discussion*. Eden Grove Blue Lecture Theatre, Rhodes University, Grahamstown. South Africa. 3 August 2017.

Birikorang, E.A.

Birikorang, E.A. Seminar. The securitisation of terrorism in West Africa: Actors, approaches and failures. *Weekly Friday Lunchtime Seminar*. Ruth Mompati Seminar Room, Political and International Studies Department, Grahamstown. South Africa. 21 September 2017.

Bischoff, P.H.

Bischoff, P.H. Seminar. African transnationalism in China: at the interface of local, transnational, bilateral and multilateral responses. *Weekly Friday Lunchtime Seminar*. Ruth Mompati Seminar Room, Political and International Studies Department, Grahamstown. South Africa. 17 - 1 March 2017.



de Lima, M.R.S.

de Lima, M.R. and **de Lima**, **M.R.S.** Seminar. Brazil's Foreign Policy and the 'Graduation Dilemma'. *Weekly Friday Lunchtime Seminar*. Ruth Mompati Seminar Room, Political and International Studies Department, Grahamstown. South Africa. 12 May 2017.

Diaz, F.A.

Diaz, F.A. Seminar. Political compromise and peace building - The experience of Colombia's peace process. *Weekly Friday Lunchtime Seminar*. Ruth Mompati Seminar Room, Political and International Studies Department, Grahamstown. South Africa. 29 September 2017.

Handy, P.

Handy, P. Seminar. Exiting violent conflicts: Some lessons from South Africa, Rwanda and Mozambique. *Weekly Friday Lunchtime Seminar*. Ruth Mompati Seminar Room, Political and International Studies Department, Grahamstown. South Africa. 18 August 2017.

Hwami, R.F.

Hwami, R.F. Seminar. An inquiry into the influence of funding on higher education research cultures. *Weekly Friday Lunchtime Seminar*. Ruth Mompati Seminar Room, Political and International Studies Department, Grahamstown. South Africa. 13 October 2017.

Idahosa, G.

Idahosa, G. Seminar. 'I now met a new version of me': The role of individual critical engagement in enabling the transformation of University cultures. *Weekly Friday Lunchtime Seminar*. Ruth Mompati Seminar Room, Political and International Studies Department, Grahamstown. South Africa. 7 April 2017.

Kabwato, L.M.

Kabwato, L.M. Seminar. Madness and non-conformity in Thomas Sankara's Political Thought and Practice (1983-1987). *Weekly Friday Lunchtime Seminar*. Ruth Mompati Seminar Room, Political and International Studies Department, Grahamstown. South Africa. 24 March 2017.

Magadla, S. and Mntambo, L.N.

Magadla, S., Xaba, M.H. and Mntambo, L.N. Public Dialogue. "Yayi lixesha lento ayithethwa!" (It was the time of that which could not pass our lips): women combatants and the armed struggles against apartheid. *Public Dialogue*. General Lecture Theatre, Rhodes University, Grahamstown. South Africa. 24 May 2017.

Mataruse, S.

Mataruse, S. Seminar. Funding Projects versus Funding Struggles: Rethinking Democracy Assistance. *Weekly Friday Lunchtime Seminar*. Ruth Mompati Seminar Room, Political and International Studies Department, Grahamstown. South Africa. 15 September 2017.

Mavura, M.T.

Mavura, M.T. Seminar. Cross-border migration as counter-hegemonic practice in Southern Africa. *Weekly Friday Lunchtime Seminar*. Ruth Mompati Seminar Room, Political and International Studies Department, Grahamstown. South Africa. 26 May 2017.

Moore, C. and Munyuki, C.

Moore, C. and **Munyuki**, C. Seminar. Internationalism in the Global South: The evolution of a Concept. *Weekly Friday Lunchtime Seminar*. Ruth Mompati Seminar Room, Political and International Studies Department, Grahamstown. South Africa. 10 March 2017.

Mtolo, S.

Mtolo, S. Seminar. Walking the Spatial Triad: How do Rhodians experience Rhodes University as a place? *Weekly Friday Lunchtime Seminar*. Ruth Mompati Seminar Room, Political and International Studies Department, Grahamstown. South Africa. 6 October 2017.

Nedziwe, C.L.

Nedziwe, C.L. Seminar. Game changing: A story about bottom-up civil society boundary-crossing practices around gender-related issues in Southern Africa. *Weekly Friday Lunchtime Seminar*. Ruth Mompati Seminar Room, Political and International Studies Department, Grahamstown. South Africa. 8 September 2017.

Ngcobozi, L., Kgabe, V. and Silosini, T.

Ngcobozi, L., Kgabe, V. and Silosini, T. Public Dialogue. "uMama woManyano Ngumfazi": Ubufazi and Motherhood for Methodist Manyano Women. *Public Dialogue*. Barrat 1, Rhodes University, Grahamstown. South Africa. 10 August 2017.

Yacob-Haliso, O.

Yacob-Haliso, O. Seminar. Forging a homeland - the construction of 'home' by returnee refugee women in Liberia. *Weekly Friday Lunchtime Seminar*. Ruth Mompati Seminar Room, Political and International Studies Department, Grahamstown. South Africa. 24 February - 24 January 2017.

Other Publications

Diaz, F.A.

Diaz, F.A. (2017) Will Colombia's most stubborn rebel group agree to peace? In: Diaz Pabon, F.A. (ed.). Colombia: The Conversation.

Diaz, F.A. (2017) Peace makes strides in Colombia, but the battle is far from won. In: Diaz Pabon, F.A. (ed.). Colombia: The Conversation.

Diaz, **F.A.** (2017) Protests in Colombia and South Africa reveal link between inequality and popular uprisings. In: Diaz Pabon, F.A. (ed.). Colombia: The Conversation.

Diaz, **F.A**. (2017) Colombians are fed up with corruption, and everyone seems to be under investigation. In: Colombia: The Conversation.

Diaz, **F.A.** (2017) Relief & Development. In: Diaz Pabon, F.A. (ed.). Demobilization, Reintegration, and The Challenges of Peace Agreements. United States of America: Georgetown University Press.

Diaz, F.A. (2017) Colombia's FARC rebels have rebranded as a political party - now they need a leader. In: Colombia: The Conversation.

Diaz, **F.A.** (2017) The latest threat to peace in Colombia: Congress. In: Diaz Pabon, F.A. (ed.). Colombia: The Conversation.

Magadla, S.

Magadla, S. (2017) OR Tambo and Khumalo, Z. (eds.). *Oliver Tambo: acre by acre in a time of rupture?* Johannesburg: Mail and Guardian.

Magadla, S. (2017) Abafazi, Special Report. In: *Matrifocality and shared motherhood.*

Distinguished Visitors

Adesina, J.O.T., Clarke, Y. and Motsemme, N.

Professor JOT Adesina, Ms Y Clarke and Dr N Motsemme. University of South Africa, Johannesburg, South Africa. *Speakers - Amadiume Colloquium "Celebrating 30 years of Ifi Amadiume's Male Daughters, Female Husbands: Gender and Sex in an African Society"*. September 2017.

Atta-Asamoah, A.

Dr A Atta-Asamoah. Institute for Security Studies, Pretoria, South Africa. *Lecture*. July 2017.

Birikorang, E.A.

EA Birikorang. Kofi Annan International Peacekeeping Training Centre (KAIPTC), Accra, Ghana. *Lecture*. September 2017.

de Lima, M.R.S.

MRS de Lima. Institute of Social and Political Studies, State University of Rio de Janeiro, Rio, Brazil. *Lecture*. April 2017.

Diaz, F.A.

FA Diaz. Institute of Social Studies, Erasmus University, Bogota, Colombia. *Lecture*. September 2017.

Friedman, S.

Professor S Friedman. Director, Centre for the Study of Democracy, Grahamstown, South Africa. *Lecture.* July 2017.

Handy, P.

Dr P Handy. Institute of Security Studies, Pretoria, South Africa. *Lecture.* August 2017.



Mene, W.K.

Mr WK Mene. Africa Economic Relations, Department of Trade & Industry of South Africa, Johannesburg, South Africa. *Lecture*. April 2017.

Mfecane, S.

S Mfecane. Nelson Mandela Metropolitan University, Port Elizabeth, South Africa. *Public Dialogue*. March 2017.

S Mfecane, S Ntshingana and TA Sipungu. Nelson Mandela Metropolitan University, Port Elizabeth, South Africa. *Speaker - Public Dialogue*. March 2017.

Moore, C.

Dr C Moore. University of KwaZulu-Natal, Durban, South Africa. *Speaker - Public Dialogue*. March 2017.

Ndimurwimo, L.A.

LA Ndimurwimo. Nelson Mandela Metropolitan University, Port Elizabeth, South Africa. *Speaker - Friday Seminar*. March 2017.

Pillay, M.

Dr M Pillay. Deputy Director: International Trade in Services, Johannesburg, South Africa. *Speaker - Friday Seminar*. April 2017.

Oobo, M., Mene, W.K., Dlamini-Zuma, N. and Ngwenya, N. Professor M Oobo, Mr WK Mene, Dr N Dlamini-Zuma and Dr N Ngwenya. University of Johannesburg, Johannesburg, South Africa. Speaker - July Teach-In "The Post American World" 17 - 20 July 2017. July 2017.

Yacob-Haliso, O.

O Yacob-Haliso. Babcock University, Nigeria. *Postdoctoral Research Fellow.* February 2017.

Peer Reviewed Subsidy-Earning Journal Research Publications

Acharya, A.

Acharya, A. (2017) After Liberal Hegemony: The Advent of a Multiplex World Order. *Ethics & International Affairs.* 31 (3), p.271-285.

Booi, M., Vincent, L. and Liccardo, S.

Booi, M., Vincent, L. and Liccardo, S. (2017) 'If it ain't broke, don't fix it': Challenges facing institutional transformation of historically white universities. *African Sociological Review.* 21 (1). p.2-19.

Chiwandire, D. and Vincent, L.

Chiwandire, **D**. and Vincent, L. (2017) Wheelchair users, access and exclusion in South African higher education. *African Journal of Disability.* 6 (2017). p.1-9.



Professor Paul-Henri Bischoff (middle) stands with our four (4) 2017 PhD graduates (from left to right): Dr Ronald Chipaike, Dr Siphokazi Magadla, Dr Grace Idahosa and Dr Mike Mavura. Photo: Department of Political and International Studies.

de Lima, M.R.S.

Milani, C.R.S., Pinheiro, L. and **de Lima**, **M.R.S.** (2017) Brazil's foreign policy and the 'graduation dilemma'. *International Affairs*. 93 (3). p.585-605.

de S. Duarte, R. and **de Lima, M.R.S.** (2017) Politicising financial foreign policy: an analysis of Brazilian foreign policy formulation for the financial sector (2003-2015). *Revista Brasileira de Politica Internacional.* 60 (1). p.1-18.

Diaz, F.A.

Diaz, F.A. (2017) Inequality, Social Protests and Civil War. *OASIS: Observatorio de analisis de los sistemas internacionales.* 26 (2017). p.25-39.

Magadla, S.

Magadla, S. (2017) Book Review: Democratic South Africa's foreign policy: Voting behaviour in the United Nations, by Suzanne Graham, London, Palgrave Macmillan, 2016, 310 pp., 114.99 (hardcover), ISBN 978-1-137-59380-1. *South African Journal of International Affairs.* 24 (3). p.417-2418.

Matthews, S.

Matthews, S. (2017) Colonised minds? Post-development theory and the desirability of development in Africa. *Third World Quarterly.* 38 (12). p.2650-2663.

Matthews, S. (2017) Privilege, Poverty, and Pedagogy: Reflections on the Introduction of a Service-Learning Component into a Postgraduate Political Studies Course. *Educational Research for Social Change*. 6 (2). p.45-59.

Munyuki, C. and Vincent, L.

Munyuki, C. and **Vincent, L.** (2017) "It's Tough Being Gay'. Gay, Lesbian and Bisexual Students' Experiences of Being at Home" in South African University Residence Life. *South African Journal of Higher Education*. 31 (4). p.14-33.

Praeg, L.

Praeg, L. (2017) Essential building blocks of the Ubuntu debate; or: I write what I must. *South African Journal of Philosophy.* 36 (2). p.292-304.

Vincent, L. and Liccardo, S.

Booi, M., **Vincent, L.** and **Liccardo, S.** (2017) Counting on demographic equity to transform institutional cultures at historically white South African universities? *Higher Education Research & Development.* 36 (3). p.498-510.

Vincent, L., Idahosa, G. and Msomi, Z.

Vincent, L., Idahosa, G. and Msomi, Z. (2017) Disclaiming/denigrating/dodging: white South African academics' everyday race talk. *African identities*. 15 (3). p.324-338.

Research Papers Presented at Academic/Scientific Conferences (Nonpeer-reviewed Proceedings)

Chiwandire, D.

Chiwandire, D. Partial inclusion approach as a barrier to achieving inclusive education for students with disabilities and employment equity for staff members with disabilities at Rhodes University. *Partial inclusion approach as a barrier to achieving inclusive education for students with disabilities and employment equity for staff members with disabilities at Rhodes University.* Rhodes University, Grahamstown. South Africa. August 2017.

Chiwandire, D. Partial inclusion approach as a barrier to achieving inclusive education for students with disabilities and employment equity for staff members with disabilities at Rhodes University. *3rd Disability Support Research Indaba*. University of KwaZulu-Natal, Durban. South Africa. September 2017.



Chiwandire, D. Decolonising the South African higher education and the labour market environment by valuing and respecting diversity as a way of achieving employment equity and inclusive education for persons with disabilities. *South African Association of Political Studies (SAAPS) Eastern Cape Regional Colloquium.* University of Fort Hare, Bhisho. South Africa. October 2017.

Chiwandire, D. and Vincent, L.

Chiwandire, D. and **Vincent, L.** Wheelchair users, access and exclusion in South African higher education. *University of Johannesburg Colloquium on Disability and Transitions*. University of Johannesburg, Johannesburg. South Africa. September 2017.

Chiwandire, **D**. and **Vincent**, **L**. Constructions of students with disabilities as a threat to academic excellence at historically White South African universities. *8th Interdisciplinary Postgraduate Conference (IPGC)*. Rhodes University, Grahamstown. South Africa. September 2017.

Idahosa, G. and Vincent, L.

Idahosa, G. and Vincent, L. The scales were peeled from my eyes: South African academics coming to consciousness to become agents of change. *15th Development Dialogue conference: "Localizing the Global: Global Development and Social Justice in Practice"*. The Netherlands at the International Institute of Social Studies (ISS), Hague. Netherlands. October 2017.

Magadla, S.

Magadla, S. Political Feminism and Social Justice. *Political Feminism Reflection Group Botswana*. Friedrich Ebert Stiftung offices, Gaborone. Botswana. November 2017.

Makgakge, R.D.

Makgakge, R.D. What it means to decolonize the curriculum: insight from a case study. *UNIZULU Humanities and Social Science conference 2017*. UNIZULU Science Center, Richard's Bay. South Africa. October 2017.

Makgakge, R.D. What does it mean to 'decolonize the curriculum'? Insights from a case study. *South African Association of Political Studies (SAAPS) Eastern Cape Regional Colloquium*. University of Fort Hare, Bhisho. South Africa. October 2017.

Mataruse, P.S.

Mataruse, P.S. Donor Funding and Democracy Activists: Emerging Patterns from Zimbabwe. *South African Association of Political Studies (SAAPS) Eastern Cape Regional Colloquium*. University of Fort Hare, Bhisho. South Africa. October 2017.

Mataruse, S.

Mataruse, **S**. 'Finding my feet': First year Rhodes University former child support grant receiving student's eudaimonic wellbeing in relation to independent financial sustenance. *South African Association of Political Studies (SAAPS) Eastern Cape Regional Colloquium*. University of Fort Hare, Bhisho. South Africa. October 2017.

Matthews, S.

Matthews, S. Decolonising African Studies: Three Questions and Some Tentative Responses. *African Studies Association Second Biennial Conference*. University of Ghana, Accra. Ghana. October 2017.

Matthews, S. Confronting the Colonial Library: Reflections on Writing and Teaching about Africa amidst Calls for a Decolonized Curriculum. *South African Association of Political Studies Regional Colloquium*. University of Fort Hare, Bhisho. South Africa. October 2017.

Monaheng, K.

Monaheng, K. Uncovering women on the frontline of conflict in Africa: a case study of the South African liberation struggle, how women played a critical and active role in the war and in the peace making process. *South African Association of Political Studies (SAAPS) Eastern Cape Regional Colloquium*. University of Fort Hare, Bhisho. South Africa. October 2017.

Mtolo, S.

Mtolo, S. Walking the Spatial Triad: How do Rhodians experience Rhodes University as a place? *South African Association of Political Studies (SAAPS) regional colloquium*. University of Fort Hare, Bhisho. South Africa. October 2017.

Mtolo, S. Walking the Spatial Triad: How do Rhodians experience Rhodes University as a place? *11th Annual Higher Education Conference*. UKZN, Elangeni Hotel. Durban. South Africa. September 2017.

Onokwai, J.C.

Onokwai, J.C. Accountability, Globalization and the Changing Dynamics of the Global Health Regime. *South African Association of Political Studies (SAAPS) Eastern Cape Regional Colloquium*. University of Fort Hare, Bhisho. South Africa. October 2017.

Qoza, P.

Qoza, **P**. Transmission of Affecting contemporary South African Student Movements. *South African Association of Political Studies (SAAPS) Eastern Cape Regional Colloquium*. University of Fort Hare, Bhisho. South Africa. October 2017.

Vincent, L. and Chiwandire, D.

Vincent, L. and Chiwandire, D. Wheelchair users, access and exclusion in South African higher education. *8th University of Zululand Humanities and Social Sciences Conference*. University of Zululand, Richard's Bay. South Africa. October 2017.

Vincent, L. and Idahosa, G.

Vincent, L. and Idahosa, G. The scales were peeled from my eyes: South African academics coming to consciousness to become agents of change. *Dynamics of Changing Higher Education in the Global South Conference*. Muckleneuk Campus, UNISA. Pretoria. South Africa. August 2017.

Vincent, L. and Idahosa, G. 'I now met a new version of me: South African academics becoming agents of change'. *11th Annual Higher Education Conference*. Southern Sun Elangeni, Durban. South Africa. September 2017.



The year 2017 was another productive one for the Psychology Department. Scholarly works include a variety of books, chapters, workshops, peer-reviewed articles, reports and presentations.

Academic staff and students presented their research in South Africa, Canada, England, Wales, Greece, Ireland and Thailand. In particular, many staff and students attended the inaugural Pan-African Psychology Conference in Durban in September 2017, jointly hosted The Pan-African Psychology Union (PAPU) and the Psychological Society of South Africa (PsySSA).

Broad areas of research include:

- Case-study methodology,
- Sexual and reproductive health,
- Gender-based violence,
- Neurocognitive assessment,
- Community-based service learning,
- Psychotherapy and professional practice,
- Psychiatric genomics,
- Organisational psychology,
- Teaching and learning in psychology,
- Disabilities, and
- Alcohol use in pregnancy.

Postgraduates / Graduations

Drs Nicola Wanneburg and Jabulile Mavuso (supervised by Professor Roelf van Niekerk and Professor Catriona Macleod respectively) obtained their PhD degrees, alongside another thirteen (13) Masters students and forty-three (43) Honours students in psychology. Six (6) Masters students and sixteen (16) Honours students graduated with distinction.

Dr Wanneburg is a Postdoctoral Research Fellow in the Psychology Department and Dr Mavuso is working in Johannesburg on research articles based on her doctoral studies.

Significant Research Aligned Events

The Critical Studies in Sexualities and Reproduction (CSSR), led by Professor Catriona Macleod, continues to be a hub of research activities and Postgraduate students. Professor Macleod's SARChI Chair was recently renewed for another five (5)-year term and upgraded from Tier 2 to Tier 1, which means that she is eligible for a further five (5)-year cycle of funding in 2024.

In 2017, Professor Catriona Macleod received the 10th Social Change Award, a departmental award that recognises prominent psychologists for their contribution to social change in the country. She presented a lecture titled; *"The spectacular failure and extraordinary success of Psychology in South* *Africa: the decolonial imperative*". The lecture was a reflection on the simultaneous successes and failures of Psychology, a popular subject at universities, including Rhodes. The award was a fitting acknowledgment of Professor Macleod's contributions to the discipline as the person who initiated the Social Change project ten years ago.

In acknowledgment of her distinguished and highly productive career as a researcher, Professor Macleod was also promoted to *Distinguished Professor* at the end of the year, joining just a handful of the very most successful researchers at the University.

Professor Jacqui Akhurst received her first National Research Foundation (NRF) rating of C2. This brings to five (5) the number of academic staff members in the Psychology Department who have NRF ratings.

The Prabashini Apalsamy award, that commemorates one of the department's most enthusiastic teachers and is awarded each year to the Honours student with the best mark for the research methodology paper, went to Cara Liza Ribeiro.

A number of new staff members joined the department towards the end of the year and the start of the next. These include Mr Duane Booysen, Dr Liezille Jacobs and Dr Grant Freedman.



Professor Charles Young, Head of Department

Department of Psychology



Books/Chapters/Monographs

Edwards, D.J.A.

Fishman, D.B. and Edwards, D.J.A. (2017) The Terrain. In: Fishman, D.B., Messer, S.B., Edwards, D.J.A. and Dattilio, F.M. (eds.). *Case Studies Within Psychotherapy Trials: Integrating Qualitative and Quantitative Methods*. New York: Oxford University Press. p.3-25. ISBN: 9780199344635.

Fishman, D.B., Messer, S.B., Edwards, D.J.A. and Dattilio, F.M. (2017) Reflections and Next Steps: Themes and Lessons Learned. In: Fishman, D.B., Messer, S.B., Edwards, D.J.A. and Dattilio, F.M. (eds.). *Case Studies Within Psychotherapy Trials: Integrating Qualitative and Quantitative Methods*. New York: Oxford University Press. p.337-361. ISBN: 9780199344635.

Edwards, D.J.A. (ed.) (2017) *Case Studies Within Psychotherapy Trials: Integrating Qualitative and Quantitative Methods*. New York: Oxford University Press. ISBN: 9780199344635.

Macleod, C.

Macleod, C., Bhatia, S. and Kessi, S. (2017) Postcolonialism and Psychology: Growing Interest and Promising Potential. In: Willig, C. and Stainton Rogers, w. (eds.). *The SAGE Handbook of Qualitative Research in Psychology*. 2nd Ed. United Kingdom: Sage. p.306-317. ISBN: 9781473925212.

Macleod, C. (2017) 'Adolescent' Sexual and Reproductive Health: Controversies, Rights, and Justice. In: Cherry, A.L., Baltag, V. and Dillon, M.E. (eds.). *International Handbook on Adolescent Health and*

Development: The Public Health Response. Switzerland: Springer International Publishing. p.169-181. ISBN: 9783319407418.

Saville Young, L.

Frosh, S. and **Saville Young**, L. (2017) Psychoanalytic Approaches to Qualitative Research. In: Willig, C. and Stainton Rogers, w. (eds.). *The SAGE Handbook of Qualitative Research in Psychology*. 2nd Ed. United Kingdom: Sage. p.124-140. ISBN: 9781473925212.

Young, C.

Young, C. (2017). An introduction to coping with panic (2nd Ed.). London: Constable & Robinson. ISBN: 9781472138538

Hogan, B., and **Young, C.** (2017). *An introduction to coping with health anxiety (2nd Ed.)*. London: Constable & Robinson. ISBN: 9781472138514.

Concerts, Exhibitions, Performances, Workshops, Events

Bohmke, W. and Moore, S.

Bohmke, W. and Moore, S. Facilitated Discussion. Gender-based violence faced by workers in South Africa: prevalence, theories and debates. *Vuyisile Mini Winter School*. Rhodes University, Grahamstown. South Africa. 12 - 15 July 2017.

Donaldson, N.

Kelland, L. and Donaldson, N. Co-Presenter. Gender dynamics. *Student Leadership Orientation.* Barratt Lecture Hall 2, Grahamstown. South Africa. 2 - 3 February 2017.

Macleod, C.

Macleod, C. Invited Presentation. A supportability reproductive justice framework; possibilities and challenges. *Reproductive Politics in India*



Professor Lisa Young (centre), Ms Nicole Cooke (left) and Ms Sinazo Williams (right) at the inaugural Pan-African Psychology Conference in Durban in September 2017, jointly hosted by The Pan-African Psychology Union (PAPU) and the Psychological Society of South Africa (PsySSA). Both students presented papers at the conference on caregivers of children with disabilities and their experiences of caregiving as well as of participating in a service-learning programme offered by the Psychology Department at RU. Photo: Department of Psychology.

and South Africa workshop. University of Cape Town, Cape Town. South Africa. 23 - 24 May 2017.

Macleod, C. Invited Paper. Dealing with sexual violence in higher education: a three-pronged justice approach. *Law Faculty Symposium on Violence against Women*. University of Cape Town, Cape Town. South Africa. 23 - 27 May 2017.

Macleod, C. Invited Presentation. Rape culture and the sexual violence task team. *South African University Staff Network workshop*. UNISA, Pretoria. South African. 26 - 27 January 2017.

Macleod, C. Invited Presentation. Sexual violence: responses in higher education. The case of Rhodes University. *Centre for Sexualities, Aids and Gender colloquium*. University of Pretoria, Pretoria. South Africa. 17 - 19 March 2017.

Du Plessis, U., Young, C. and Macleod, C.

Du Plessis, U., Young, C. and Macleod, C. Invited Presentation. Review of interventions with regard to alcohol use. *National Alcohol Summit.* ICC, East London. South Africa. 4 - 5 March 2017.

Macleod, C., Young, C., Jearey-Graham, N. and Molokoe, C.K. Macleod, C., Young, C., Jearey-Graham, N. and Molokoe, C.K. Invited Presentation. Alcohol and pregnancy: research in support of the FASfacts programme. *South African Community Epidemiology Network of Drug Use Seminar*. Nelson Mandela University, Port Elizabeth. South Africa. 9 November 2017.

Mavuso, J. and Ndabula, Y.

Mavuso, J. and Ndabula, Y. Facilitated Workshop. What would a more gender equitable citizenship look like for men and women in South Africa? *Vuyisile Mini Winter School.* Rhodes University, Grahamstown. South Africa. 12 - 15 July 2017.

Ndabula, Y., Chitiki, E., Reuvers, M.J. and Bohmke, W.

Jacobs, V., Ndabula, Y., Chitiki, E., Reuvers, M.J. and Bohmke, W. Round Table Discussion. Stories of Struggle: Strategies to Address Sexual Violence. *Vuyisile Mini Winter School.* Rhodes University, Grahamstown. South Africa. 12 - 15 July 2017.



Truter, S.

Truter, S. Workshop Presenter. *Neuropsychological Assessment of Children in South Africa: Practical Application of the NEPSY II.* Makaranga Lodge, Kloof, KwaZulu-Natal. South Africa. 26 - 27 October 2017.

Truter, S. Workshop Presenter. *Neuropsychological Assessment of Children in South Africa: Practical Application of the NEPSY II.* Lord Charles Hotel, Cape Town. South Africa. 16 - 17 October 2017.

Truter, S. Workshop Presenter. *Neuropsychological Tests: A South African Focus*. Premier Hotel, Johannesburg. South Africa. 20 May 2017.

Truter, S. Workshop Presenter. *Neuropsychology: Essential Tools for the Practitioner.* Premier Hotel, Johannesburg. South Africa. 19 May 2017.

Truter, S. Workshop Presenter. *Neuropsychological Tests: A South African Focus.* Hotel Verde, Cape Town Airport, Cape Town. South Africa. 9 May 2017.

Truter, S. Workshop Presenter. *Neuropsychology: Essential Tools for the Practitioner.* Blue Waters Hotel, Durban, KwaZulu-Natal. South Africa. 8 May 2017.

Truter, S. Workshop Presenter. *Neuropsychological Assessment of Children in South Africa: Practical Application of the NEPSY II.* Lynnewood Conference Centre, Pretoria. South Africa. 3 - 4 November 2017.

Truter, S. Workshop Presenter. *Neuropsychology: Essential Tools for the Practitioner.* Hotel Verde, Cape Town Airport, Cape Town. South Africa. 27 March 2017.

Truter, S. Presentation. *Visual Hallucinations (Aug 2017)*. Synapse Optometry Conference. Zorgvliet Estate, Stellenbosch, Cape Town. South Africa. 27 March 2017.

Truter, S. Presenter. The influence on medical insurance on Neuropsychology Practice in Three Southern African Countries. *Symposium presented at the Mid-Year Meeting of the International Neuropsychology Society.* Cape Town International Convention Centre (CTICC), Cape Town. South Africa. 5 - 8 July 2017.

Truter, S. Workshop Presenter. *Neuropsychological Tests: A South African Focus.* Blue Waters Hotel, Durban, KwaZulu-Natal. South Africa. 28 March 2017.

Wilbraham, L.

Wilbraham, L. Presentation - event. Mental illness and mental hospitals in the Eastern Cape of Good Hope Colony, 1875-1910, referring to a case study of a patient. *Talk to Lower Albany Historical Society*. Settler's Park, Port Alfred. South Africa. 19 May 2017.

Other Publications

Shuttleworth-Edwards, A.B.

Shuttleworth-Edwards, A.B. (2017) Critical Pointers for Valid Application of the Wechsler IQ tests in South Africa: WAIS-III, WAIS-IVSA, and WISC-IV. In: *EPASSA News (Newsletter of the Educational Psychology Society of South Africa)*. South Africa: EPASSA.

Shuttleworth-Edwards, A.B. (2017) Practitioner Alert on the Use of the South African WAIS-III and the WAIS-IVSA and WISC-IV. In: *Brainwaves, Newsletter of the South African Clinical Neuropsychological Association (SACNA).* South Africa: SACNA.

Wilbraham, L.

Wilbraham, L. (2017) Mental illness and mental hospitals in the Eastern Cape of Good Hope Colony: A case study. In: *Toposcope*. Grahamstown: Lower Albany Historical Society.

Peer Reviewed Non-Subsidy-Earning Journal Research Publications

Meehan, T.

Easterbrook, C.J. and **Meehan**, **T**. (2017) The Therapeutic Relationship and Cognitive Behavioural Therapy: A Case Study of an Adolescent Girl With Depression. *The European Journal of Counselling Psychology*. 6 (1). p.1-24.

Peer Reviewed Subsidy-Earning Journal Research Publications

Akhurst, J.

Akhurst, J. (2017) Student Experiences of Community-Based Service Learning During Masters' Level Training, as Related to Critical Community Psychology Practice. *Journal for New Generation Sciences*. 15 (1). p.1-20.

Chiweshe, M. and Macleod, C.

Chiweshe, M. and **Macleod, C.** (2017) 'If You Choose to Abort, You Have Acted As an Instrument of Satan': Zimbabwean Health Service Providers' Negative Constructions of Women Presenting for Post Abortion Care. *International Journal of Behavioral Medicine*. 24 (2017). p.856-863.

Chiweshe, M., Mavuso, J. and Macleod, C.

Chiweshe, M., Mavuso, J. and Macleod, C. (2017) Reproductive justice in context: South African and Zimbabwean women's narratives of their abortion decision. *Feminism & Psychology*. 27 (2). p.203-224.

Edwards, D.J.A.

Edwards, D.J.A. (2017) An Interpretative Phenomenological Analysis of Schema Modes in a Single Case of Anorexia Nervosa: Part 1 - Background, Method, and Child and Parent Modes. *Indo-Pacific Journal of Phenomenology.* 17 (1). p.1-13.

Edwards, D.J.A. (2017) An Interpretative Phenomenological Analysis of Schema Modes in a Single Case of Anorexia Nervosa: Part 2 -Coping Modes, Healthy Adult Mode, Superordinate Themes, and Implications for Research and Practice. *Indo-Pacific Journal of Phenomenology*. 17 (1). p.1-12.

Fleischack, A., Macleod, C. and Bohmke, W.

Fleischack, A., Macleod, C. and Bohmke, W. (2017) "The man can use that power", "She got courage" and "Inimba": Discursive resources in counsellors' talk of intimate partner violence: Implications for practice. *Social Work*. 53 (1). p.127-144.

Jearey-Graham, N. and Macleod, C.

Jearey-Graham, **N**. and **Macleod**, **C**. (2017) Gender, dialogue and discursive psychology: a pilot sexuality intervention with South African High-School learners. *Sex Education-Sexuality Society and Learning*. 17 (5). p.555-570.

Knoetze, J.J. and Mcculloch, M.

Knoetze, J.J. and Mcculloch, M. (2017) Reflections on becoming a psychologist: Professional development experiences of students in a South African psychology graduate program. *Journal of Psychology in Africa*. 27 (5). p.472-476.

Lynch, I.

Lynch, I. and Maree, D. (2017) Gender outlaws or a slow bending of norms? South African bisexual women's treatment of gender binaries. *Feminist Theory.* 2017 (2017). p.1-20.

Lynch, I., Swartz, S. and Isaacs, D. (2017) Anti-racist moral education: A review of approaches, impact and theoretical underpinnings from 2000 to 2015. *Journal of Moral Education*. 46 (2). p.129-144.

Sanger, N. and Lynch, I. (2017) 'You have to bow right here': heteronormative scripts and intimate partner violence in women's same-sex relationships. *Culture Health & Sexuality*. (2017). p.1-17.

Macleod, C.

Bloomer, F. K., O'Dowd, K., and Macleod, C. (2017). Breaking the silence on abortion: the role of adult community abortion education in fostering resistance to norms. *Culture, Health & Sexuality.* 19(7), p.709-722.

Kelland, L., Paphitis, S. and Macleod, C. (2017) A contemporary phenomenology of menstruation: Understanding the body in situation and as situation in public health interventions to address menstruation-related challenges. *Women's Studies International Forum*. 63 (2017). p.33-41.

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Macleod, C.I., Beynon-Jones, S. and Toerien, M. (2017). Articulating reproductive justice through reparative justice: case studies of abortion in Great Britain and South Africa. *Culture, Health & Sexuality.* 19(5), p.601-615.

Marecek, J., Macleod, C. and Hoggart, L. (2017) Abortion embedded and embodied in social relations: Challenges for feminist psychology. *Feminism & Psychology.* 27 (2). p.133-143.

Marecek, J., Macleod, C. and Hoggart, L. (2017) Abortion in legal, social, and healthcare contexts. *Feminism & Psychology*. 27 (1). p.4-14.

Macleod, C., Bohmke, W., Mavuso, J., Barker, K. and Chiweshe, M.

Macleod, C., Bohmke, W., Mavuso, J., Barker, K. and Chiweshe, M. (2017) Contesting sexual violence policies in higher education: the case of Rhodes University. *Journal of Aggression, Conflict and Peace Research.* (2017). p.1-10.

Mavuso, J. and Chiweshe, M.

Mavuso, J. and Chiweshe, M. (2017) Book Review: Good Catholics: The battle over abortion in the Catholic Church. Miller Patricia. Berkeley: University of California Press, 2014; 321 pp. ISBN: 978-0-520-28753-2 (pbk). *Feminism & Psychology.* 27 (1). p.114-116.

Nagdee, M.

Carnbell, M.M., Sibeko, G., Mall, S., Baldinger, A., **Nagdee, M.**, Susser, E. and Stein, D.J. (2017) The content of delusions in a sample of South African Xhosa people with schizophrenia. *BMC Psychiatry*. 17 (41). p.1-9.

Campbell, M.M., Susser, E., Mall, S., Mqulwana, S.G., Mndini, M.M., Ntola, O.A., **Nagdee, M.**, Zingela, Z., Van Wyk, S. and Stein, D.J. (2017) Using iterative learning to improve understanding during the informed consent process in a South African psychiatric genomics study. *PLoS One.* 12 (11). p.1-11.

Nhamo-Murire, M. and Macleod, C.

Nhamo-Murire, M. and Macleod, C. (2017) Lesbian, gay, and bisexual (LGB) people's experiences of nursing health care: An emancipatory nursing practice integrative review. *International Journal of Nursing Practice*. (2017). p.1-10.

Shuttleworth-Edwards, A.B.

Shuttleworth-Edwards, A.B. (2017) Response to Taylor and de Beer (2017) on population based norms and IQ testing. *South African Journal of Psychology*. (2017). p.1-4.

Steenkamp, J.

Padmanabhanunni, A., Jaffer, L. and **Steenkamp, J.** (2017) Menstruation experiences of South African women belonging to the ama-Xhosa ethnic group. *Culture Health & Sexuality.* (2017). p.1-11.

Toerien, M.

Holmes, E.J.B., **Toerien, M.** and Jackson, C. (2017) The Interactional Bind of "Just [Do X]". *Research On Language and Social Interaction*. (2017). p.1-16.

Toerien, M. (2017) Deferring the Decision Point: Treatment Assertions in Neurology Outpatient Consultations. *Health Communication*. (2017). p.1-11.

Bergen, C., Stivers, T., Barnes, R.K., Heritage, J., McCabe, R., Thompson, L. and **Toerien**, **M**. (2017) Closing the Deal: A Cross-Cultural Comparison of Treatment Resistance. *Health Communication*. (2017). p.1-12.

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Wilbraham, L.

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Peer-reviewed Proceedings

Akhurst, J.

Lovell, J. and **Akhurst**, J. Whose PARty is this? Problematizing a participatory evaluation process in a community cooperative. *Collaborative and Sustainable Learning for a Fairer World: Rhetoric or Reality.* North-West University, Potchefstroom Campus. South Africa. November 2015.

Kabungaidze, T.

Terera, S.R., Ngirande, H. and **Kabungaidze, T.** The Influence of Employee Engagement on Employee Organisational Commitment in the South African Health Sector. *11th International Business Conference.* White Sands Hotel, Dar es Salaam. Tanzania. September 2017.

Research Papers Presented at Academic/Scientific Conferences (Non-peer-reviewed Proceedings)

Akhurst, J.

Akhurst, J. and Mitchell, C. Community-based service learning and critical community psychology: towards a theoretical basis. *Community Engagement Conference*. Durban University of Technology, Durban. South Africa. May 2017.

Akhurst, J. Critical community psychology practice and communitybased service learning: trainee psychologists' experiences. *Society for Community Research and Action Biennial conference*. University of Ottawa, Ottawa. Canada. June 2017.

Akhurst, J., Olvitt, L.L. and Ward-Smith, C.F. A community psychology take on decolonised, ethics-led and embodied nature-based pedagogies for culturally diverse youth. *Society for Community Research and Action Biennial conference*. University of Ottawa, Ottawa. Canada. June 2017.

Akhurst, J. and Wilbraham, L.

Akhurst, J., Van Der Riet, M. and Wilbraham, L. Reflections on a peerled participatory sexual health intervention at two South African universities: breaking the silence and building agency. *International Society of Critical Health Psychology*. University of Loughborough, Loughborough. UK. July 2017.

Van Der Riet, M., **Akhurst**, **J.** and **Wilbraham**, **L.** Interventionist participatory research: Auntie Stella promotes sexual health in two South African university settings. *Psychology for Society Pan-African Psychology Union conference*. ICC, Durban. South Africa. September 2017.

Bennie, R. and Bohmke, W.

Bennie, R. and Bohmke, W. What are we telling people to do about rape? A Q-Methodological approach to audience reception of public awareness messages on sexual violence. *1st Pan-African Psychology Union Conference*. ICC, Durban, South Africa, September 2017.

Bohmke, W., Macleod, C., Mavuso, J., Barker, K. and Chiweshe, M.

Bohmke, W., Macleod, C., Mavuso, J., Barker, K. and Chiweshe, M. "We will not be silenced": A three-pronged justice approach to sexual offences and rape culture at a South African university. *Building Bridges in a Complex World Conference*. Chania, Crete, Greece, July 2017.

Chitiki, E., Macleod, C. and Marx, J.

Chitiki, E., Macleod, C. and Marx, J. Participation in the silent protest: Promoting or inhibiting inclusive and process-based understanding of



sexualities in relation to sexual violence? *1st Pan African Psychology Union Conference*. ICC, Durban. South Africa. September 2017.

Chiweshe, M. and Macleod, C.

Chiweshe, M. and Macleod, C. You do not have a choice at that point in time: Stories of women's abortion experiences in Zimbabwe. *1st Pan African Psychology Union Conference*. ICC, Durban. South Africa. September 2017.

Cooke, N. and Saville Young, L.

Cooke, **N**. and **Saville Young**, **L**. A case study of the impact and process of a service-learning programme for one particular caregiver and her child with physical disabilities. *1st Pan African Psychology Congress*. ICC, Durban. South Africa. September 2017.

Du Plessis, U. and Macleod, C.

Du Plessis, **U**. and **Macleod**, **C**. Governing pregnant women: The case of alcohol consumption. *1st Pan African Psychology Union Conference*. ICC, Durban. South Africa. September 2017.

Du Toit, R.R. and Macleod, C.

Du Toit, **R.R**. and **Macleod**, **C**. "Your baby comes out in bits and pieces": Sharing procedural information in the pre-abortion counselling interaction. *1st Pan African Psychology Union Conference*. ICC, Durban. South Africa. September 2017.

Fleming, T.

Fleming, T. A psychosocial analysis of students' experiences of service learning with disabled children in South Africa. *IARSLCE (International Association for Research in Service Learning and Community Engagement) annual international conference*. NUI, Galway. Ireland. September 2017.

Jearey-Graham, N. and Macleod, C.

Jearey-Graham, N. and Macleod, C. Gendered boundaries, recognition, and desire: a pilot sexuality intervention with South African High School learners. *International Association for the Study of Sexuality, Culture and Society conference*. Chulalongkorn University, Bangkok. Thailand. July 2017.

Knoetze, J.J.

Knoetze, J.J. Sandworlds, storymaking and shared therapeutic documents: The Therapeutic Sandstory Method. *Meeting the Challenges: Reflections on Narrative Therapy in South Africa.* Helderberg NG Kerk Conference Centre, Somerset West. South Africa. August 2017.

Lynch, I. and Macleod, C.

Lynch, I., Timol, F., Essop, R. and Macleod, C. Starting young: Intimate partner violence among very young adolescents in Cape Town, South Africa. *1st Pan African Psychology Union conference*. ICC, Durban. South Africa. September 2017.

Macleod, C.

Feltham-King, T. and **Macleod, C.** Configurations of risk, race and culture in the construction of the teenaged pregnant woman. *1st Pan African Psychology Union conference*. ICC, Durban. South Africa. September 2017.

Macleod, C. and Tracey, T.

Macleod, C. and Tracey, T. Queering heterosexuality? Undoing the disciplinary technologies of surveillance and confession, and the technologies of relationship. *1st Pan African Psychology Union conference*. ICC, Durban. South Africa. September 2017.

Macleod, C., Bohmke, W., Mavuso, J. and Chiweshe, M.

Macleod, C., Bohmke, W., Mavuso, J. and Chiweshe, M. Contesting sexual violence policies in higher education: The case of Rhodes University. *1st Pan African Psychology Union conference*. ICC, Durban. South Africa. September 2017.

Macleod, C., Lynch, I. and Morison, T.

Macleod, C., Lynch, I., Morison, T. and Sanders, B. Girls want to be pleaded: The sexual hustler blurring the lines of sexual coercion and consent. *International Association for the Study of Sexuality, Culture* and Society conference. Chulalongkorn University, Bangkok. South Africa. July 2017.

Marx, J. and Macleod, C.

Marx, J. and Macleod, C. Predators, perverts and prostitutes, or some unintended consequences of colonial and apartheid era social engineering. *1st Pan African Psychology Union Conference*. ICC, Durban. South Africa. September 2017.

Mavuso, J. and Macleod, C.

Mavuso, J. and Macleod, C. 'Unwise choices': Problematising unintended pregnancy and abortion in nurses' and counsellors' narrated experiences of providing pre-abortion counselling. *1st Pan African Psychology Union Conference*. ICC, Durban. South Africa. September 2017.

Molokoe, C.K., Young, C. and Macleod, C.

Molokoe, C.K., Young, C. and Macleod, C. Alcohol use during pregnancy in the Eastern Cape: Research in support of FASfacts intervention. *1st Pan African Psychology Union Conference*. ICC, Durban. South Africa. September 2017.

Moore, S., Lynch, I., Chiweshe, M. and Macleod, C.

Moore, S., Lynch, I., Chiweshe, M. and Macleod, C. Policy responses to the sexual and reproductive health and rights of queer youth in the global South. *1st Pan African Psychology Union conference*. ICC, Durban. South Africa. September 2017.

Ndabula, Y., Young, L.S. and Macleod, C.

Ndabula, Y., Young, L.S. and Macleod, C. Sistering and sexual socialisation: A psychosocial study of Xhosa women's 'sex and reproduction talk' with their sisters. *1st Pan African Psychology Union Conference*. ICC, Durban. South Africa. September 2017.

Reuvers, M.J. and Macleod, C.

Reuvers, M.J. and Macleod, C. Women's experiences of pregnancy support: An intersectionality approach. *1st Pan African Psychology Union Conference*. ICC, Durban. South Africa. September 2017.

Robertson, C.A., Marx, J. and Macleod, C.

Robertson, C.A., Marx, J. and **Macleod, C.** Blessers, naps, and the friendzone: Colloquial terms in young adults talk about sexual desire, sexual practices and sexual subjectivities. *1st Pan African Psychology Union Conference*. ICC, Durban. South Africa. September 2017.

Shuttleworth-Edwards, A.B.

Bickell, A., Pienaar, I., **Shuttleworth-Edwards**, A.B. and **Radloff**, S. WISC-IV test performance of Grade 3 Xhosa-speaking children: An extension of a prior South African normative database. *22nd Annual South African Psychology Congress*. Emperor's Palace, Johannesburg. South Africa. September 2017.

Shuttleworth-Edwards, A.B. Highlights and Hurdles: An international forum on Clinical Neuropsychology. *Invited symposium presented at the Mid-Year Meeting of the International Neuropsychology Society.* Cape Town International Convention Centre (CTICC), Cape Town. South Africa. July 2017.

Shuttleworth-Edwards, A.B. State of the art research and development in the field of sports concussion. *Invited symposium presented at the Mid-Year Meeting of the International Neuropsychology Society.* Cape Town International Convention Centre (CTICC), Cape Town. South Africa. July 2017.

Shuttleworth-Edwards, A.B. Interaction effects reveal cognitive vulnerability in late adolescent rugby playing scholars. *Invited symposium presented at the Mid-Year Meeting of the International Neuropsychology Society.* Cape Town International Convention Centre (CTICC), Cape Town. South Africa. July 2017.

Shuttleworth-Edwards, A.B. Countrywide IQ test norming in culturally diverse contexts: A review. An international forum on Clinical Neuropsychology. *Invited symposium presented at the Mid-Year Meeting of the International Neuropsychology Society.* Cape Town International Convention Centre (CTICC), Cape Town. South Africa. July 2017.

Department of Psychology





Some of the participants at Elize Morkel's Meeting the Challenges: Reflections on Narrative Therapy in South Africa conference in Somerset West in August 2017, with Stephen Madigan and David Nylund. Photo: Department of Psychology.

Truter, S.

Truter, S., Menachem, M., Alejandra, M., Diego, R. and Arango-Lasprilla, J.C. The Status of Neuropsychology in South Africa. *Mid-Year Meeting of the International Neuropsychology Society*. Cape Town International Convention Centre (CTICC), Cape Town. South Africa. July 2017.

Truter, S. and Shuttleworth-Edwards, A.B.

Truter, S., Tau, P., Thulare, S.I., Methermbu, S.A., Kene, S., Polden, K. and Shuttleworth-Edwards, A.B. Investigating the development of the NEPSY-II for use in a multicultural pediatric population. *Highlights and Hurdles: An international forum on Clinical Neuropsychology. Invited symposium presented at the Mid-Year Meeting of the International Neuropsychology Society.* Cape Town International Convention Centre (CTICC), Cape Town. South Africa. July 2017.

Vorster, A.C. and Macleod, C.

Vorster, A.C. and Macleod, C. "It's not an abortion": Silencing and stigma surrounding late termination of pregnancy and 'feticide'. *1st Pan African Psychology Union conference*. ICC, Durban. South Africa. September 2017.

Williams, S.O. and Saville Young, L.

Williams, S.O. and Saville Young, L. "So I am fine, but I wasn't fine": An interpretive phenomenological study of the experiences of particular caregivers of children with disabilities. *1st Pan African Psychology Conference*. ICC, Durban. South Africa. September 2017.

Zoccola, D. and Shuttleworth-Edwards, A.B.

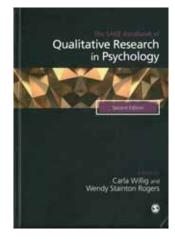
Zoccola, D., Shuttleworth-Edwards, A.B. and Radloff, S. Tackling, concussion and the 'ding' effect for players of club level Rugby Union. 22nd Annual South African Psychology Conference. Emperor's Palace, Johannesburg. South Africa. September 2017.

Zoccola, D., Shuttleworth-Edwards, A.B. and Radloff, S.

Neurocognitive effects of head and body collisions on players of club level rugby union. *Invited symposium presented at the Mid-Year Meeting of the International Neuropsychology Society.* Cape Town International Convention Centre (CTICC), Cape Town. South Africa. July 2017.

Zondo, S.

Zondo. S. A comparative analysis of students' attitudes towards statistics using blended learning vs traditional learning. *Annual Research Conference held by the Society of Research in Higher Education*. Newport, Wales. December 2017.





Rhodes Business School

2017 was a very productive year for the Business School, with an increase in research activities from 2016.

Our hosting of the Archbishop Thabo Makgoba Development Trust (ATMDT) Annual Lecture on Values Based Leadership was once again a great success, with former First Lady, Graça Machel Mandela delivering the third in the series. She can best be described as a global citizen and hence her message transcended many dimensions.

Whilst the focus of the lecture is about values based leadership, Ms Machel Mandela placed it fair and square on a values based society. The statistics she provided on the levels of gender and child violence shocked the audience to the core. Rather than just presenting the solution, she challenged us to demonstrate outrage, make the change and most particularly as institutions of higher learning, provide the architecture that will contribute to us addressing these societal issues. As she stated most bluntly, "*Don't wait for leadership, we'll be disappointed. Start with ourselves, and our families, we can make the change*".

During the course of 2017, we ran twenty-one (21) Rhodes University accredited certificate short course programmes, with two hundred and seventy-three (273) Certificates of Competence being issued. This in addition to a number of training workshops that we run for various organizations.

We signed Memoranda of Understanding for academic cooperation with International Business School Americas, Brazil and City Business School, Russia.

Postgraduates / Graduations

One (1) PhD, seventeen (17) MBA and fifty-one (51) Post Graduate Diploma in Enterprise Management (of whom thirteen (13) were our first cohort of part-time students) candidates graduated. The MBA Fellowship Award recipients as voted by their peers, was jointly shared by Leon Soko and Maëva Ternal, the ATMDT Prize recipient for the Responsible Leadership essay was Dino Giovannoni and the inaugural FNB Economics Prize recipient was Juan Haasbroek.

Distinguished Visitors

Mr GG Alcock. Minanawe Mass Marketing and Events, Johannesburg, South Africa. *Business Forum, How sustainable is the informal economy?* May 2017.

Ms GS Machel Mandela. Former First Lady, The Graça Machel Trust, Johannesburg, South Africa. *The Archbishop*



Former First Lady, Graça Machel Mandela delivering her lecture at the Archbishop Thabo Makgoba Development Trust (ATMDT) Annual Lecture on Values Based Leadership. Photo: Rhodes Business School.

Thabo Makgoba Development Trust, 3rd Annual Lecture on Values Based Leadership. October 2017.

Mr J Stone. Jabu Stone Natural Hair Care, Johannesburg, South Africa. *Business Forum, Youth entrepreneurship: What must we do?* September 2017.

Ms M Verwoerd. Former MP and South African Ambassador to Ireland, Cape Town, South Africa. Lecture, The State of play in politics today. September 2017.

International Visits

Professor Noel Pearse continues to have visiting status at Faculty of Economics, University of Ljubljana, Slovenia.

Mr Evert Knoesen presented two (2) modules at Montpellier Business School, France on Economics and Gender Justice.

In 2017, we hosted two (2) international visiting academics, Dr Charles Bassey from University of Leicester, England, who taught on Responsible Leadership and Professor Vlado Dimovksi from University of Ljubljana, Slovenia, who taught on Ethical Organization.



Significant Research Aligned Events

A number of research publications have arisen from collaborative research that the School has been involved with both locally and internationally.

The essence of the School is "Leadership for Sustainability". This focus on topics of leadership and sustainability has received renewed emphasis, with the School's involvement in collaborative initiatives that are related to the Sustainable Development Goals (SDG).

In particular, the delivery of the Certificate in School Leadership for Principals and their Deputies as part of the Vice-Chancellor's Schools Initiative, has been aligned with SDG 4: "Quality Education".

Furthermore, the involvement of the School in the University Consortium on Holistic Wellness provides for local initiatives that contribute to SDG 3: "Good Health and Wellbeing". This has seen the School being involved in an initiative in health literacy amongst peer educators at Roberts University, which has also led to engaged research opportunities and conference publications. This demonstrates a growing focus on engaged research.

PUBLICATIONS

Books/Chapters/Monographs

Mohapeloa, M.M.E.

Mohapeloa, M.M.E. (2017) An Integrated Framework for Stimulating Entrepreneurial Behaviour: A South African Example. In: Branch, J., Horsted, A. and Nygaard, C. (eds.). *Teaching and Learning Entrepreneurship in Higher Education*. Faringdon, UK: Libri Publishing. p.203-228. ISBN: 9781911450122.

Pearse, N.J.

Pearse, N.J. (2017) Change Management in a VUCA World. In: Elkington, R., Van der Steege, M., Glick-Smith, J. and Moss Breen, J. (eds.). *Visionary Leadership in a Turbulent World: Thriving in the New VUCA Context.* UK: Emerald Group Publishing Limited. p.81-104. ISBN: 9781787142435.

Skae, F.O.

Skae, F.O. (ed.) (2017) *Managerial Finance*. 8th Ed. Durban: LexisNexis (Pty) Ltd. ISBN: 9780409124590.

Peer Reviewed Subsidy-Earning Journal Research Publications

Mohapeloa, M.M.E.

Mohapeloa, M.M.E. (2017) Developing an entrepreneurial mindset within the social sector: A review of the South African context. *African Journal of Science, Technology, Innovation and Development.* 9 (5). p.645-652.

Pearse, N.J.

Paphitis, S. and **Pearse**, **N.J.** (2017) Developing and Implementing a Service-learning Course into an MBA Programme: Critical Perspective from Students. *Journal for New Generation Sciences*. 15 (1). p.140-156.

Another area of collaborative research was conducted with Rhodes University Community Engagement on the servicelearning programme within the MBA programme of the Business School, as well as a focus on health leadership.

Collaboration with the Global Leadership Initiative (GLI), an international network of consultants and researchers working in the area of leadership, has resulted in a book publication and a journal article.

Lastly, it has been pleasing to note the publications arising from supervised student research, as well as the Certificate Programme offered as preparation for PhD candidates.



Professor Owen Skae, Director

Elkington, R., **Pearse**, **N.J.**, Moss, J., Van der Steege, M. and Martin, S. (2017) Global leaders' perceptions of elements required for effective leadership development in the twenty-first century. *Leadership & Organization Development Journal*. 38 (3). p.1038-1056.

Manhanzva, R., Marara, P., Duxbury, T., Bobbins, A.C., **Pearse, N.J.**, Hoel, E., Mzizi, T. and Srinivas, S.C. (2017) Gender and leadership for health literacy to combat the epidemic rise of Non-Communicable Diseases. *Health Care for Women International.* 38 (3). p.833-847.

Pearse, N.J. (2017) Service of followers as a leadership competency: a social exchange perspective. *Journal of Management Development.* 36 (3). p.361-375.

Peer-reviewed Proceedings

Bedser, M.B. and Pearse, N.J.

Bedser, M.B. and Pearse, N.J. Servant Leadership and Quality of Work Life amongst Contact Centre Employees. *5th International Conference on Management, Leadership and Governance.* Wits Business School, University of the Witwatersrand, Johannesburg. South Africa. March 2017.

Mohapeloa, M.M.E.

Mohapeloa, M.M.E. Review of Literature on Social Value: Gap Determinant. *4th International Conference on Business Innovation and Growth: Sustainable Business Innovation - the Key to Transforming and Growing Economies*. University of Botswana, Kasane. Botswana. July 2017. **Rhodes Business School**





Pearse, N.J. (2017) Change Management in a VUCA world. In: Elkington, R., Van der Steege, M., Click-Smith, J. and Moss Breen, J. (eds.). Visionary Leadership in a Turbulent World: Thriving in the New VUCA Context. Photo: Rhodes Business School.





Research Papers Presented at Academic/Scientific Conferences (Nonpeer-reviewed Proceedings)

Knoesen, E.P.

Knoesen, E.P. Teaching Economics for Social Justice at Business Schools: A Rhodes Business School Case Study. *11th IBC Conference*. White Sands Hotel, Dar es Salaam. Tanzania. September 2017.

Mohapeloa, M.M.E.

Mohapeloa, M.M.E. Effects of Silo mentality on corporate ICT's business model. *The 11th International Conference of Business Excellence on Strategy, Complexity and Energy in changing times.* Calea Griviei, Bucharest. Romania. March 2017.

Pearse, N.J.

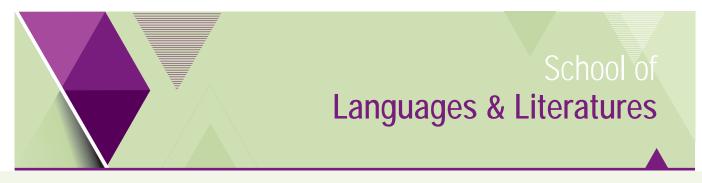
Srinivas, S.C., Duxbury, T., Marara, P., Limson, J., Manhanzva, R., Pearse, N.J., Davy, J., Mzizi, T., Tandlich, R. and Hornby, D. Womencentered health promotion for health care challenges. *Asia-Pacific University Engagement Network Conference*. Penang. Malaysia. April 2017.

Pearse, N.J., Sharma, S., Srinivas, S.C., Tandlich, R., Chigumete,

T.G., Nagaraju, K. and Mzizi, T. Culturally-sensitive and contextspecific workplace health promotion on physical activity for the support staff at Rhodes University. *Thirteenth Ergonomics Society of South Africa Conference/ First ErgoAfrica Conference/Third African Symposium on Human Factors and Aviation Safety*. Birchwood Hotel, Johannesburg. South Africa. September 2017.

Pearse, N.J. and Simataa, G.

Pearse, N.J. and Simataa, G. Talent management: a case study of Namibia's Directorate of Civil Aviation (DCA) in securing talent for aviation safety. *The Thirteenth Ergonomics Society of South Africa Conference/ First ErgoAfrica Conference/Third Africa Symposium on Human Factors and Aviation Safety.* Birchwood Hotel, Johannesburg. South Africa. September 2017.



The School of Languages is a large department made of six (6) Sections: African Languages, Afrikaans and Netherlandic, Chinese, Classical, French and German Studies.

Postgraduates / Graduations

The School of Languages & Literatures graduated ten (10) PhDs and three (3) MAs in 2017. This is the first time that the School has achieved such results.

Every single PhD presented a particular case, and is worth mentioning. Some theses were written in languages other than English (isiXhosa, and French), while others were dealing with sign language, indigenous music, edition and translation, etc. The titles were very diversified, and they translate the intensity of research undertaken in order to achieve these results:

- Ganiso, MN. Sign language in South Africa: Pedagogic approaches, policy developments and new directions. Supervisor: Professor RH Kaschula.
- Ishaya, NS. Transgression et métissage: Une lecture de l'œuvre d'Adelaëde Fassinou. (Transgression and transcultural blending: Reading the work of Adelaide Fassinou). Supervisor: Professor PK Mwepu.
- Kunju, HW. IsiXhosa ulwimi lwabantu abangesosininzi eZimbabwe: Ukuphila nokulondolozwa kwaso. Supervisor: Professor RH Kaschula.
- Mafrika, AE. The life and literary works of Peter Tshobiso Mtuze - A critical analysis. Supervisor: Professor RH Kaschula.
- Mazwi, NRM. Edition, translation and critical analysis of biographical poems contributed by Sek Mqhayi to early isiXhosa newspapers. Supervisor: Professor P Maseko. Cosupervisor: Professor RH Kaschula.
- McConnachie, BE. Indigenous and traditional music in the school classroom: A re-evaluation of the South African Indigenous African Music (IAM) curriculum. Supervisor: Professor RH Kaschula. Co-supervisor: Dr L Watkins.
- Mzite, M. Étude postcoloniale: une analyse thématique et stylistique de quelques œuvres en littérature africaine francophone. Supervisor: Professor PK Mwepu.
- Nkaongami, JB. L'étude comparative des éléments merveilleux dans trois épopées africaines: Soundjata ou l'épopée mandingue, Emperor Shaka the great: A Zulu epic et Nsongo' a lianja: L'épopée nationale des nkundo. Supervisor: Dr AN Mukenge.
- Nxasana, T. Nontsizi Mgqwetho's The Nation's Bounty: A prophetic voice towards an African literary theory. Supervisor: Professor RH Kaschula.
- Sithole, E. From dialect to "official" language: Towards the intellectualisation of Ndau in Zimbabwe. Supervisor: Professor D Nkomo. Co-supervisor: Mrs B Nosilela.

Distinguished Visitors / International Visits

The School of Languages & Literatures hosted Emeritus Professor Ekkerhard Wolff, Chair: African Linguistics; University of Leipzig, as part of Hugh le May Fellowship. Professor Wolff gave several lectures on African languages and cultures, including: "Linguistic Plurality and Diversity - Why the 'North' cannot understand the 'South': When European experience clashes with African reality". Professor Wolff continued his visit at the School of Languages & Literatures from October 2017 to March 2018.

As part of the African Humanities Programme (AHP), the School of Languages & Literatures hosted Dr Kayode Ayobami Atilade from the Department of Foreign Languages, Obafemi Awolowo University, Ile-Ife Osun State, Nigeria. Dr Atilade is an expert in Francophone African Literature from North Africa.

In December, Professor PK Mwepu was hosted by the University of Queensland (Brisbane), where discussions were held in connection with the introduction of African Studies in Australia. Contacts were made, and are currently being made, with Professor Anne Le Guinio, in order for the two (2) institutions, Rhodes University and the University of Queensland, to cooperate in this field and share the necessary expertise in terms of teaching and research.

Significant Research Aligned Events

In 2017, the School of Languages & Literatures continued to organise Postgraduate seminars at individual sections. Postgraduate students and Postdoctoral Research Fellows presented papers in their particular disciplines. We hope that this trend will continue into 2018.



Professor Patrice Kabeya Mwepu, Head of Department

School of Languages & Literatures



PUBLICATIONS

Books/Chapters/Monographs

Docrat, Z.

Docrat, Z. (2017) The fissure between language and law in a multilingual constitutional democracy: The case of Lourens *v* Speaker of the National Assembly and Others. In: Ralarala, M.K., Barris, K., Ivala, E. and Siyepu, S. (eds.). *African Languages and Language Practice Research in the 21st Century: Interdisciplinary Themes and Perspectives*. South Africa: CASAS. p.279-298. ISBN: 9781920294151.

Docrat, Z. and Kaschula, R.H.

Docrat, Z., Kaschula, R.H. and Ralarala, M.K. (2017) The Exclusion of South Africa sign language speakers in the criminal justice system: A case-based approach. In: Ralarala, M.K., Barris, K., Ivala, E. and Siyepu, S. (eds.). *African Languages and Language Practice Research in the 21st Century: Interdisciplinary Themes and Perspectives.* South Africa: CASAS. p.261-277. ISBN: 9781920294151.

Domingo, R.S.C. and Fourie, R.B.J.

Weber, U.S., Domingo, R.S.C. and Fourie, R.B.J. (2017) Beyond Language: German Studies in a South African university context. In: Kaschula, R.H., Maseko, P. and Wolff, H.E. (eds.). *Multilingualism and Intercultural Communication: A South African Perspective*. Johannesburg: Wits University Press. p.323-335. ISBN: 9781776140268.

Du Toit, J.E. and Maseko, P.

Du Toit, J.E. and Maseko, P. (2017) Language and media: isiXhosa in Journalism and Media studies at South African Universities. In: Kaschula, R.H., Maseko, P. and Wolff, H.E. (eds.). *Multilingualism and Intercultural Communication: A South African Perspective*. Johannesburg: Wits University Press. p.223-246. ISBN: 9781776140268.

Jadezweni, M.

Jadezweni, M. and Mfazwe-Mojapelo, L.R. (2017) Achieving public acceptability of taboo words translated to isiXhosa. In: Ralarala, M.K., Barris, K., Ivala, E. and Siyepu, S. (eds.). *African Languages and Language Practice Research in the 21st Century: Interdisciplinary Themes and Perspectives*. South Africa: CASAS. p.201-223. ISBN: 9781920294151.

Joseph, M.V., Frans, N. and Ramani, E.

Joseph, M.V., Frans, N. and Ramani, E. (2017) Teacher development: promoting a biliteracy approach to epistemic access. In: Kaschula, R.H., Maseko, P. and Wolff, H.E. (eds.). *Multilingualism and Intercultural Communication: A South African Perspective*. Johannesburg: Wits University Press. p.194-207. ISBN: 9781776140268.

Kaschula, R.H.

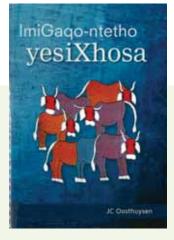
Kaschula, R.H. (2017) Technauriture as a Platform to Create an Inclusive Environment for the Sharing of Research. In: Merolla, D. and Turin, M. (eds.). *Searching for Sharing: Heritage and Multimedia in Africa*. Cambridge: Open Book Publishers. p.41-59. ISBN: 9781783743186.

Kaschula, R.H. and Maseko, P.

Kaschula, R.H. and Maseko, P. (2017) Researching the intellctualisation of African langauges, multilingualism and education. In: Kaschula, R.H., Maseko, P. and Wolff, H.E. (eds.). *Multilingualism and Intercultural Communication: A South African Perspective*. Johannesburg: Wits University Press. p.19-33. ISBN: 9781776140268.

Kaschula, R.H. and Mostert, A.M.

Kaschula, R.H. and Mostert, A.M. (2017) Language policy in South Africa through the Sapir-Whorf "looking glasses". In: Kaschula, R.H.,



Language and Development in Africa Perceptions, Ideologies and Challenges



Maseko, P. and Wolff, H.E. (eds.). *Multilingualism and Intercultural Communication: A South African Perspective*. Johannesburg: Wits University Press. p.283-300. ISBN: 9781776140268.

Kaschula, R.H., Maseko, P. and Wolff, H.E.

Kaschula, R.H., Maseko, P. and Wolff, H.E. (ed.) (2017) *Multilingualism* and Intercultural Communication: A South African Perspective. Johannesburg: Wits University Press. ISBN: 9781776140268.

Kunju, H.W. and Kaschula, R.H.

Kunju, H.W. and Kaschula, R.H. (2017) Music, literature and multilingualism in the Eastern Cape Opera Company. In: Kaschula, R.H., Maseko, P. and Wolff, H.E. (eds.). *Multilingualism and Intercultural Communication: A South African Perspective*. Johannesburg: Wits University Press. p.313-322. ISBN: 9781776140268.

Maseko, P. and Wolff, E.

Maseko, P. and Wolff, E. (2017) Language empowerment and intellectualisation through multilingual higher education in South Africa. In: Kaschula, R.H., Maseko, P. and Wolff, H.E. (eds.). *Multilingualism and Intercultural Communication: A South African Perspective.* Johannesburg: Wits University Press. p.34-60. ISBN: 9781776140268.

Mukenge, A.N.

Mukenge, A.N. (2017) Axel Gauvin, Mohamed Toihiri et Lomami Tchibamba: Des styles à la croisée des chemins. In: Malela, B.B., Rasoamanana, L. and Tchokothe, R.A. (eds.). *Les Littératures francophones de l'archipel des Comores*. Paris: Classiques Garnier. p.343-359. ISBN: 9782406062370.

Nkomo, D.

Nkomo, D. and Maseko, B. (2017) Sixteen officially recognised languages: Milestones and challenges for linguistic democracy in Zimbabwe. In: Ralarala, M.K., Barris, K., Ivala, E. and Siyepu, S. (eds.). *African Languages and Language Practice Research in the 21st Century: Interdisciplinary Themes and Perspectives*. South Africa: CASAS. p.241-259. ISBN: 9781920294151.

Nkomo, D. (2017) IsiXhosa dictionaries, language learning intercultural communication. In: Kaschula, R.H., Maseko, P. and Wolff, H.E. (eds.). *Multilingualism and Intercultural Communication: A South African Perspective*. Johannesburg: Wits University Press. p.112-127. ISBN: 9781776140268.

Nkomo, D. and Maseko, P.

Gambushe, W., **Nkomo, D.** and **Maseko, P.** (2017) Using African languages to teach Science in higher education. In: Kaschula, R.H., Maseko, P. and Wolff, H.E. (eds.). *Multilingualism and Intercultural Communication: A South African Perspective*. Johannesburg: Wits University Press. p.247-261. ISBN: 9781776140268.

Oosthuysen, J.C.

Oosthuysen, J.C. (2017) ImiGaqo-ntetho yesiXhosa. Bloemfontein: SUN MeDIA. ISBN: 9789283573911.



Weber, U.S.

Weber, U.S., Domingo, R.S.C. and Fourie, R.B.J. (2017) Beyond Language: German Studies in a South African university context. In: Kaschula, R.H., Maseko, P. and Wolff, H.E. (eds.). *Multilingualism and Intercultural Communication: A South African Perspective*. Johannesburg: Wits University Press. p.323-335. ISBN: 9781776140268.

Wolff, E.

Wolff, E. (2016) *Language and Development in Africa: Perceptions, Ideologies and Challenges.* Cambridge: Cambridge University Press. ISBN: 9781107088559.

Concerts, Exhibitions, Performances, Workshops, Events

Mukenge, A.N.

Mukenge, A.N. Workshop. *La littérature francophone de nos jours. Workshop*. Université de Lubumbashi, Lubumbashi. Congo. 17 April - 18 January 2017.

Mwepu, P.K.

Mwepu, P.K. Experts, PhD Proposals on French Studies Evaluation and Discussion. Études doctorales en Afrique du Sud. *Études doctorales en Afrique du Sud.* University of Cape Town, Cape Town. South Africa. 10 -14 October 2017.

Nkaongami, J.B.

Nkaongami, J.B. Workshop. L'épopee madingue: Soundiata. *Workshop in African Literature*. Centre for African Literature Studies, Pietermaritzburg. South Africa. 5 - 10 June 2017.

International Visits

Mwepu, P.K.

Mwepu, **P.K**. University of Queensland, Brisbane, Australia. "Discuter les études africaines francophones aujourd'hui". *Un bilan mitigé*. 15 - 18 December 2017.

Distinguished Visitors

Ntshingana, S.

S Mfecane, S Ntshingana and TA Sipungu. Nelson Mandela Metropolitan University, Port Elizabeth, South Africa. *Speaker - Public Dialogue*. March 2017.

Other Publications

Mukenge, A.N.

Mukenge, A.N. (2017). Book Review: *Aggarwal, Kusum (Dir). 2016. Les francophonies postcoloniales: textes et contextes.* In: French Studies in Southern Africa.

Peer Reviewed Non-Subsidy-Earning Journal Research Publications

Kaschula, R.H.

Mostert, A., Lisney, B., Maroko, G.M. and **Kaschula**, **R.H.** (2017) From Technauriture to Cultauriture: Developing a Coherent Digitisation Paradigm for Enhancing Cultural Impact. *International Journal of Society, Culture & Language (IJSCL)*. 5 (2). p.37-48.

Peer Reviewed Subsidy-Earning Journal Research Publications

Kaschula, R.H.

Kaschula, R.H. (2017) Intellectualisation of isiXhosa literature: the case of Jeff Opland. *Tydskrif vir letterkunde*. 54 (2). p.5-25.

Maalim, H.A.

Maalim, H.A. (2017) Students' underachievement in English-medium

subjects: The case of secondary school in Zanzibar. *Southern African Linguistics and Applied Language Studies*. 35 (1). p.53-62.

Maseko, P.

Maseko, P. (2017) Exploring the History of the Writing of isiXhosa: An Organic or an Engineered Process? *International journal of African renaissance studies*. 12 (2). p.81-96.

Mfaba, P.W.

Mfaba, P.W. (2017) Inkululeko Isentabeni, Ncedile Saule. Pretoria: Bard Publishers. 2010. ISBN 9781919690704 1919690700. *South African journal of African languages/Suid-Afrikaanse tydskrif vir Afrikatale.* 37 (2017). p.263-266.

Mose, P.N.

Mose, P.N. (2017) Language-in-Education Policy in Kenya: Intention, Interpretation, Implementation. *Nordic journal of African studies*. 26 (3). p.215-230.

Mwepu, P.K.

Mwepu, P.K. (Editor). (2017). French Studies in Southern Africa. 47 (1). 255 pages.

Nkomo, D.

Nkomo, D. (2017) The Dictionary in Examinations at a South African University: A Linguistic or a Pedagogic Intervention? *Lexikos 27.* (2017). p.346-377.

Sithole, E. and Nkomo, D.

Sithole, E. and Nkomo, D. (2017) Lost and Found: The Value of a Little Known Bilingual Dictionary Towards the Intellectualization of Ndau. *Lexikos.* 27 (2017). p.478-493.

Xaba, M.

Masola, A. and **Xaba**, **M**. (2017) "What Is a Place": Exploring Place and Displacement in Lauretta Ngcobo's Novel Cross of Gold. *Scrutiny2*. 22 (1). p.52-63.

Xaba, M. (2017) Poetry: Found Poems from the Novel and They Didn't Die. *Scrutiny2*. 22 (1). p.16-21.

Peer-reviewed Proceedings

Mose, P.N.

Mose, P.N. Devolving the language Resource in Kenya: a Study of Public Perceptions. *KESSA*. Atlanta Marriott Marquis, Atlanta. USA. September 2017.

Research Papers Presented at Academic/Scientific Conferences (Nonpeer-reviewed Proceedings)

Malamis, D.

Malamis, D. Defining the Gods: the lost and surviving Orphic Hymns. Conceptualising the Divine: Revelations, Internalisations and Identifications with the Divine in the Greek, Near Eastern and African Worlds'. North-West University, Potchefstroom. South Africa. April 2017.

Mukenge, A.N.

Mukenge, **A.N.** La revisitation des lieux dans Pays sans chapeau et L'énigme du retour de Dany Laferrière. *Pour une géo-critique du texte et du cinéma francophones*. Macgill University, Montreal. Canada. May 2017.

Mwepu, P.K.

Mwepu, **P.K.** "Leurre et lueur. Approche critique d'une écriture du mensonge". *Australian Society for French Studies Conference 2017 Truth and Representation / Vérité et Représentation*. Australian National University, Canberra. Australia. December 2017.



The Department has had another extremely productive year in terms of research output and Postgraduate throughput. Professor Lucien van der Walt made a significant contribution to the Department's research output by publishing three (3) chapters in edited volumes and presenting five (5) conference papers.

Professor Kirk Helliker, meanwhile, has continued his exceptional higher degree supervision record with four (4) of his doctoral and master's students graduating this year.

Postgraduates / Graduations

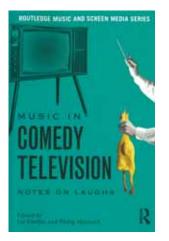
Thirty-two (32) honours, two (2) with distinction, one (1) master's by thesis (with distinction), six (6) master's by coursework/ dissertation, one (1) with distinction, and four (4) PhD students graduated.

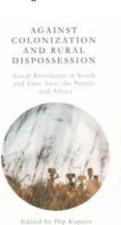
The four (4) PhD candidates graduating this year were supervised by Professors Kirk Helliker, Gilton Klerck, Monty Roodt, and Valerie Møller. Their doctoral theses focused on different regions and included topics on the construction of household livelihood strategies in Harare; a sociological study of naming in times of social change, with a focus on statistical problems in empirical onomastic research; the role of social capital in enhancing community resilience to natural disasters in Muzarabani district in Zimbabwe; and the impact of South African business on employment relations in Mozambique.

Significant Research Aligned Events

Members of staff and Postgraduate students published short papers in the media, including in *Alternativa Libertaria* and *Zabalaza, Africa is a Country, Pambazuka New,* and *The Conversation.* Leroy Maisiri, a PhD candidate in the Department, co-produced several research reports.

Brilliant Xaba, also a PhD candidate, won the prize for Best Student Paper at the 2017 Annual Congress of the South





African Sociological Association (SASA), which was held at the University of the North West, Mafikeng.

Staff members and Postgraduate students presented papers at numerous conferences, both national and international, throughout the year, including the South African Sociological Association (SASA) Annual Conference in July.

Professor Gilton Klerck, Professor Lucien van der Walt and Mr Kanyiso Ntikinca are part of the steering committee of the Labour Studies Seminar Series, an interdisciplinary programme between the Neil Aggett Labour Studies Unit (NALSU), Economics & Economic History, History, and Sociology.

In 2017, the Labour Studies Seminar Series ran eleven (11) public events, including three (3) book launches. The Series has grown into perhaps the largest and best attended seminar series in the economic and social sciences on campus, with a notable turnout of students.



Professor Gilton Klerck, Head of Department



PUBLICATIONS

Books/Chapters/Monographs

Bialakowsky, A.L.

Bialakowsky, A.L. (2017) Dialogos sobre el conocimiento la complejidad, el desarrollo y la geopolitica. In: *Las Encrucijadas Abiertas: America Latina Y Caribe: Sociedad y Pensamiento Critico Abya Yala (Tomo II)*. Argentina: CEFIS-AAS. p.17-28.

Bialakowsky, A.L. (2017) De los exilios en la (in)quietud de lo movil y los saberes en juego. In: *Intellectual generations in movement: Argentina-Mexico-Chile-France / Generaciones Intelectuales En Movimiento: Argentina-Mexico-Chile-France.* Ciudad Autonoma de Buenos Aires: TeseoPress. p.9-30.

Byrne, S. and Van Der Walt, L.

Byrne, S., Ulrich, N. and Van Der Walt, L. (2017) Red, Black and Gold: FOSATU, South African 'Workerism,' 'Syndicalism' and the Nation. In: Webster, E.C. and Pampallis, K. (eds.). *The Unresolved National Question in South Africa: Left Thought under Apartheid.* Johannesburg: Wits University Press. p.254-273. ISBN: 9781776140220.

Drewett, M.

Drewett, M. (2017) Censorship, Religion and Popular Music. In: Partridge, C. and Moberg, M. (eds.). *The Bloomsbury Handbook of Religion and Popular Music*. London: Bloomsbury. p.43-53. ISBN: 9781474237345.

Gunnigle, P.

Gunnigle, **P**., Brewster, C. and Morely, M. (2017) European industrial relations: change and continuity. In: Brewster, C. and Hegewisch, A. (eds.). *Policy and Practice in European Human Resource management.* 2nd Ed. London: Routledge. p.139-153. ISBN: 9781138294523.

Helliker, K.

Helliker, K. (2017) 'We Give Off a Lot of Heat But Not a Lot of Light': NGOs and Land Advocacy in Zimbabwe, 1995-2005. In: Matthews, S. (ed.). *NGOs and Social Justice in South Africa and Beyond*. Durban: University of KwaZulu-Natal Press. p.75-99. ISBN: 9781869143282.

Martinez Mullen, C. and Mapadimeng, M.S.

Martinez Mullen, C. and Mapadimeng, M.S. (2017). Leisure and Consumption: Youth escapism in South Africa through illegal substances. In: Dwyer, T., Gorshkov, M.K., Modi, I., Li, C. & Mapadimeng, M.S. (eds.) 2017. *Handbook of the Sociology of Youth in BRICS Countries*. Campinas, Brazil: World Scientific Publisher. ISBN: 978-981-3148-38-3.

Naidoo, L., Klerck, G. and Helliker, K.

Naidoo, L., Klerck, G. and Helliker, K. (2017) Resisting Accumulation by Dispossession: Organization and Mobilization by the Rural Poor in Contemporary South Africa. In: Kapoor, D. (ed.). *Against Colonization and Rural Dispossession: Local Resistance in South and East Asia, the Pacific and Africa.* London: Zed Books. p.187-208. ISBN: 9781783609437.

Nardi, C.

Nardi, C. (2017) The Mockumentary Sitcom: The Discomfort of Fake Realism. In: Giuffre, L. and Hayward, P. (eds.). *Music in Comedy Television: Notes on Laughs*. London: Routledge. p.73-87. ISBN: 9781138193581.

Nardi, C. (2016) Sound and Racial Politics: Aural Formations of Race in a Color-Deaf Society. In: Papenburg, J.G. and Schulze, H. *Sound as Popular Culture: A Research Companion*. USA: MIT Press. p.77-87. ISBN: 9780262033909. Nardi, C. (2016) Critical Listening. In: Papenburg, J.G. and Schulze, H. *Sound as Popular Culture: A Research Companion*. USA: MIT Press. p.395-402. ISBN: 9780262033909.

Sishuta, H.B. and Doyle, A.R.

Sishuta, H.B. and Doyle, A.R. (2017) South Africa: Control of Biodiversity in the Context of Biopiracy. In: Akpan, W. and Moyo, P. (eds.). *Revisiting Environmental and Natural Resource Questions in Sub-Saharan Africa*. Newcastle on Thynne: Cambridge Scholars Publishing. p.57-74. ISBN: 9781443886512.

Van Der Walt, L.

Van Der Walt, L. (2017) 'All Workers Regardless of Craft, Race or Colour': The First Wave of IWW Activity and Influence in South Africa. In: Cole, P., Struthers, D. and Zimmer, K. (eds.). *Wobblies of the World: A Global History of the IWW*. London: Pluto Press. p.271-287. ISBN: 9780745399607.

Van Der Walt, L. (2017) Anarchism and Marxism. In: Jun, N. (ed.). Brill's *Companion to Anarchism and Philosophy*. Leiden: Brill. p.505-558. ISBN: 9789004356887.

Concerts, Exhibitions, Performances, Workshops, Events

Van Der Walt, L.

Van Der Walt, L. Presentation. The Political Economy of the Rhodes Industrial Action. *Seminar on Students and the Strike*. Rhodes University, Grahamstown. South Africa. 28 April 2017.

Van Der Walt, L. and Byrne, S.

Van Der Walt, L., Ulrich, N. and Byrne, S. Presentation. Learning from Radical 1980s Unionism: FOSATU's 'Workerism,' Its Power and Its Limits. *Workshop on 'People's Power,' 'Workers' Control' and Grassroots Politics in South Africa: Rethinking Practices of Self-Organisation and Anti-apartheid Resistance in the 1980s.* Orange Farm Human Rights Advice Centre, Drieziet extension, Orange Farm. South Africa. 24 June 2017.

Van Der Walt, L. and Maisiri, L.J.

Van Der Walt, L. and Maisiri, L.J. Design, facilitation and delivery. Women, Workers, Land Reform: What Can we learn from the Russian Revolution? *Workshop for Unemployed People's Movement (UPM)*. Stone Crescent Hotel, Grahamstown. South Africa. 10 - 12 December 2017.

Creative Writing

Bialakowsky, A.L.

Bialakowsky, A.L. and Costa, M.I. (2017) Ciencias Sociales. In: Versiones y reversiones sobre las poblaciones trabajadoras extinguibles.

Distinguished Visitors

Sipungu, T.A.

S Mfecane, **S Ntshingana** and **TA Sipungu**. Nelson Mandela Metropolitan University, Port Elizabeth, South Africa. *Speaker - Public Dialogue*. March 2017.

Other Publications

Basnet, J.B.

Basnet, J.B., Uprety, L., Ravanera, R.R., Marzan, A. and Demaluan,

Department of Sociology



J. (2017) From the Farmland to the Table: Exploring the Links between Tenure and Food Security. In: *From the Farmland to the Table: Exploring the Links between Tenure and Food Security.*

Peer Reviewed Non-Subsidy-Earning Journal Research Publications

Bhatasara, S.

Bhatasara, **S**. (2017) Towards a Sociology of Adaptation to Rainfall Variability in Rural Zimbabwe: The Case of Charewa in Mutoko. *Fudan Journal of the Humanities and Social Sciences*. 10 (2017). p.547-568.

Bialakowsky, A.L.

Bialakowsky, A.L. (2017) De Los Exilios En La (In)Quietud De Lo Movil Y Los Saberes En Juego. *Horizontes Sociológicos: Revista de la Asociancion Argentina de Sociolgia.* 4 (7). p.36-38.

Bialakowsky, A.L. (2017) Acerca De La Cultura, La Ciencia Y Los Movimientos Sociales En Sus Correspondencias. *Horizontes Sociológicos: Revista de la Asociancion Argentina de Sociolgia.* 5 (9). p.115-120.

Tomazic, A.C. and **Bialakowsky**, A.L. (2017) Desde la Colonialidad del Trabajo hacia el Trabajo Sustentable? *Controversias y Concurrencias Latinoamericanas*. 9 (14). p.1-18.

Bialakowsky, A.L. and Tomazic, A.C. (2017) El trabajo sustentable interrogado. Relexiones sobre su dinamica historica y prospectiva. *Controversias y Concurrencias Latinoamericanas.* 9 (14). p.1-30.

Wilson, J.K.

Wilson, J.K. (2017) Unfolding Knowledge on Sexual Violence Experienced by Black Lesbian Survivors in the Townships of Cape Town, South Africa. *European Journal of Social Sciences Education and Research*. 10 (1).

p.7-15.

Peer Reviewed Subsidy-Earning Journal Research Publications

Bhatasara, S.

Bhatasara, S. (2017) Rethinking climate change research in Zimbabwe. *Journal of Environmental Studies and Sciences*. 7 (2017). p.39-52.

Gunnigle, P.

O'Sullivan, M., Turner, T., Lavelle, J., MacMahon, J., Murphy, C., Ryan, L., **Gunnigle**, **P**. and O'Brien, M. (2017) The role of the state in shaping zero hours work in an atypical liberal market economy. *Economic and Industrial Democracy*. (2017). p.1-20.

Monaghan, S.T., Lavelle, J. and **Gunnigle**, P. (2017) Mapping networks: Exploring the utility of social network analysis in management research and practice. *Journal of Business Research*. 76 (2017). p.136-144.

Monaghan, S.T., **Gunnigle**, **P**. and Lavelle, J. (2017) Firm-location dynamics and subnational institutions: creating a framework for collocation advantages. *Industry and Innovation*. (2017). p.1-22.

Jha, P.

Jha, P. (2017) Global Issues: India's Peasant Rebellions at the Current Juncture. *Global labour journal*. 8 (3). p.252-257.

Klerck, G.

Klerck, G. (2017) 'Breaking the wire': The evolution of employee voice in Namibia. *Advances in Industrial and Labor Relations*. 23. p. 193-223.

Kwet, M.F.

Kwet, M.F. (2017) Operation Phakisa Education: Why a secret? Mass surveillance, inequality, and race in South Africa's emerging national e-education system. *First Monday.* 22 (12). p. 1-10.

Research Papers Presented at Academic/Scientific Conferences (Nonpeer-reviewed Proceedings)

Kambarami, F.C.

Kambarami, F.C. Impact of Information Communication Technologies on the Post Office: Do Postal Services Have a Sustainable Future? *8th Interdisciplinary Postgraduate Conference*. Rhodes University, Grahamstown. South Africa. September 2017.

Madzivire, S.C.

Madzivire, S.C. The Social Construction of Young Women's Sexuality in 21st Century Zimbabwe. *South African Sociological Association (SASA) Annual Conference*. University of the North West, Mafikeng. South Africa. July 2017.

Mathekga, J.M.

Mathekga, J.M. The Retail Sector Growth, Expansion, Employment and Income Inequality: A Case Study of Shoprite and Pick 'n Pay in South Africa and Namibia. *2nd Multi/Interdisciplinary Research Conference*. University of Namibia, Windhoek. Namibia. July 2017.

Ngoma, A.L.

Ngoma, A.L. Black Middle Class: Predatory or Productive? *Seminar: The Rise of South Africa's Middle Class - Myths and Realities.* Freedom Park Sanctuary/Nordic Africa Institute, Pretoria. South Africa. November 2017.

Ngoma, A.L. "Bring your Friends Batswafang": Pentecostalising the Black Middle Class. 2017 Annual National Doctoral Conference: National Institute for Humanities and the Social Sciences (NIHSS). Birchwood Hotel and OR Tambo Conference Centre, Boksburg. South Africa. November 2017.

Ngoma, A.L. "Blessed and Highly Favoured": Pentecostalised Urbanism and the Black Middle Class. *Colloquium: Ifi Amaidume: Celebrating 30 years of Male Daughters and Female Husbands*. Rhodes University, Grahamstown. South Africa. September 2017.

Ngoma, A.L. Pentecostal Urbanism: Shaping Black Middle Classes. *"Race and Class: Approaches and Debates" colloquium*. University of the Witwatersrand, Johannesburg. South Africa. September 2017.

Sibuyi, L.N.

Sibuyi, L.N. Understanding the Issues: Tensions between South Africa's Current Industrial Policy Framework, Electricity Supply and the Automotive Industry Manufacturing Sector. *South African Sociological Association (SASA) Annual Conference*. University of the North West, Mafikeng. South Africa. July 2017.

Sipungu, T.A.

Sipungu, T.A. "Sociologising the experiences of gay men within the Methodist Church of Southern Africa (MCSA) using Ifi Amadiume instead of Pierre Bourdieu". *Colloquium: Ifi Amaidume: Celebrating 30 years of Male Daughters and Female Husband.* Rhodes University, Grahamstown. South Africa. September 2017.

Van Der Walt, L.

Van Der Walt, L. The Industrial and Commercial Workers Union in South West Africa: Syndicalism, Garveyism and resistance in South African-ruled Namibia, 1920-1925. *South African Historical Society biennial conference*. University of the Witwatersrand, Johannesburg. South Africa. June 2017.

Van Der Walt, L. Internal Democracy, Participative Unionism and Union Renewal: Perspectives from Anarcho-Syndicalism. *Challenges for Trade Unions in Sub-Saharan Africa: The Members are the Union, Aren't They?* University of the Witwatersrand, Johannesburg. South Africa. October 2017.

Van Der Walt, L. 1917-2017: The Russian Revolution and its Relevance Today. *Labour Studies Seminar Series*. Rhodes University, Grahamstown. South Africa. October 2017.



Van Der Walt, L. Soviets, Revolution and Workers' Democracy: An Anarchist/ Syndicalist Perspective. *1917 Russian Revolution Centenary Festival.* Workers Museum, Newtown, Johannesburg. South Africa. November 2017.

Van Der Walt, L. and Byrne, S.

Van Der Walt, L., Ulrich, N. and Byrne, S. Red, Black and Gold: FOSATU, South African 'Workerism,' 'Syndicalism' and the Nation. *South African Historical Society biennial conference*. University of the Witwatersrand, Johannesburg. South Africa. June 2017.

Xaba, M.B.

Xaba, M.B. From Land Dispossession to Land Restitution: Understanding the Post-Settlement Livelihoods of Land Restitution Beneficiaries in Maclean town, Eastern Cape, South Africa. *8th Interdisciplinary Postgraduate Conference*. Rhodes University, Grahamstown. South Africa. September 2017.

Xaba, M.B. Restitution or Relocation? Questioning the Meanings and Success of Land Restitution in South Africa. *South African Sociological Association (SASA) Annual Conference*. University of the North West, Mafikeng. South Africa. July 2017.

Xaba, M.B. The Capabilities Approach to an Understanding of the Land Restitution Programme in South Africa: The Maclean town and Salem Restitution Cases. *Human Development and Capabilities Association (HDCA) Annual Conference*. The Westin, Protea Hotel, Mowbray, Cape Town. South Africa. September 2017.



The Department of Statistics continued pursuing a broad range of research interests and activities during 2017.

Professor Radloff's research collaborations with the Departments of Entomology (Kind Saud University, Saudi Arabia), Management and Psychology resulted in four (4) peerreviewed journal articles and three (3) conference presentations including a invited symposium presentation at the International Neurophysiology Society meeting held in Cape Town.

Professor Raubenheimer's Bayesian accelerated life testing presentation at the International Statistical Institute Regional Statistical Conference held in Bali was very well received.

Dr Chinomona's presented a poster on the development of a semi-parametic spline based predictive model for HIV at the Royal Statistical Society International Conference in Glasgow.

Mr Southey won the best Masters student poster competition with his research on Bayesian hierarchical modelling in spatial epidemiology, which he presented at the South African Statistical Association's annual conference held in Bloemfontein.

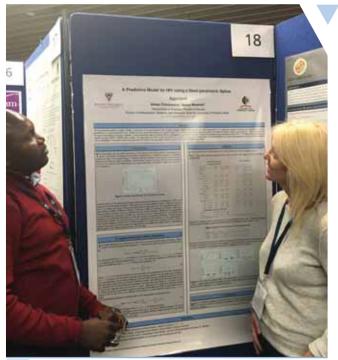
Mr Izally continued reading towards his doctorate and attended the Bayesian biostatistics workshop hosted by Stellenbosch University.

Postgraduates / Graduations

Two (2) students graduated with Masters of Science in the Department of Statistics, Mr Southey attained a distinction. Of the five (5) Bachelor of Science Honours in the Department of Statistics graduates, Mr Baba and Ms Franklin both attained distinctions. Two (2) students completed their fourth year of the Bachelor of Business Science program in the department. Ms Mcewan attained a distinction in joint Bachelor of Science Honours in Human Kinetics, Ergonomics and Statistics. Five (5) students attained distinctions in Mathematical Statistics 3. Ms Amy Langston was the top third year student in the Faculty of Science with distinctions in Mathematical Statistics and Mathematics.

Distinguished Visitors / International Visits

The Department of Statistics hosted the Eastern Cape Chapter of the South African Statistical Association meeting in April. Professor AJ van der Merwe from the Department of Mathematical Statistics and Actuarial Science at the University of the Free State presented papers on outlier detection in the



Dr Chinomona discussing his poster with a conference delegate at the Royal Statistical Society International Conference held in Glasgow. Photo: Department of Statistics.

one-way variance components model and on residual analysis and outliers in a two-way random effects model. The staff and Postgraduate students attended Professor van der Merwe's presentation on Bayesian methods for comparing process capability indices at the Nelson Mandela University.



Mr Jeremy Baxter, Head of Department



PUBLICATIONS

Concerts, Exhibitions, Performances, Workshops, Events

Izally, S.R.

Izally, S.R. Attend. Bayesian Biostatistics Workshop. *Bayesian Biostatistics Workshop*. Stellenbosch University, Stellenbosch. South Africa. 20 - 24 November 2017.

Peer Reviewed Non-Subsidy-Earning Journal Research Publications

Mazengera, H.

Mazengera, H. (2017) Derivation of a Stochastic Loan Repayment Model for Valuing a Revenue-Based Loan Contract. *Annals of Financial Economics*. 12 (2017). p.1-29.

Peer Reviewed Subsidy-Earning Journal Research Publications

Radloff, S.

Hassan, A.M.A., Giovanetti, M., Raweh, H.S.A., Owayss, A.A., Ansari, M.J., Nuru, A., **Radloff, S.** and Alqarni, A.S. (2017) Nectar secretion dynamics of *Ziziphus nummularia*: A melliferous species of dry land ecosystems. *Saudi Journal of Biological Sciences*. 24 (2017). p.1470-1474.

Adgaba, N., Al-Ghamdi, A.A., Getachew, A., Tadesse, Y., Belay, A., Ansari, M.J., **Radloff, S.** and Sharma, D. (2017) Characterization of honeys by their botanical and geographical origins based on physicochemical properties and chemo-metrics analysis. *Journal of Food Measurement and Characterization.* 11 (3). p.1106-1117.

Radloff, S.J.

Louw, L., Muriithi, S.M. and Radloff, S.J. (2017) The relationship between transformational leadership and leadership effectiveness in

Kenyan indigenous banks. *SA Journal of Human Resource Management.* 15 (2017). p.1-11.

Research Papers Presented at Academic/Scientific Conferences (Nonpeer-reviewed Proceedings)

Chinomona, A.

Chinomona, A. and Mwambi, H. A Predictive Model for HIV using Semi-parametric Spline Approach. *The Royal Statistical Society International Conference*. University of Strathclyde, Glasgow. Scotland. September 2017.

Radloff, S.

Zoccola, D., Shuttleworth-Edwards, A.B. and Radloff, S. Tackling, concussion and the 'ding' effect for players of club level Rugby Union. *22nd Annual South African Psychology Conference*. Emperor's Palace, Johannesburg. South Africa. September 2017.

Bickell, A., Pienaar, I., **Shuttleworth-Edwards, A.B.** and **Radloff, S.** WISC-IV test performance of Grade 3 Xhosa-speaking children: An extension of a prior South African normative database. *22nd Annual South African Psychology Congress*. Emperor's Palace, Johannesburg. South Africa. September 2017.

Zoccola, D., Shuttleworth-Edwards, A.B. and Radloff, S.

Neurocognitive effects of head and body collisions on players of club level rugby union. *Invited symposium presented at the Mid-Year Meeting of the International Neuropsychology Society.* Cape Town International Convention Centre (CTICC), Cape Town. South Africa. July 2017.

Raubenheimer, L.

Raubenheimer, L. Bayesian accelerated life testing. *International Statistical Institute Regional Statistics Conference*. BICC and Hotel Westin, Bali. Indonesia. March 2017.

Southey, R.R., Raubenheimer, L. and Radloff, S.

Southey, R.R., Raubenheimer, L. and Radloff, S. Bayesian hierarchical modelling with application in spatial Epidemiology. *The South African Statistical Association (SASA) Conference*. University of the Free State, Bloemfontein. South Africa. November 2017.



Professor Raubenheimer (Supervisor) with Mr Southey at the presentation for the best Masters poster at the SASA conference. Mr Gao Maribe received the best PhD student presentation award, with his supervisor Dr Andrehette Verster (UFS). Photo: Department of Statistics.



During 2017, the Department of Zoology and Entomology welcomed two (2) new academic staff members, Drs Ben Smit and Nokubonga Mgqatsa.



Professor Julie Coetzee and PhD candidate Zolile Maseko looking for biological control agents on the water hyacinth on the Nahoon River. Photo: Department of Zoology & Entomology.

Despite considerable undergraduate teaching commitments, 2017 was another exceedingly productive year for the department with all the staff, Postdoctoral Research Fellows and Research Associates contributing to the research output.

In addition to one hundred and seven (107) full-length papers appearing in both local and international ISI accredited peer reviewed journals, staff also contributed to three (3) book chapters and numerous popular science articles covering a variety of topics.

Staff within the department travelled widely to present their research findings at conferences and workshops both locally, and in Africa, Europe, Australasia, north and South America. The high regard of the research conducted by staff and research associates is reflected in numerous invited lectures and keynote addresses during the year.

Additionally, a number of the staff were invited to evaluate international and local research programmes. A key event during the year was the launch of the Centre for Biological Control under the directorship of Professor Martin Hill. In recognition of his outstanding contribution to the academic project at the university, Professor Martin Hill was promoted to the position of Distinguished Professor.

The department continued to attract Postdoctoral Research Fellows from around the globe and also hosted a number of research scientists from aboard including amongst others from Africa, Europe North and South America. The department continues to have a vibrant and diverse Postgraduate school. Postgraduate students within the department presented the main findings of their research at a number of local and international conferences.

Dr Louw Claassens won best student presentation at the international Syngbio Conference in Tampa, USA and was also awarded an international grant from Sweden to participate in a Fish Behaviour workshop, Gothenburg University in September.

Ms Pippa Muskett, Ms Soja Kenfack and Dr Candice Owen visited Benin to participate in a Modelling workshop on global climate change.



Professor William Froneman, Head of Department

Department of Zoology & Entomology



Books/Chapters/Monographs

Hill, M.P.

Hill, M.P. and Coetzee, J.A. (2017) Biological Control of Water hyacinth Restores Ecosystem Functioning to an Impoundment in South Africa. In: Van Driesche, R.G. and Reardon, R.C. (eds.). *Supressing Over-Abundant Invasive Plants and Insects in Natural Areas by Use of Their Specialised Natural Enemies*. USA: USDA: United States Department of Agriculture. p.48-52. ISBN: 9780160939211.

Moore, S.D.

Grzywacz, D. and **Moore, S.D.** (2017) Production, Formulation, and Bioassay of Baculoviruses for Pest Control. In: Lacey, L.A. (ed.). *Microbial Control of Insect and Mite Pests: From Theory to Practice*. Oxford: Academic Press. p.109-124. ISBN: 9780128035276.

Moore, S.D. and Duncan, L.W. (2017) Microbial Control of Insect and Mite Pests of Citrus. In: Lacey, L.A. (ed.). *Microbial Control of Insect and Mite Pests: From Theory to Practice*. Oxford: Academic Press. p.283-298. ISBN: 9780128035276.

Peer Reviewed Non-Subsidy-Earning Journal Research Publications

Craig, A.J.F.K. and Hulley, P.E.

Craig, A.J.F.K., Galpin, M.D., Hulley, P.E. and Tree, A.J. (2017) Cape White-Eyes in the Eastern Cape: Plumage Characters, Survival, and Movements. *Biodiversity Observations*. 8 (25). p.1-5.

Craig, C.A., Hunter, C.A., Craig, A.J.F.K. and Hulley, P.E.

Craig, **C.A.**, **Hunter**, **C.A.**, **Craig**, **A.J.F.K.** and **Hulley**, **P.E.** (2017) Birds Feeding on Aloe Nectar: Do Camera Traps and Point Counts Produce Comparable Data? *Biodiversity Observations*. 8 (44). p.1-10.

Dalu, T.

Prajapati, M., Van Bruggen, J.J.A., **Dalu, T.** and Malla, R. (2017) Assessing the effectiveness of pollutant removal by macrophytes in a floating wetland for wastewater treatment. *Applied Water Science*. 7 (2017). p.4801-4809.

Nhiwatiwa, T., **Dalu, T.** and Sithole, T. (2017) Assessment of river quality in a subtropical Austral river system: a combined approach using benthic diatoms and macroinvertebrates. *Applied Water Science*. 2017 (1). p.1-8.

Peer Reviewed Subsidy-Earning Journal Research Publications

Barnes, R.S.K.

Barnes, R.S.K. (2017) Little-known and phylogenetically obscure South African estuarine microgastropods (Mollusca: Truncatelloidea) as living animals. *Journal of Natural History.* (2017). p.1-27.

Canavan, K.

Visser, V., Wilson, J.R.U., **Canavan, K.**, Canavan, S., Fish, L., Le Maitre, D., Nanni, I., Mashau, C., O'Connor, T.G., Ivey, P., Kumschick, S. and Richardson, D.M. (2017) Grasses as invasive plants in South Africa revisited: Patterns, pathways and management. *Bothalia*. 47 (2). p.1-29.

Canavan, K., Paterson, I.D. and Hill, M.P.

Canavan, K., Paterson, I.D. and Hill, M.P. (2017) Exploring the Origin



Dr Candice Owen (centre) and Tamzin Griffith (far right), with KZN Parks Staff, after a boat trip on the Tugela River in KZN looking for invasive plants and their biological control agents. Photo: Department of Zoology & Entomology.

and Genetic Diversity of the Giant Reed, *Arundo donax* in South Africa. *Invasive Plant Science and Management.* 10 (2017). p.53-60.

Caputo, M. and Froneman, P.W.

Caputo, **M**., Rubenstein, D.I., **Froneman**, **P.W**. and Bouveroux, T. (2017) Striping patterns may not influence social interactions and mating in zebra: Observations from melanic zebra in South Africa. *African Journal of Ecology*. (2017). p.1-4.

Caputo, M., Froneman, P.W., du Preez, D., Thompson, G. and Plon, S. (2017) Long-term trends in cetacean occurrence during the annual sardine run off the Wild Coast, South Africa. *African Journal of Marine Science*. 39 (1). p.83-94.

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Carassou, L., Whitfield, A.K., Moyo, S. and **Richoux, N.B.** (2017) Dietary tracers and stomach contents reveal pronounced alimentary flexibility in the freshwater mullet (*Myxus capensis, Mugilidae*) concomitant with ontogenetic shifts in habitat use and seasonal food availability. *Hydrobiologia.* 799 (2017). p.327-348.

Chari, L.D., Moyo, S. and Richoux, N.B.

Chari, L.D., Moyo, S. and Richoux, N.B. (2017) Trophic ecology of adult male Odonata. II. Dietary contributions of aquatic food sources. *Ecological Entomology*. (2017). p.1-13.

Chari, L.D., **Moyo, S.** and **Richoux, N.B.** (2017) Trophic ecology of adult male Odonata. I. Dietary niche metrics by foraging guild, species, body size, and location. *Ecological Entomology*. (2017). p.1-14.

Claassens, L. and Hodgson, A.

Claassens, L. and Hodgson, A. (2017) Gaining insights into in situ behaviour of an endangered seahorse using action cameras. *Journal* of *Zoology*. (2017). p.1-11.

Compton, S.G.

Ghana, S., Suleman, N. and **Compton, S.G.** (2017) Style length variation in male and female figs: development, inheritance, and control of pollinator oviposition. *Entomologia Experimentalis et Applicata*. 162 (2017). p.41-50.

Rodriguez, L.J., Young, F., Rasplus, J.Y., Kjellberg, F. and **Compton**, **S.G.** (2017) Constraints on convergence: hydrophobic hind legs allow some male pollinator fig wasps early access to submerged females. *Journal of Natural History*. 51 (13-14). p.761-782.



Connan, M.

Dilley, B.J., Davies, D., Schramm, M., **Connan, M.** and Ryan, P.G. (2017) The distribution and abundance of Blue Petrels (*Halobaena caerulea*) breeding at subantarctic Marion Island. *EMU*. 117 (3). p.222-232.

Connan, M. and McQuaid, C.D.

Connan, M., Bonnevie, B.T., Hagen, C., van der Lingen, C.D. and McQuaid, C.D. (2017) Diet specialization in a colonial seabird studied using three complementary dietary techniques: effects of intrinsic and extrinsic factors. *Marine Biology.* 164 (171). p.1-10.

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Coombes, C.A., Hill, M.P., Moore, S.D. and **Dames, J.F.** (2017) Potential of entomopathogenic fungal isolates for control of the soildwelling life stages of *Thaumatotibia leucotreta* Meyrick (Lepidoptera: Tortricidae) in citrus. *African Entomology.* 25 (1). p.235-238.

Craig, A.J.F.K.

Craig, A.J.F.K. (2017) Gill Memorial Medal Address 2014 Reviewing the Red Bishop: the bird that introduced me to ornithology. *Ostrich.* 88 (1). p.91-95.

Chiawo, D.O., Kombe, W.N. and **Craig, A.J.F.K.** (2017) Conservation and human livelihoods at the crossroads: Local needs and knowledge in the management of Arabuko Sokoke Forest. *African Journal of Ecology*. (2017). p.1-7.

Craig, A.J.F.K. (2017) Blue Cranes *Anthropoides paradiseus* at Etosha Pan, Namibia: what is the origin of this isolated population? *Bulletin of the British Ornithologists' Club.* 137 (3). p.206-210.

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Dalu, T.

Dalu, M.T.B., Dalu, T. and Wasserman, R.J. (2017) Correspondence: Restrict bush fires used in animal hunts. *Nature*. 547 (2017). p.18.

Jordaan, M.S., Dalu, T., Wasserman, R.J., Slabbert, M. and Weyl, O.L.F. (2017) Unexpected survival of sharptooth catfish *Clarias gariepinus* (Burchell 1822) during acute rotenone toxicity trials will complicate management of invasions. *Biological Invasions*. 19 (2017). p.1739-1744.

Marufu, L., **Dalu, T.**, Phiri, C. and Nhiwatiwa, T. (2017) Diet composition changes in tigerfish of Lake Kariba following an invasion by redclaw crayfish. *Annales De Limnologie - International Journal of Limnology.* 53 (2017). p.47-56.

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Dalu, T., Wasserman, R.J., Vink, T.J.E. and Weyl, O.L.F. (2017) Sex and species-specific isotopic niche specialisation increases with trophic complexity: evidence from an ephemeral pond ecosystem. *Scientific Reports*. 7 (43229). p.1-12.

Nhiwatiwa, T. and **Dalu**, **T**. (2017) Seasonal variation in pans in relation to limno-chemistry, size, hydroperiod, and river connectivity in a semiarid subtropical region. *Physics and Chemistry of the Earth*. 97 (2017). p.37-45. Nhiwatiwa, T., Brendonck, L. and **Dalu, T.** (2017) Understanding factors structuring zooplankton and macroinvertebrate assemblages in ephemeral pans. *Limnologica*. 64 (2017). p.11-19.

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Nhiwatiwa, T., **Dalu, T.** and Brendonck, L. (2017) *Streptocephalus Sangoensis* N. Sp. (Anostraca, Streptocephalidae). A New Large Branchiopod Species for Southern Africa. *Crustaceana*. 90 (6). p.673-683.

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Chad Keates holding three (3) rock agama lizards (*Agama atra*), captured in Witsands Nature Reserve.

Photo: Department of Zoology & Entomology.



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Daniels, R.J., Hulley, P.E. and Craig, A.J.F.K. (2017) Comparative perch selection in Southern Fiscal *Lanius collaris* and Fiscal Flycatcher *Sigelus silens* at Amakhala Game Reserve, South Africa. *Ostrich.* (2017). p.1-6.

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Lourenco, C.R., McQuaid, C.D. and Zardi, G.I.

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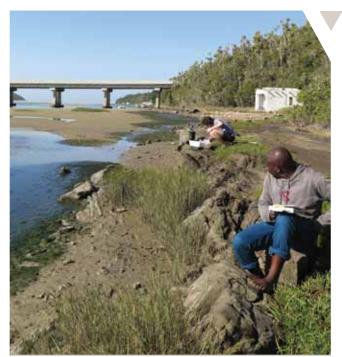
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Cornops aquaticum, the water hyacinth grasshopper in the field. Photo: Department of Zoology & Entomology.

Department of Zoology & Entomology





Zoology field trip at the Kariega Estuary, where the students worked on mini research projects. Photo: Department of Zoology & Entomology.

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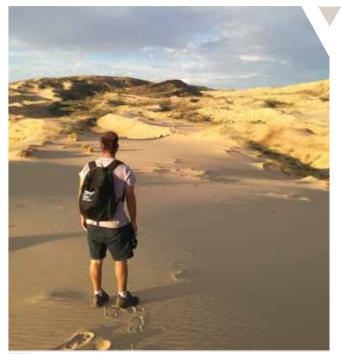
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Chad Keates ponders life on the sand-dunes of Witsand Nature Reserve, during a field trip. Photo: Zoology & Entomology.

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Naidu, P., Coetzee, J.A., Hill, J.M. and Peter, C.I. Comparison of the genetic differentiation and variation of the native and invasive ranges of Nymphaea Mexicana (Mexican water lily) in South Africa. Combined Congress of the Entomological and Zoological Societies of Southern Africa. Pretoria. South Africa. July 2017.

Nel, H.A. and Froneman, P.W.

Skeels, M., Nel, H.A. and Froneman, P.W. Microplastic contamination within the tissue of varying size classes of Perna perna along the east coast of South Africa. 16th Southern African Marine Science Symposium. Port Elizabeth. South Africa. July 2017.

Ngxande-Koza, S.W. and Hill, M.P.

Ngxande-Koza, S.W., Hill, M.P. and Coetzee, J.A. Pargeting an emerging weed, Iris pseudacorus L. (Iridaceae), in South Africa using biological control. Combined Congress of the Entomological and Zoological Societies of Southern Africa. Pretoria. South Africa. July 2017.

Owen, C.A. and Hill, M.P.

Owen, C.A., Coetzee, J.A. and Hill, M.P. A potential new methodology for determining thermal tolerance in insects: are current methods accurate enough? Combined Congress of the Entomological and Zoological Societies of Southern Africa. Pretoria. South Africa. July 2017.

Petela, N., Hill, J.M. and Hill, M.P.

Petela, N., Coetzee, J.A., Hill, J.M. and Hill, M.P. Impact of prior feeding by two biocontrol agents, Eccritotarsus catarinensis and Megamelus scutellaris, on their subsequent feeding, and implications for water hyacinth control in South Africa. Combined Congress of the Entomological and Zoological Societies of Southern Africa. Pretoria. South Africa. July 2017.

Van Der Merwe, M., Jukes, M.D., Opoku-Debrah, J.K., Hill, M.P. and Moore, S.D.

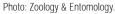
Van Der Merwe, M., Jukes, M.D., Rabalski, L., Opoku-Debrah, J.K., Knox, C., Hill, M.P., Moore, S.D. and Szewczyk, S. Genetic stability of the Cryptophlebia leucotreta granulovirus (CrleGV-SA), after 15 years of commercial use as a biopesticide. Proceedings of the 16th Meeting of the IOBC-WPRS Working Group: Microbial and Nematode Control of Invertebrate Pests. Tiblisi. Georgia. June 2017.



Dr Shelley Edwards pictured in a Rhodes vehicle on a field trip in the Northern Cape Province during the field trip around the country.

Photo: Zoology & Entomology.

ZEML researchers celebrating the end of a successful field trip around the country. Pictured left to right: Chad Keates, Anthony Evlambiou, Shelley Edwards and Luke Kemp.





AFFILIATES, INSTITUES & UNITS REPORT INDEX

keep off the wall

Photo: Rhodes Website

RHODES UNIVERSITY RESEARCH REPORT 2017

AFFILIATES, INSTITUTES & UNITS INDEX



Albany Museum

The Albany Museum continues to be an active associated research institute, feeding research outputs to the university in a mutually beneficial relationship. Numerous students are supervised by museum staff each year, who also give undergraduate lectures in several departments.



In addition to collections-aligned research, development of new exhibitions and curation of collections are also a major thrust at the museum, as well as outreach to schools though the museum's education department.

Staff of Research Departments

- Entomology: vacant from March 2017. The museum's entomologist, Dr John Midgely, left at the end of February 2017 and the candidates to fill the vacant post were interviewed in December, with the new incumbent, also a Rhodes University graduate, contracted to begin in 2018.
- Department of Freshwater Invertebrates: Dr Helen James (HoD), Mr Musa Mlambo (scientist), Dr Alexandra Holland (Postdoctoral Research Fellow), Dr Ferdinand de Moor (Emeritus Researcher).
- Palaeontology Dr Rose Prevec (HoD), Dr Robert Gess (Postdoctoral Research Fellow), Dr Billy de Klerk (Emeritus Researcher), Ms Aviwe Matiwane (PhD student).
- Herbarium Mr Tony Dold and Mr Phumlani Cimi.
- Anthropology Ms Phumeza Mntonintshi.
- Archaeology Ms Celeste Booth.
- History Ms Gcobisa Zomele.

Postgraduates / Graduations

Two (2) PhD students were supervised during 2017 by the Department of Freshwater Invertebrates and Palaeontology respectively, with Awive Matiwane (palaeontology) placed in the top ten (10) at the National Famelab competition.

Photo: Albany Museum

Two (2) honours students were supervised in the Departments of Zoology and Entomology and Environmental Science, and two (2) 3rd year students in the Departments of Zoology and Entomology.

Two (2) Postdoctoral Research Fellows were also based at the museum, in the Department of Freshwater Invertebrates and in Palaeontology.

Distinguished Visitors / International Visits

Professor Per Ahlberg, Uppsala University, Uppsala, Sweden was a guest of Dr Robert Gess.

Dr Prevec hosted Dr Romain Garrouste, an international researcher from France working on fossil insects, and five (5) international visitors working on fossil trackways. She also hosted a visiting scientist, Dr Bárbara Cariglino from the Museo Argentino de Ciencias Naturales, Argentina. Dr Prevec chaired





Avie Matiwane finds an awesome fossil. Photo: Albany Museum.

a meeting of the Palaeontological Society of South Africa as President of the Society.

Mr Laban Njorge from the Natural History Museum in Nairobi, Kenya, visited the Department of Freshwater Invertebrates to get help with mayfly and caddisfly identification in May.

Mr Pfananani Ramulifho, a PhD student from the University of Venda, spent two (2) weeks at the museum in September, getting specialist help with freshwater insect specimen identification.

Staff from the Department of Freshwater Invertebrates undertook fieldwork in the Tsitsikamma and Hogsback regions (November-December) with colleagues from the Natural History Museum (NHM), London. This was part of developing the Southern African Forest Fauna Molecular Assessment Programme (#SAFFMAP project), a pilot project, aiming for long term developing DNA meta-barcoding to do stream biomonitoring in South Africa.

Significant Research Aligned Events

Dr James' Kruger National Park Rivers Project continued with fieldwork in April and September, with Postdoctoral Research Fellow, Alex Holland.

The Department of Freshwater Invertebrates was also part of the National Geographic funded Okavango Wilderness Expedition, and Mr Mlambo and PhD student Ms Ferreira conducted fieldwork along the Cubango River (Angola) in May 2017.

Dr James attended a meeting in Port Elizabeth representing the Angola Okavango Wilderness project to discuss our contribution with National Geographic journalist David Quammen in June. Mr Mlambo and interns undertook two (2) ten (10) day fieldtrips to collect specimens for research on streams in the Eastern Cape forest fragments at Baziya-Langeni-Nquadu, and Dwesa and Mazeppa Bay on in January and September - October 2017, respectively. This is a collaborative project with biologists from many disciplines recording the fauna and flora present, run by Professor Michael Cherry at the University of Stellenbosch.

Mr Mlambo also joined Sam Motitsoe from Rhodes University's Entomology Department in the Drakensberg, carrying out research on temporary water bodies in the Drakensberg (August 2017).

Dr James hosted a meeting between all of the natural science museums in the Eastern Cape to discuss the National Science Collections Facility (NSCF) program, in May. The NSCF is a SANBI-led initiative, aimed at providing much needed funding for natural science museums in terms of equipment and also contract staff for databasing of collections, and Postdoctoral projects to contribute to the description of new species which are being discovered, thus making biodiversity knowledge available for species conservation.

Dr James, Dr Prevec and Mr Phumlani Cimi, along with interns Ms Mdidimba and Ms Mnqeta, attended the Natural Science Collections Facility forum in the Drakensberg, KwaZulu-Natal on 17-20th October 2017, for the launch of the NSCF. Dr James gave the Albany Museum presentation.

Both Dr James and Mr Mlambo were members of the Reference Group for the WRC project headed by Dr Nelson Odume of Rhodes University, and attended meetings on 31 May 2017.

Dr James attended the 28th International Congress for Conservation Biology (ICCB 2017) in Cartagena, Colombia, where she presented two (2) papers, ran a workshop and was involved in running another, as well attending a wide variety of talks. Rhodes University funded part of this and she wrote a report for them on her return. Other funding was obtained through the Society for Conservation Biology using crowd sourcing. Dr James is a Board member of the Freshwater Working Group, Society for Conservation Biology. In addition to the physical meeting in Cartagena, Colombia, in July, she participated in several Skype Meetings with the committee.

Dr James attended several Rhodes University Science Research committee meetings; she had a Skype meeting with Professor Mary Kelly Quinn (University College Dublin) about identification of Ethiopian mayflies and she attended some Rhodes University Science Faculty meetings.

Dr James and the Department of Freshwater Invertebrates was part of the African Insect Atlasing project, a collaborative GBIF-funded project to database specimens in museum collections, with other representatives from museums in Zimbabwe, Botswana, Mozambique, Kenya and Madagascar.

Dr de Moor, Dr James, Dr Holland and Ms Ferreira did fieldwork in Barrydale area in November. Focus week took place on 9-13 October and Careers Day on 13th October were run



efficiently for the Department of Freshwater Invertebrates by two (2) interns Ms Nonkazimulo Mdidimba and Ms Zezethu Mnqeta.

Dr James organised a MIRAI training course (Macroinvertebrate response assessment index) - a two (2) day course run at Albany Museum), 5-7th June 2017, followed by SASS Accreditation (i.e. accreditation of people doing biomonitoring in the Eastern Cape) on 8th June 2017.

Dr Prevec and her team discovered new insect fossils at Wapadsberg Pass near Nieu-Bethesda. A fieldtrip to a new site near Sutherland resulted in collection of more new insects and plants (300 slabs), bringing in a wealth of Permian insect and plant fossils.



Books/Chapters/Monographs

de Moor, F.C.

de Moor, F.C. (2017) *Simuliidae* (Blackflies). In: Kirk-Spriggs, A.H. and Sinclair, B.J. (eds.). *Manual of Afrotropical Diptera Volume 2. Nematocerous Diptera and lower Brachycera. Suricata 5.* South Africa: SANBI. p.693-728. ISBN: 9781928224129.

Peer Reviewed Subsidy-Earning Journal Research Publications

de Moor, F.C

de Moor, F.C. (2017) Book Review: Dragonflies as indicators of aquatic ecosystem health. Book Title: Manual of freshwater assessment for South Africa: Dragonfly Biotic Index. ISBN: 9781928224051 (softcover). Publishers: South African National Biodiversity Institute, Pretoria. Authors: Michael J. Samways and John P. Simaika. *South African Journal of Science*. 133 (3/4). p.1-2.

Gess, R.W.

Coates, M.I., **Gess**, **R.W.**, Finarelli, J.A., Criswell, K.E. and Tietjen, K. (2017) A symmorilform chondrichthyan braincase and the origin of chimaeroid fishes. *Nature*. 541 (2017). p.208-211.

Gess, R.W. and Trinajstic, K.M. (2017) New morphological information on, and species of placoderm fish *Africanaspis* (Arthrodira, Placodermi) from the Late Devonian of South Africa. *PLoS One.* 12 (4). p.1-30.

Scholze, F. and **Gess, R.W.** (2017) Oldest known naiaditid bivalve from the high-latitude Late Devonian (Famennian) of South Africa offers clues to survival strategies following the Hangenberg mass extinction. *Palaeogeography Palaeoclimatology Palaeoecology*. 471 (2017). p.31-39.

Gess, S.K.

Gess, S.K. and Roosenschoon, P.A. (2017) Notes on the nesting of three species of Megachilinae in the Dubai Desert Conservation Reserve, UAE. *Journal of Hymenoptera Research*. 54 (2017). p.43-56.

Midgley, J.M.

Daniel, C.A., **Midgley, J.M.** and Villet, M.H. (2017) Determination of species and instars of the larvae of the Afrotropical species of *Thanatophilus* Leach, 1817 (Coleoptera, Silphidae). *African Invertebrates*. 58 (2). p.1-10.

Ms Mntonintshi of the Anthropology Department gathered Information from *Ingcibi*, *Amagqirha*, *amaxhwele* and elders of the local Rhini communities. This helped to formulate a study to reach out to our people to use them in a manner that is not environmentally destructive.



Dr Rose Prevec, Albany Museum: Curator and Head - Department of Earth Sciences



Dr Ferdy de Moor studing flight activity behaviour of caddis flies. Photo: Albany Museum.



Dr Helen James and Dr Lyndall Pereira da Conceicoa biomonitoring in the Kruger National Park. Photo: Albany Museum.



(EBRU) Institute for Environmental Biotechnology

The Institute for Environmental Biotechnology, Rhodes University (EBRU) is a self-funded autonomous institute of the university and targets research and development in environmental biotechnology at the interface between the fundamental and applied sciences.

The focus areas include wastewater treatment and beneficiation, renewable energy derivation and implementation (e.g. biomass-to-biogas), biological systems; land rehabilitation and decontamination technology (e.g. post-mining, hydrocarbon spillages, etc.), natural products, agricultural, and microalgae biotechnology. Basic activities are supported by a strong emphasis on technology transfer from laboratory to full-scale commercial/industrial process application and implementation. In brief, use of natural products/microbes to perform industrially important tasks in an environmentally sustainable way is the focus of attention.

Studies on the development of technologies for the in-situ bioremediation of South African coal discard dumps concluded with the acceptance by Anglo American Thermal Coal of the final report, Fungcoal 3, authored and published by EBRU. As part of this research and development programme the science underpinning the biological conversion of low-grade coal discard to a humic substance-enriched soil-like material was published in the *International Journal of Coal Science & Technology*.

Results from this Rhodes University-developed 'green' technology have profound implications for use of coal discard as an organic substrate to replace topsoil in phytobioremediation strategies for sustainable large-scale rehabilitation of coal discard dumps to mitigate most if not all of the detrimental effects of stockpiled coal discard on the environment, including the human component.

In addition, a long-term study on the bacterial degradation of waste coal concluded with the award of a PhD degree and aspects of this work are now ready for publication.

Final applications were submitted to the *South African Patent Office* for processes relating to the bacterial degradation of bituminous coal discard and the biodegradation of petroleum hydrocarbons.

Department of Science and Technology (DST) funding awarded to EBRU via the Water Research Commission (WRC) in 2014 and again in 2015 to manage the design, construction, and implementation of the Rhodes University-pioneered wastewater treatment process known as the integrated algal pond system (IAPS). In the first instance implementation was destined for Chris Hani District Municipality and subsequently, for Mbombela (previously Umjindi) Local Municipality. The effort is ongoing



MSc candidate Masudi Wiya setting up a pot trial to test effect of bacteria on plant growth. Photo: EBRU.

and is proving quite challenging in contemporary South Africa. Together, these projects form part of the Innovation Partnership for Rural Development Programme (IPRDP), an initiative of the DST aimed at value addition to targeted local and district municipalities, in responding to some of their prioritised needs.

Selection of the IAPS technology by DST was based upon a recent re-evaluation that showed IAPS-treated water complies with the South African general limit values for either irrigation or discharge into a water resource that is not a listed water resource for volumes up to two (2) megalitres of treated wastewater on any given day; greenhouse gas emissions of negative (-) 0.16 tonnes CO² equivalents per megalitre of wastewater treated indicating a technology with ability to mitigate climate change and, with no faecal sludge handling.

From a scholastic viewpoint, these large-scale implementation projects are intended to map the various steps (legislative and otherwise), identify challenges and constraints, and determine timelines and parameters for complete technology transfer in addition to quantifying:

- 1. volume of clean water available for recycle and/or reuse;
- 2. energy demand of less than 10 kWh per person per year;
- 3. amount of N-rich fertilizer generated; and
- 4. energy flows and CO² equivalents.

In related research EBRU scientists isolated and partially characterised the soluble extracellular polymeric substances (EPSs) associated with microalgal-bacterial flocs generated in high rate algal oxidation ponds of IAPS treating domestic sewage. Extracellular polymeric substances are high-molecular weight compounds secreted into the environment and are responsible for the functional and structural integrity of biofilms. These complex molecular structures are of biotechnological importance and potential application in the food, pharmaceutical and cosmetics industries as emulsifiers, stabilizers, gel agents, coagulants, thickeners and suspending agents has been documented.

EPSs are mainly associated with high-value applications, and have received considerable research attention in recent years due to biocompatibility, biodegradability, and both environmental and human compatibility. Algae-based wastewater treatment truly is a bioprocess to be nurtured in the face of ever-increasing pressure on our natural resources.

Additionally, funded projects continue to develop the RBC bioremediation process for mine wastewater, production platform for algae-based nitrogen-enriched fertilizer and elaborate biological mutualism and carbon sequestration in the plant-microbe-soil continuum.

Postgraduates / Graduations

Nine (9) Postgraduate students were registered at EBRU for higher degrees in Environmental Biotechnology in 2017 - three (3) PhD and six (6) MSc's.

Ms. Sylvie Tebitendwa, an Organization for Women in Science in the Developing World (OWSD) scholarship holder, successfully completed PhD studies on the biotechnology and performance of hybrid constructed wetlands for wastewater treatment.

Mr. Jacob Olewale also successfully completed a PhD that formed part of a larger Anglo American Thermal Coal sponsored programme on bioremediation technologies for restoration of land disturbed by mining.

Ms. Taobat Jimoh was awarded the degree of MSc with distinction for her studies on microalgal-bacterial extracellular polymeric substances and the contribution of these complex molecular entities in maintaining structural and functional integrity of microalgal biocatalysts used in wastewater treatment.

Significant Research Aligned Events

EBRU scientists participated in a number of meetings including the *Water Research Commission Symposium and Tech Summit: Adaptation to the New Normal and the 2nd International Peri Urban Conference: Future Water.*

In addition, engagement with the Technology Innovation Agency (TIA) and the South African National Energy Development Institute (SANEDI) took place on aspects related to development of platforms for wastewater, agriculture, and bioenergy in South Africa.



MSc candidate Masudi Wiya, sampling of a high rate algal oxidation pond for nitrogen fixing bacteria. Photo: EBRU.

Professor Cowan was invited to attend the South African -Danish researcher Match-Making event hosted by the South African-Danish Water Sector Cooperation Programme and to the signing of an MOU between South Africa and Denmark at The Royal Danish Embassy in Pretoria in September.

In November EBRU was invited to join the consortium ReNEWal (Recycling Nutrients, Energy & Water via Algae), in collaboration with partners from Sweden (Umeå University, UmU; Swedish University of Agricultural Science, SLU) and Norway (Norwegian Institute for Water Research, NIVA), which seeks to elaborate a bioprocess for provision of safe and affordable water for all.

EBRU continues to explore commercial opportunities for other biotechnologies developed in our laboratories over the past ten (10) years.



Professor Ashton Keith Cowan, Director



PUBLICATIONS

Books/Chapters/Monographs

Laubscher, R.

Madikizela, P., Tandlich, R. and Laubscher, R. (2017) Cost Effective Way of Managing Pit Latrine Faecal Sludge: A Review. In: Tandlich, R. (ed.). *Novel Approaches to Rainwater Harvesting*. New York: Nova Science Publishers, Inc. p.63-101. ISBN: 9781634858267.

Madikizela, P. and Laubscher, R. (2017) A Food Crop Fertilizer From Latrine Pit Faecal Sludge After Anaerobic Digestion and Pasteurization. In: Tandlich, R. (ed.). *Novel Approaches to Rainwater Harvesting*. New York: Nova Science Publishers, Inc. p.103-122. ISBN: 9781634858267.

Peer Reviewed Non-Subsidy-Earning Journal Research Publications

Laubscher, R.

Khaldi, H., Maatoug, M., **Dube, C.S.**, **Ncube, M.**, **Tandlich, R.**, Heilmeier, H., **Laubscher, R.** and Dellal, A. (2017) Efficiency of Wastewater Treatment by a Mixture of Sludge and Microalgae. *Journal of Fundamental and Applied Sciences*. 9 (3). p.1454-1472.

Peer Reviewed Subsidy-Earning Journal Research Publications

Jimoh, T.A. and Cowan, A.K.

Jimoh, T.A. and Cowan, A.K. (2017) Extracellular polymeric substance production in high rate algal oxidation ponds. *Water Science and Technology*. 76 (10). p.2647-2654.

Sekhohola, L.M. and Cowan, A.K.

Sekhohola, L.M. and Cowan, A.K. (2017) Biological conversion of low-grade coal discard to a humic substance-enriched soil-like material. *International Journal of Coal Science and Technology.* 4 (2). p.183-190.

Other Publications

Cowan, A.K.

Cowan, A.K. (2017). In: *Fungcoal 3*. South Africa: Anglo American Thermal Coal.

Research Papers Presented at Academic/Scientific Conferences (Nonpeer-reviewed Proceedings)

Cowan, A.K.

Cowan, A.K. IAPS - a sustainable wastewater treatment option for rural and peri-urban environments. *Water Research Commission Symposium and Tech Summit: Adaptation to the New Normal.* Birchwood Hotel, Boksburg. South Africa. November 2017.

Cowan, A.K. IAPS - a sustainable wastewater treatment for peri-urban environments. *2nd International Peri Urban Conference*. Century City Conference Centre, Cape Town. South Africa. December 2017.

Cowan, A.K. Remedial biotechnologies - at the water-energy-food nexus. *FAST Monthly*. Port Alfred Ski Boat Club, Port Alfred. South Africa. September 2017.



Institute for the Study of the Englishes of Africa

Unlike the past two (2) years, 2017 was relatively stable at Rhodes University (and most other South African universities) which allowed ISEA staff and students alike to devote all our energy to the core business of teaching, research and building our community engagement projects.

Landmarks for this year included a bumper number and quality of graduations, with a record number of distinctions in the MA in Creative Writing (MACW). The stellar MACW graduated ten (10) students, nine (9) with distinctions.

Three (3) new staff appointments were made: Ms Stacy Hardy and Mr Mxolisi Nyezwa were appointed on three-year contracts, while Dr Hleze Kunju was appointed as Assistant Coordinator of the MACW.

Also at the April graduation, the ISEA Postgraduate teacher education programme celebrated our first doctoral graduate, Dr Anna Nkomo, who was co-supervised jointly by Madeyandile Mbelani and Monica Hendricks.

Mr Lutho Mnyanda, supervised by Madeyandile Mbelani, graduated with a MEd by full thesis.

Seven (7) MEd students registered part-time in February 2017. Five (5) are in their second year whilst two (2) were first-time registrations in 2017.

The ISEA, together with the ISER, hosted a celebratory tribute on 19 April for the dub poet, Linton Kwesi Johnson, on the award of an honorary doctorate by Rhodes University.

The undergraduate teacher education programme continues to flourish. The Northern Cape teacher development initiative, funded by the Sishen Iron Ore Company Community Development Trust cohort of twenty-eight (28) teachers from the John Taole Gaetsewe district in the Northern Cape completed their third and final year of the BEd in English Language Teaching (BEd in ELT).

In addition, there were twelve (12) English teachers and Subject Advisers from a range of districts in the Eastern Cape, funded by the provincial Basic Education Department who completed their third year of the BEd in English Language Teaching.



The mini-conference for the 3rd year students (Northern Cape). Photo: ISEA.

Another cohort of twenty-three (23) English teachers and Subject Advisers from a range of districts in the Eastern Cape, funded by the provincial Basic Education Department, completed their second year of the BEd in ELT.

The Andrew W. Mellon Foundation-funded Writer-in-Residence programme of the MACW hosted Sonwabile Mfecane and Taban Lo Liyong, while the Scholar-in-Residence programme hosted Associate Professor Lily Hoang.

The MACW also hosted a colloquium with invited local and international speakers, titled *Fixions 2017: On (Still) Rediscovering the Ordinary*, at Rhodes University, Grahamstown, from 14-15 July 2017.

Poet and teacher on the MACW, Lesego Rampolokeng, won the prestigious 2017 National Institute for the Humanities and Social Sciences Award for Best Fiction for his anthology, *A Half Century Thing.* He left the MACW at the end of 2016. He has taken up a doctoral scholarship awarded by the National Institute for the Humanities and Social Sciences to pursue his ground-breaking research on the work of poet, Mafika Pascal Gwala, in the Department of Literary Studies in English.

Both Wordfest SA and Wordfest Eastern Cape took place during the National Arts Festival. The books launched and issues discussed once again reflected the range of concerns on the minds of many South Africans.

Professor Chris Mann received the St Edmund Hall Writers' Forum award for a cycle of song-poems entitled *Cantata Animalia* and was appointed Honorary Writer-in-Residence of the Grahamstown Cathedral.



Professor Monica Hendricks, Director



Books/Chapters/Monographs

Berold, R.

Berold, R. (2017) "Reading and Writing as One Activity", in Hardy, S. & Berold, R. (eds.). *The Fertile Ground of Misfortune - Teaching Practices in Creative Writing.* Grahamstown: ISEA. pp.56-63.

Berold, R. and Hardy, S.

Berold, R. and Hardy, S. (eds) (2017) *The Fertile Ground of Misfortune* - *Teaching Practices in Creative Writing*. Grahamstown: ISEA.

Beyers, M.

Beyers, **M.** (2017) "My Online Writing Group" in Hardy, S. & Berold, R. (eds.). *The Fertile Ground of Misfortune - Teaching Practices in Creative Writing*. Grahamstown: ISEA. pp.98-101.

Buzani, M.

Buzani, M. (2017) "What I Learned as an MA Student" in Hardy, S. & Berold, R. (eds.). The *Fertile Ground of Misfortune - Teaching Practices in Creative Writing.* Grahamstown: ISEA. pp.72-75.

Hardy, S.

Hardy, S. (2017) "River Blindness," in T. Mwanaka and R. Rodriguez (Eds). *Experimental Writing: Volume 1, Africa vs Latin America Anthology.* Cameroon: Langaa RPCIG. pp.3-16.

Hardy, S. (2017) "Involution", in E. Chela, B. Kona, and H. Moffett (Eds) *Migrations: New Short Story Fiction from Africa*. Northampton: New Internationalist Publications. pp.21-32.

Hardy, S. (2017) "The Body or the Academy or the Creative Teacher". In Hardy, S. & Berold, R. (eds.). *The Fertile Ground of Misfortune - Teaching Practices in Creative Writing*. Grahamstown: ISEA. pp.26-34.

Nyezwa, M.

Nyezwa, M. (2017) "Trauma and Image". In Hardy, S. & Berold, R. (eds.). *The Fertile Ground of Misfortune - Teaching Practices in Creative Writing*. Grahamstown: ISEA. pp.20-25.

Nyezwa, M. "Duende in Maskandi Music" in Msila, V. *Decolonising* Knowledge for Africa's Renewal - Examining African Perspectives and Philosophies. Johannesburg: Knowledge Resources Publishing. pp.237-256.

Mann, C.M.

Mann, C.M. (2017) *Epiphanies*. Grahamstown: Cathedral of St Michael and St George. ISBN: 9780620612142.

McNeil, J.

McNeil, J. (2017) *The Dhow House: A Novel*. USA: ECW Press. ISBN: 9781770413498.

Nyezwa, M.

Nyezwa, M. (2017) Duende in Maskanda Music. In: Msila, V. (ed.). Decolonising Knowledge for Africa's Renewal: Examining African Perspectives and Philosophies. South Africa: KR Publishing. p.237-255. ISBN: 9781869226725.

Nyezwa, M. (2017) Ndiyoyika. Port Elizabeth: Imbizo Arts.

Nyezwa, M. (2017) Songs from the earth. Howick: The Caversham Press.

Wessels, P. and Hardy, S.

Wessels, P. and Hardy, S. (eds). (2017) *Tyhini 2017*. Prose and poetry from MA in Creative Writing students: Baphithi John Dludlu, Craig O'Flaherty, Jennifer Campbell, Leila Hall, Lindokuhle Nkosi, Mercy Dhliwayo, Mtha Ndyoko, Nolwazi Machi, Nomnikelo Komanisi, Ntombi Mhlambi, Previn Pillay, Reikanne Mofokeng, Shirley Marais, Simthembile Matyobeni, Sisonke Papu, Siza Mokhele, Tamaryn Dalldorf, Thandokazi Mayo, Tseliso Masolane, Unathi Ngada, Wame Molefhe. Grahamstown: MACW, ISEA.



Professor Chris Mann in performance at the Farmers' Market in Bathurst on Sunday 24 December. Photo: Bev Cummings-Penlington.

Concerts, Exhibitions, Performances, Workshops, Events

Berold, R.

Berold, **R**. (2017) Poetry Writing Workshop, Mandela Bay Book Fair. Port Elizabeth Opera House, Port Elizabeth. 17-18 March.

Dhliwayo, M.

Dhliwayo, **M.** (2017) "Makhura". Performance in play directed by Kgafela Magogodi, produced by Malose Lekganyane, created by cast members and director. Polokwane Literary Fair, Polokwane. 12 - 15 September.

Dhliwayo, M. (2017) Polokwane Poetry Burning, Polokwane Literary Fair. Polokwane. 15 September.

Hardy, S.

Hardy, S. (2017) "Angazi But I'm Sure". Curator and lead faculty at Raw Academy. Raw Material Company. Dakar, Senegal. April-June.

Hardy, S. (2017) "Once, When Cape Strung Cairo". Performance/reading with Neo Muyanga and Nancy Mounir. Youngblood Arts and Culture Development. Cape Town. August 5.

Hardy, S. (2017) "Pan African Writing". Mandela Bay Book Fair. Port Elizabeth Opera House, Port Elizabeth. 17-18 March.

Mann, C.M.

Mann, C.M. Performance. Country Music Stall. *Performance Poetry Installation.* St George's Hall, Grahamstown. South Africa. 28 October 2017.

Mann, C.M. Poetry performances. *Take your Time: the poetry of adolescence*. St Andrew's - DSG, Grahamstown. South Africa. 8 March 2017.

Mann, C.M. Poetry performances. *Epiphanies, book-launch*. Chapter House, Grahamstown Cathedral, Grahamstown. South Africa. 8 July 2017.

Mann, C.M. Poetry performances. Five song-poems. *Articulate Africa Literary Festival*. International Conference Centre, Durban. South Africa. 29 September 2017.

Mann, C.M. Poetry performances. *Epiphanies*. St John's Church, Walmer, Port Elizabeth. South Africa. 26 November 2017.

Mann, C.M. Poetry performances. *Six song-poems*. Acoustic Cafe, Grahamstown. South Africa. 14 December 2017.

Mann, C.M. Poetry performances. *Country Music Song-poems*. St David's, Bushmans. South Africa. 21 - 28 December 2017.

Mann, C.M. Poetry performances. *Country Music Song-poems*. Landman function, Bushmans. South Africa. 28 December 2017.

Mann, C.M. Poetry performances. *Country Music Song-poems.* Bushmans Boot Sale, Bushmans. South Africa. 16 December 2017.

Mann, C.M. Poetry performances. *Country Music Song-poems*. Bathurst Market, Bathurst. South Africa. 23 December 2017.

Mann, C.M. Poetry performances. Country Music Song-poems. St



Paul's Hall, Port Alfred. South Africa. 29 December 2017.

Mann, C.M. Poetry performances. *Culani nonke! Sundowner Concert.* National Arts Festival. Grahamstown. South Africa. 30 June 2017.

Marais, S.

Marais, S. (2017) "Confronting the shadow," poetry workshops at the Christian Community: Movement for Religious Renewal conference: The Michael Guidance to be Servants of the Word. Johannesburg. 29 September - 1 October.

Masolane, T

Masolane, T. (2017) PanSALB International Translation Day presentation. CUT-Welkom. 29 September.

Masolane, T. (2017) Sesotho Literature Museum. *4th Annual Literary Symposium*. Bethlehem 7-8 September.

Masolane, T. (2017) Bessie Head books discussion hosted by Omo Ole Books. Bloemfontein. 24 June.

Masolane, T. (2017) ANFASA Workshop, UFS, Bloemfontein. 20 September.

Masolane, T. (2017) Writers Day Indaba, UFS, Bloemfontein. 30 August.

Masolane, T. (2017) Ke reke Kereke. Film: scriptwriter and director. *Grahamstown National Arts Festival.* 2-4 July.

McNeil, J.

McNeil, J. Fine art exhibition. Day for Night: the legacy of Walter Benjamin. *Fine art exhibition (film, text) in conjunction with photographer Diego Ferrari*. Urban PhotoFest, London. United Kingdom. 10 - 15 November 2017.

Mokhele, S.

Mokhele, S. (2017) Arts Across Lesotho 2017. 5-7 May.

Mokhele, S. (2017) Arts Across South Africa 2017. 28-30 September.

Mokhele, S. (2017) Radio interview on Mandela Month: Radio2000. 1 July.

O'Flaherty, C.

O'Flaherty, C. (2017) McGregor Poetry Festival. 25-27 August.

Sisonkepapu, P.

Sisonkepapu, P. (2017) Between Absence & Presence, (BAP). Port Elizabeth. 3 February.

Sisonkepapu, P. (2017) Between Absence & Presence, (BAP). Nelson Mandela University Faculty of Arts Poetry Festival, Port Elizabeth. 22 September.

Sisonkepapu, P. (2017) Radio interview and reading: Mesh-Up, SAFM. July.

Sisonkepapu, P. (2017) Radio interview and reading: Soul Cuisine Edition, Bay FM. September.

Willan, B.

Willan, B. Public Lecture. Retrieving a lost past: Mathakgong Kepadisa, Sol Plaatje and the siege of Mahikeng. *Public Lecture*. Sol Plaatje University, Kimberley. South Africa. 23 September 2017.

Xaba, M.H.

Magadla, S., Xaba, M.H. and Mntambo, L.N. Public Dialogue. "Yayi lixesha lento ayithethwa!" (It was the time of that which could not pass our lips): women combatants and the armed struggles against apartheid. *Public Dialogue*. General Lecture Theatre, Rhodes University, Grahamstown. South Africa. 24 May 2017.

Creative Writing

Berold, R.

Berold, R. (2017) "cargo", in Brown, M. *et al* (eds) *Voices of this land: An anthology of South African poetry in English*. Pretoria: Van Schaik. 94.

Beyers, M.

Beyers, **M**. (2017) "storytime" in The Sol Plaatje European Union Poetry Anthology. **Beyers**, **M**. (2017) "voormoeder" in The Sol Plaatje European Union Poetry Anthology.

Beyers, M. (2017) "communion". Stanzas 9.

Beyers, M. (2017) "diving". Stanzas 9.

Beyers, M. (2017) "heritage". *Illuminations* 32. Special South African issue.116.

Beyers, M. (2017) "outside". *Illuminations* 32. Special South African issue. 117.

Buzani, M.

Buzani, M. (2017) "a naked bone". *Illuminations* 32. Special South African issue. 53-57.

Hardy, S.

Hardy, S. (2017) "A Butcher Fantasy". *New Orleans Review 43.* New Orleans: The Walker Percy Center for Writing & Publishing and the Department of English at Loyola University. pp.10-20.

Hardy, S. (2017) "An Aesthetics of Rat Bites," *Joyland Magazine*, April. New York. *http://joylandmagazine.com/regions/new-york/aesthetics-rat-bites*. Leff, C.

Leff, C. (2017) Poem. In: Carvalho, R., Gouws, L.A., Nhlapo, P. and Pienaar, L. (eds.). *Flux and flame*. 17th Ed. Grahamstown: ISEA.

Leff, C. (2017) Short story New Contrast 178 V45. In: Betty, M. (ed.). *Shades of Indigo*. Cape Town: South African Literary Journal NPC.

Mann, C.M.

Mann, C.M. (2017) Southern African Quaker News. In: *The Parliament Within*.

Mann, C.M. (2017) Rhodes Scholar, Oxford. In: *Poem: Wren.* 4th Ed. Marais, S.

Marais, S. (2017) "tea in the garden". Aerodrome. http://thisisaerodrome.com/poems-shirley- marais/. 30 January.

Marais, S. (2017) "you know how dogs". Aerodrome. http://thisisaerodrome.com/poems-shirley- marais/. 30 January.

Marais, S. (2017) "highveld winter sunset". Aerodrome. http://thisisaerodrome.com/category/poems/.

Marais, S. (2017) "in memory of Gran'ma". AVBOB poetry. https://www.avbobpoetry.co.za/.

Marais, S. (2017) "Konstantinos was right". AVBOB poetry. https://www.avbobpoetry.co.za/.

Marais, S. (2017) "dad". Ja. #ed13. 81.

https://issuu.com/jamagsa/docs/memorymakingandeightiesgraphics.

Marais, S. (2017) "for mangaliso". New Coin. 53.1. 60.

Marais, S. (2017) "the edge of". New Coin. 53.1. 61.

Marais, S. (2017) "The soft green silver of the fish across her brow". *New Contrast.* 178. 45.

Marais, S. (2017) "The psychopath as guest". New Contrast. 178. 45.
 Marais, S. (2017) "Advice for long-term relationships". New Contrast. 178. 45.

Marais, S. (2017) "Baviaanskloof". Ons Klyntji.

Marais, S. (2017) "Kareedouw". Ons Klyntji.

Marais, S. (2017) "along the breede at witsand". Ons Klyntji.

Marais, S. (2017) "breach". Stanzas. 7. 40

Marais, S. (2017) "creature comfort". Stanzas. 7. 40

Marais, S. (2017) "ouma". Stanzas 10.

Mokhele, S.

Mokhele, S. (2017) "Try not to mourn". The #Coinage Book One.

Nyezwa, M.

Nyezwa, M. (2017) "Burial of the Poems". *Illuminations* 32. Special South African issue. 141-146.



O'Flaherty, C.

O'Flaherty, C. (2017) "Winter Karoo Evening". Aerodrome. August online edition. http://thisisaerodrome.com/poem-winter-karoo-evening-craig-o-flaherty/

O'Flaherty, C. (2017) "Lights". Stanzas 9. (forthcoming).

O'Flaherty, C. (2017) "Driving Away". Stanzas 9. (forthcoming).

O'Flaherty, C. (2017) "Trying Again". *AVBOB poetry*. October online edition. https://www.avbobpoetry.co.za.

Sisonkepapu, P.

Sisonkepapu, P. (2017) "an excerpt from 'Elsewhere'". Kotaz Cultural Magazine.

Sisonkepapu, P. (2017) "an excerpt from 'Elsewhere'". *Liberation Heritage Volumes (anthology on Eastern Cape writing).*

Other Publications

Hardy, S.

Berold, R. and Hardy, S. (2017) "Interview with Lesego Rampolokeng". *Illuminations* 32. Special South African issue. 106-114.

Hardy, S. (2017) "The Agronomist". *The Chimurenga Chronic*. April. Cape Town: Chimurenga. 22.

Hardy, S. (2017) Book Review: *Gay Guerrilla: Julius Eastman and His Music* by Renée Levine Packer and Mary Jane Leach (University of Rochester Press, 2015). *Chronic Books*. April. Cape Town: Chimurenga. 24.

Hardy, S. (2017) Book Review: *The Bleeding of the Stone* by Ibrahim al-Koni, May Jayyusi (trans.), Christopher Tingley (trans.) (Interlink Pub Group, 2002). *Chronic Books*. April. Cape Town: Chimurenga. 25.

Hardy, S. (2017) Book Review: *How to Cook Your Husband the African Way* by Calixthe Beyala (News Press Ltd, 2015). *Chronic Books*. April. Cape Town: Chimurenga. 25.

Hardy, S. (2017) Book Review: *Otared - A Novel* by Mohammad Rabie, Robin Moger (trans) (American University in Cairo Press, 2016). *Chronic Books*. April. Cape Town: Chimurenga. 25.

Hardy, S. (2017) Book Review: *Descent & Other Poems* by Timothy Ogene (Deerbrook Editions, 2016). *Chronic Books*. April. Cape Town: Chimurenga. 25.

Hardy, S. and Mason, P. 2017. "Untimely Meditations: A Dialogue with Taban Lo Liyong". *Africa In Dialogue, Issue 1*. 4.

Hendricks, M.G. and Matambo, E.

Kota, Z., Hendricks, M.G., Matambo, E. and Naidoo, V. (2017) The governance of basic education in the Eastern Cape. In: *ESID Working Paper No.83*. Manchester: University of Manchester.

Nyezwa, M. "Trauma and Image". *The Chimurenga Chronic.* April. Cape Town: Chimurenga. 37.

Peer Reviewed Subsidy-Earning Journal Research Publications

Berold, R.

Berold, R. (2017) Poetry: Visit to my mother. *New England Review - Middlebury Series*. 38 (4). p.25-26.

Bila, V.

Bila, V. (2017) Poetry: Baloyi's art gallery. *New England Review - Middlebury Series*. 38 (4). p.11-12.

Mann, C.M.

Mann, C.M. (2017) Poetry: A Meditation at Nongqause's Grave. *English Academy Review*. 34 (1). p.125.

Mann, C.M. (2017) Poetry: Spelling. *English Academy Review*. 34 (1). p.128-129.

Mann, C.M. (2017) Poetry: Narcissus Redivivus. *English Academy Review*. 34 (1). p.126-127.

Nyezwa, M.

Nyezwa, M. (2017) Poetry: the poor blacks of the world. New *England Review - Middlebury Series*. 38 (4). p.21-22.

Research Papers Presented at Academic/Scientific Conferences (Nonpeer-reviewed Proceedings)

Willan, B.

Willan, B. *Native Life in South Africa* and Brotherhood? *Biennial meeting of the Southern African Historical Society*. University of the Witwatersrand, Johannesburg. South Africa. June 2017.

Other Conferences and Public Lectures

Berold, R.

Berold, R. (2017) "The Moment of Reading", at the *Fixions 2017: On* (*Still*) *Rediscovering the Ordinary Colloquium of the MA in Creative* Writing programme [MACW]. Rhodes University, Grahamstown. 14-15 July.

Beyers, M

Beyers, M. (2017) "An Overview of Literary Works in English on the Sinking of the SS Mendi". *Mendi Centenary Conference*. Centre for African Studies, University of Cape Town. 28-30 March.

Buzani, M.

Buzani, M. (2017) "Structure and Form", at the *Fixions 2017: On (Still) Rediscovering the Ordinary Colloquium of the MA in Creative Writing programme [MACW]*. Rhodes University, Grahamstown. 14-15 July.

Hardy, S.

Hardy, S. (2017) "Visceral Poetics - Violence and the Possibly of Writing Protest Today", at the *Fixions 2017: On (Still) Rediscovering the Ordinary Colloquium of the MA in Creative Writing programme [MACW].* Rhodes University, Grahamstown. 14-15 July.

Hardy, S. (2017) "Utopian Science Fiction", at *Imagined Futures:* Speculative Freedoms and Alternative African Futures: AfroSciFi, Fantasy and Speculative Fiction Postgraduate Colloquium. Rhodes University, Grahamstown. 29 September.

Hardy, S. (2017) "The Performance of Pan Africanism". *Art X Lagos.* Lagos. 3-5 November.

Nyezwa, M.

Nyezwa, M. (2017) "Writing in Character", at the *Fixions 2017: On (Still) Rediscovering the Ordinary Colloquium of the MA in Creative Writing programme [MACW].* Rhodes University, Grahamstown. 14-15 July.

Sisonkepapu, P.

Sisonkepapu, P. (2017) "Prelimenary notes on Inyikima" and *inyikima,* at Imagined Futures: Speculative Freedoms and Alternative African Futures: AfroSciFi, Fantasy and Speculative Fiction Postgraduate Colloquium. Rhodes University, Grahamstown. 29 September.

Wessels, P.

Wessels, P. (2017) "Fixions 2017 Welcome Address: Honouring that which is worthy of consideration", at the *Fixions 2017: On (Still) Rediscovering the Ordinary Colloquium of the MA in Creative Writing programme [MACW].* Rhodes University, Grahamstown. 14-15 July.

Wessels, P. (2017) "Finding the bird in the bush: Creativity and becoming", at the *Fixions 2017: On (Still) Rediscovering the Ordinary Colloquium of the MA in Creative Writing programme [MACW].* Rhodes University, Grahamstown. 14-15 July.



In 2017, the Institute of Social and Economic Research (ISER), which includes the Neil Aggett Labour Studies Unit (NALSU), continued its research agenda in the area of social policy and labour studies.

The director of ISER, Professor Robbie van Niekerk, focused significant attention on the development of a major international research project. The project is focused on Equity, Systems of Provision in Health and Education and the Public Good. The project involves collaboration with colleagues from India, Angola, Mozambique and the United Kingdom (UK), and is lead by ISER Visiting Professor Ben Fine, from the University of London's School of Oriental and African Studies (SOAS). Professor Van Niekerk was invited to be the Southern African co-leader of the international consortium bid to the United Kingdom (UK) Global Challenges Research Fund (GCRF). The South African component includes a research budget of R46 million, and the Rhodes University project partner is the School of Journalism and Media Studies.

Developmental work continued on a second ISER international comparative research project, "Cultures of Social Solidarity and the Public Good: A Reflection on South Africa and Cuba". A planning grant for this research project was awarded by the Andrew W. Mellon Foundation for two (2) workshops with the partner universities (University of Havana, Eduardo Mondlane University in Maputo and the Catholic University of Luanda). This comparative research project is jointly convened with ISER Honorary Research Fellow, Professor Yusuf Sayed, Chair at Sussex University. It seeks to understand the concept of social solidarity and its application to public goods such as health and education from a Southern perspective, drawing critically and reflectively on the experience and lessons of Cuba and its role, in particular, in African liberation struggles at the level of ideas and practices. The planning grant is aimed at facilitating a multi-million rand large-scale research proposal over a five (5) year period.

A third major project on Public Private Partnerships (PPPs), Equity and the Public Good, based on a UK Economic and Social Research Council (ESRC) networking grant, made significant progress. This is an international research initiative in which ISER is the South African partner with Professor Van Niekerk as project co-leader with Professor Sayed. The project directly aims to address the relationship between public and private forms of provision of public goods, such as health care and education and their consequences for achieving egalitarian public services based on social solidarity and social justice. The networking project includes colleagues from the UK, India and South Africa.

An international colloquium was held in Cape Town on education and PPP's - convened under the auspices of



NALSU's Dr Laura Alfers facilitating the discussion on Gender and the changing world of work at 2017 Vuyisile Mini Winter School. Photo: CN Photography.

Professor Sayed. Research reports were presented and finalized, and publications were prepared for peer review.

The fourth ISER project - *National Information Campaign on the National Health Insurance (NHI)* - sponsored by the World Health Organization (WHO) and the National Department of Health, entered its second phase following a strategic policy review submitted to the director of WHO (SA office) on *'Public Perceptions of the National Health Insurance system'*.

In this second phase, co-lead by Mr Shepi Mati of Rhodes University's School of Journalism and Media Studies, the NHI proposals were translated into a draft national radio broadcast and work commenced on a strategy for developing a national health information campaign.

The ISER also successfully hosted its annual Vuyisile Mini Winter School on 'Gender, Social Policy and Labour: The



Struggle for Equality'. It was held in conjunction with NALSU, the Critical Studies in Sexualities and Reproduction (CSSR) Unit at Rhodes University, and in partnership with the Friedrich Ebert Stiftung.

In 2017 NALSU continued to play a key role in the national Labour Market Intelligence Partnership (LMIP), which has now been concluded. Professor Michael Rogan led Theme 5 of the LMIP, which focused on the transition from education to the labour market.

Dr Laura Alfers concluded her NALSU Postdoctoral Research Fellowship at the end of 2017, and has been appointed as Director of the Social Protection Programme of WIEGO (Women in the Informal Economy, Globalising and Organising). A global network of one hundred and ninety three (193) individual and institutional members in forty-five (45) countries focused on securing livelihoods for the working poor, especially women, in the informal economy. Professor Rogan also contributes to the work of WIEGO.

In 2017, NALSU collaborated with DataFirst at the University of Cape Town to digitise the Keiskammahoek Rural Survey data, this survey led to the establishment of the ISER in 1954. The digitised data will be made available to researchers in 2018. Dr John Reynolds continues to serve as a member of the External Advisory Board of DataFirst.

Mr Eddie Cottle, ISER Senior Researcher and doctoral candidate, represented NALSU for the first time at an international labour scholar conference, The Herrenhausen Symposium on "Workers of the World" in Hanover, Germany. The main aim of the symposium was to identify new empirical approaches to the study of labour in different world regions, with specific references to methods and data.

Special acknowledgement must be made of the extensive contribution made by ISER's Visiting Professors, Professor Ben Fine and Professor Yusuf Sayed. Both have helped develop ISER into a policy institute. This, as in previous years, reflects in their contribution to the academic programme and publication outputs of the ISER in 2017.

Significant groundwork was made in 2017 by ISER and NALSU for a strong research output in 2018, with four (4) books - two (2) monographs and two (2) edited volumes - scheduled for publication in 2018, in addition to a range of journal articles.

These include:

- a book by Dr John Reynolds on Development Planning in South Africa: Provincial Policy and State power in the Eastern Cape (London: Zed Books);
- a book authored jointly by Professor Vishnu Padayachee and Professor Robbie Van Niekerk entitled 'Shadow of Liberation: ANC Economic and Social Policy 1943 to 1996' (Johannesburg: Wits University Press);
- a co-edited volume by Dr John Reynolds, ISER Visiting Professor Ben Fine and Professor Robbie Van Niekerk on Race, Class and the post-Apartheid South African state (Scottsville: UKZN Press);

- and an edited book by Dr Mike Rogan on Post-Schooling Educational Trajectories and the Labour Market in South Africa (Pretoria: HSRC Press).
- In addition, work commenced on an edited book, a Handbook of Social Policy and Development (Cheltenham: Elgar Publishing), by Professor James Midgely, University of California, Los Angeles (UCLA) Berkeley, ISER Research Associate and former staff member Professor Rebecca Surender and NALSU Postdoctoral Research Fellow Dr Laura Alfers.

Distinguished Visitors / International Visits

In 2017, ISER was honoured to host the Minister of Health, Dr Aaron Motsoaledi, to the annual Dr AB Xuma Memorial Lecture on 'A Peoples NHI', which was reported on by the national South African Broadcasting Corporation (SABC) TV.

NALSU hosted its Annual Neil Aggett Memorial Lecture, delivered by Professor Murray Leibbrandt, Pro-Vice Chancellor, SARChI Chair and Director of Southern Africa Labour and Development Research Unit (SALDRU) at the University of Cape Town. Professor Leibbrandt's lecture was entitled 'Confronting South Africa's Inequality: Why and How?'

Furthermore, ISER was extremely honoured to host Honorary Doctorate awardee Mr Linton Kwesi Johnson (LKJ). In addition to his formal graduation event, the internationally acclaimed reggae poet was celebrated at a special joint event at the National English Literary Museum (NELM) hosted under the auspices of the ISER, English Department, the Institute for the Study of the Englishes of Africa (ISEA) and the Faculty of Pharmacy.

In addition, ISER in conjunction with the Office of the Vice-Chancellor of University of the Witwatersrand (WITS) institutionally co-hosted acclaimed Marxist scholar, Professor Issa Shivji of the University of Dar es Salaam, who delivered the 2017 Harold Wolpe Memorial Lecture in Johannesburg.

The following distinguished scholars also visited the ISER in 2017:

- Professor Edward Webster, Recipient of an Honorary Doctorate from Rhodes University (University of the Witwatersrand);
- Distinguished Professor Vishnu Padayachee (University of the Witwatersrand);
- Professor Rebecca Surender (University of Oxford).

These visits were in addition to the visit by Professor Murray Leibbrandt to deliver the Annual Neil Aggett Labour Studies Lecture.

Research aligned events

In 2017, ISER co-hosted an international symposium on Social Citizenship, Solidarity and Rights in Cape Town as part of the UK ESRC funded EQUIPPS comparative research project on public private partnerships in which ISER is the South African



partner. Presentations were made by a range of established scholars from India, the UK and South Africa at this well received colloquium event.

NALSU continued to succesfully host the well attended Labour Studies Seminar Series, co-hosted with the Departments of Sociology, History, and Economics and Economic History.

In 2017, Professor Rogan was an invited expert witness to the Presidential Commission of Inquiry into Higher Education and Training (The Fees Commission). He gave sworn testimony relating to the employment outcomes of university graduates in South Africa. He also gave evidence to the Parliamentary Portfolio Committee on Higher Education and Training, focused on the gap between higher education outputs and the goals outlined in the National Development Plan. This presentation was well received and resulted in an invitation to give regular presentations to the portfolio committee.

Professor Van Niekerk was invited to provide expert feedback at a Workshop on the Impact of the National Health Insurance Policy on Access to Equitable, Quality Healthcare as part of the parliamentary Panel to Assess Key Legislation chaired by ex-president Kgalema Motlanthe.

Professor Van Niekerk was also invited by the Ambassador of Cuba to chair a discussion on 'Cuba, Solidarity and African Liberation Struggles' at which ex-president Kgalema Motlanthe and SA struggle veteran Ronald "Ronnie" Kasrils participated, and which was screened live by the SABC.

In 2017 the following key presentations were made:

- Eddie Cottle on "Strikes and the Labour Movement" for the DITSELA Workers College at the University of the Western Cape, Cape Town;
- Michael Rogan, Sally Roever and Caroline Skinner on "Urban regulation and income stability for self-employed workers";
- Laura Alfers, Francie Lund and Rachel Moussie on "Informal workers and the future of social protection" for the 5th Conference of the Regulating for Decent Work Network, International Labour Office, Geneva, Switzerland Paper.
- Dorrit Posel and Michael Rogan also presented a paper on "Inequality, social comparisons and minimum income aspirations: Evidence from South Africa" at the Biennial Conference of the Economic Society of South Africa, at Rhodes University.
- John Reynolds presented a paper on "Decent work in the Public sector" at the Public Service Coordinating Bargaining Council (PSCBC) 20th Anniversary Roundtable Discussion in the Eastern Cape, held in East London.
- Robbie Van Niekerk presented a paper on "Global Social Policy and Social Solidarity in the South - The case of Health Care in the new geo - political era" at the Third Conference of Strategic Studies at the Higher Institute of International Relations, Havana, Cuba.

Postgraduate students

The ISER is proud to report the successful examination in 2017 of social policy doctoral student Nimi Hoffmann's doctoral thesis; ISER Honorary Professor Yusuf Sayed was her supervisor.

Ben Roberts, a social policy ISER doctoral student of ISER, supervised by Professor Michael Noble, ISER Visiting Professor, and Professor Robbie Van Niekerk, also submitted his thesis for examination. At the time of writing, we are very pleased to report that Mr Roberts' doctoral thesis had been successfully examined and awarded.



Professor Robbie van Niekerk, Director

Institute of Social & Economic Research



PUBLICATIONS

Books/Chapters/Monographs

Adebanwi, W.

Adebanwi, W. (2017) Approaching the Political Economy of Everyday Life in Modern Africa: An Introduction. In: Adebanwi, W. (ed.). *The Political Economy of Everyday Life in Africa: Beyond the Margins.* UK: James Currey, pp. 1-31. ISBN: 9781847011657.

Adebanwi, W. (2017) Elites, Ethnographic Encounters and the 'Native' Ethnographer in Contemporary Africa. In: Boswell, R. and Nyamnjoh, F. (eds.). *Postcolonial African Anthropologies*. Cape Town: HSRC Press, pp. 149-176. ISBN: 9780796925695.

Adebanwi, W. (ed.) (2017) *The Political Economy of Everyday Life in Africa: Beyond the Margins.* UK: James Currey. ISBN: 9781847011657.

Fine, B.

Fine, B. (2017) The Continuing Enigmas of Social Policy. In: Yi, I. (ed.). *Towards Universal Health Care in Emerging Economies: Opportunities and Challenges (Social Policy in a Development Context).* USA: Palgrave Macmillan, pp. 29-60. ISBN: 9781137533760.

Fine, B. and Saad-Filho, A. (2017) Marxist Economics. In: Fischer, L., Hasell, J., Proctor, C., Uwakwe, D., Perkins, Z.W. and Watson, C. (eds.). Rethinking Economics: An Introduction to Pluralist Economics. UK: Taylor & Francis Group, an Informa Business, pp. 19-22. ISBN: 9781138222687.

Grapsa, E.

Posel, D. and **Grapsa**, **E**. (2017) Gender Divisions in the Real Time of the Elderly in South Africa. In: Connelly, R. and Kongar, E. (eds.). *Gender and Time Use in a Global Context: The Economics of Employment and Unpaid Labor.* UK: Palgrave Macmillan, pp. 435-463. ISBN: 9781137568366.

Moller, V.

Moller, V. and Roberts, B. (2017) New Beginnings in an Ancient Region: Well-Being in Sub-Saharan Africa. In: Estes, R.J. and Sirgy, J. (eds.). *The Pursuit of Human Well-Being: The Untold Global History*. Switzerland: Springer International Publishing, pp. 161-215. ISBN: 9783319391007.

Moller, V., Roberts, B., Tiliouine, H. and Loschky, J. (2017) 'Waiting for Happiness' in Africa. In: Helliwell, J., Layard, R. and Sachs, J. (eds.). *World Happiness Report 2017.* New York: Sustainable Development Solutions Network, p. 84-121. ISBN: 9780996851350.

Surender, R.

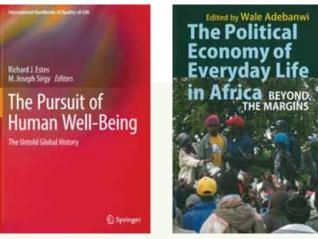
Urbina-Ferretjans, M. and **Surender**, **R**. (2017) Enhancing Global Cooperation in Social Development. In: Midgley, J. and Pawar, M. (eds.). *Future Directions in Social Development*. USA: Palgrave Macmillan, pp. 227-249. ISBN: 9781137445988.

Surender, **R**. (2017) The Drivers of Universal Health Care in South Africa: The Role of Ideas, Actors and Institutions. In: Yi, I. (ed.). Towards Universal *Health Care in Emerging Economies: Opportunities and Challenges (Social Policy in a Development Context)*. USA: Palgrave Macmillan, pp. 321-346. ISBN: 9781137533760.

Surender, R., Matsuoka, K. and Ovseiko, P. (2017) The United Kingdom Health System. In: Quah, S.R. and Cockerham, W.C. (eds.). *The International Encyclopaedia of Public Health (Volume 7).* 2nd Ed. Oxford: Academic Press, pp. 293-300. ISBN: 9780128036785.

Van Niekerk, R.

Van Niekerk, R. (2017) The African National Congress: Social



Moller, V. and Roberts, B. (2017) New Beginnings in an Ancient Region: Well-Being in Sub Saharan Africa. In: Estes, R.J. and Sirgy, J. (eds.). *The Pursuit of Human Well-Being: The Untold Global History.*

Adebanwi, W. (2017) Approaching the Political Economy of Everyday Life in Modern Africa: An Introduction. In: Adebanwi, W. (ed.). The Political Economy of Everyday Life in Africa: Beyond the Margins.

Democratic Thinking and the Good Society, 1940-1962. In: Webster, E.C. and Pampallis, K. (eds.). *The Unresolved National Question in South Africa: Left Thought Under Apartheid.* Johannesburg: Wits University Press, pp. 42-59. ISBN: 9781776140220.

Other Publications

Grapsa, E.

Grapsa, E. (2017) How well matched are South African workers to their jobs? A comprehensive analysis of education and skills mismatch. In: *Labour Market Intelligence Partnership (LMIP) Working Paper 1.* Pretoria: Human Sciences Research Council.

Rogan, M. & Reynolds, J.

Rogan, M. and **Reynolds, J.** (2017) Food poverty, hunger and household production in rural Eastern Cape households. *REDI3x3 Working paper 29, February 2017.* Cape Town: Research Project on Employment, Income Distribution and Inclusive Growth (REDI), SALDRU, University of Cape Town.

Rogan, M.

Posel, D. and **Rogan**, **M.** (2017) Inequality, social comparisons and minimum income aspirations: Evidence from South Africa. *ISER Working Paper No. 2017/3.* Grahamstown: Institute of Social and Economic Research. Rhodes University.

Otterbach, S. and **Rogan**, **M.** (2017) Spatial differences in stunting and household agricultural production in South Africa: (re)-examining the links using national panel survey data. *ISER Working Paper No. 2017/2.* Grahamstown: Institute of Social and Economic Research, Rhodes University (Joint IZA Institute of Labor Economics Working Paper).

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Cichello, P. and **Rogan**, **M**. (2017) Informal sector employment and poverty in South Africa: identifying the contribution of 'informal' sources of income on aggregate poverty measures. *REDI 3x3 Working Paper No. 34*. Cape Town: Southern Africa Labour and Development Research Unit (SALDRU), University of Cape Town.

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Peer Reviewed Non-Subsidy-Earning Journal Research Publications

Fine, B.

Fine, B. (2017) Neither Equilibrium as Such nor as Abstraction: Debating Fred Moseley's Transformation. *International Journal of Political Economy.* 46 (2017), pp. 22-28.

Peer Reviewed Subsidy-Earning Journal Research Publications

Adebanwi, W.

Adebanwi, W. (2017) Africa's 'Two Publics': Colonialism and Governmentality. *Theory Culture & Society.* 34 (4), pp. 65-87.

Alfers, L.

Alfers, L., Lund, F. and Moussie, R. (2017) Approaches to social protection for informal workers: Aligning productivist and human rights based approaches. *International Social Security Review.* 70 (4), pp. 67-85.

Fine, B.

Fine, B. (2017) From One-Dimensional Man to One-Dimensions Economy and Economics. *Radical Philosophy.* 20 (1), pp. 49-74.

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Posel, D. and **Grapsa**, **E**. (2017) Time to learn? Time allocations among children in South Africa. *International Journal of Educational Development*. 56 (2017), pp. 1-10.

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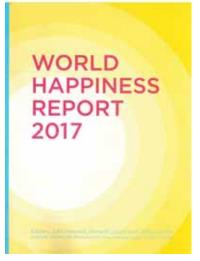
Hoffmann, N. and Metz, T. (2017) What Can the Capabilities Approach Learn from an *Ubuntu* Ethic? A Relational Approach to Development Theory. *World Development*. 97 (2017), pp. 153-164.

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Rogan, M., Roever, S., Chen, M. and Carré, F. (2017) Informal employment in the global south: globalisation, production relations and "Precarity". *Research in the Sociology of Work Vol.* 31, pp. 307-333.



Moller, V., Roberts, B., Tiliouine, H. and Loschky, J. (2017) 'Waiting for Happiness' in Africa. In: Helliwell, J., Layard, R. and Sachs, J. (eds.). *World Happiness Report 2017.* New York: Sustainable Development Solutions Network, p. 84-121. ISBN: 9780996851350.



Institute for Water Research

IWR

The Institute for Water Research (IWR) had a particularly vibrant and productive 2017.

Postgraduates / Graduations

A total of twenty-nine (29) Postgraduate students were registered in the Institute. Two (2) Hydrology and one (1) Water Resources Science Masters students graduated and one (1) PhD (cosupervised with Geography Department).

Distinguished Visitors, International Visits and Awards

Dr Stephanie Januchowski-Hartley from the Université Paul Sabatier (France) and the President of the Freshwater Working Group of the Society for Conservation Biology visited the IWR and collaborated with South African Institute for Aquatic Biodiversity.

Dr Stephan Pietch, an IIASA scholar, also visited the IWR, and the emerging partnership with the Helmholtz Centre Potsdam GFZ Research Centre for Geosciences and the Swedish Meteorological and Hydrological Institute (SMHI) resulted in trips to Germany and Sweden to gain skills in the use of satellite gravity data (GFZ Centre) and the global HYPE model (SMHI).

Ms Ntombekhaya Mgaba was awarded a prestigious IWRM (Integrated Water Resources Management) grant to attend the first São Paulo Advanced School (SPAS) on IWRM.

The Rhodes University Environmental Award in the individual excellence category was awarded to Mr Matthew Weaver, an IWR doctoral student, for his engaged and participatory research processes, harnessing people's voices to improve democratic water governance.

Significant Research Collaborations

Professor Tally Palmer attended the inaugural conference of the African Research Universities Alliance (ARUA) in Accra, Ghana, hosted by the University of Ghana. Significant interest was shown by ARUA delegates in collaborating to form the ARUA Water Centre of Excellence. By the end of 2017 the IWR submitted a motivation to host the ARUA Water CoE, based on an integrated water focus on the Sustainable Development Goals, founded on the concept of land and water catchments as complex social-ecological systems.

Environmental Water Quality (EWQ): The IWR EWQ team comprises Drs Nelson Odume, Neil Griffin, Paul Mensah and Khaya Mgaba. The team assessed the performance of a toolkit to enable eco-toxicological testing of effluents discharged to



Inaugural conference of the African Research Universities Alliance (ARUA) in Accra, Ghana, hosted by the University of Ghana, (from left to right) Dr Jane Tanner, Secretery General Professor Ernest Aryeety and Professor Tally Palmer.

surface waters. Worryingly, they found that control samples with no effluent added, showed significant toxicity in surface waters around Gauteng. The team worked with the Lesotho Highlands Water Corporation to produce a manual of standard operating procedures for river health monitoring and evaluation, and with SASOL on river health indicators for the highly stressed upper Vaal River.

Dr Griffin worked with the Department of Water and Sanitation on tracking trends in phosphate, a major driver of eutrophication and algal blooms in dams. He found a surprising recent downwards trend in riverine phosphate. The finding may link the large washing powder producer, and UCEWQ sponsor, Unilever, removing phosphate from their products.

Institute for Water Research



The team hosted a government-industry workshop on the Integrated Water Use Authorisation Bioassay toolkit. Other WRC-DWS collaboration produced an Ecotoxicity and Activity System Analysis of Salt Management, and Sector-Specific, Water Use and Resource Protection Guidelines for Agricultural, Mining and Municipal Wastewater. An EWQ Professional Course attracted 15 participants from across the water sector.

Adaptive Integrated Water Resource Management: Professor Tally Palmer, Dr Nelson Odume and Ms Margaret Wolff work actively in A-IWRM. Our current focus is developing participatory governance mechanisms to support long term policy implementation. We lead the Governance research in the large DEA-DST sponsored Tsitsa Project.

Professor Palmer has been a lead thinker in this ground-breaking project that brings together natural resource managers; local, provincial and national government departments; and catchment residents together in a joint project to understand and transform the functioning of the catchment so that vibrant livelihoods thrive in a sustainable landscape.

The team facilitated a process for residents to develop a draft catchment management strategy for the Tsitsa River, which will contribute the provincial-scale water resource management.

Dr Odume secured AfriAlliance Action Group EU funding and hosted a workshop on IWRM and Ethics, which attracted local and international scholars. A new collaboration between the IWR, ELRC and the University of Osnabruck, Germany was initiated in 2017. Dr Odume was a keynote speaker at the WRC Heritage Day colloquium, and at the Department of Health National Hygiene Symposium. The collaboration with the International Institute for Applied System Analysis progressed, with Dr Odume and a co-supervised doctoral student learning systems modelling in Austria.

Hydrology: DrJane Tanner and Dr Sukhmani Mantel co-ordinated and Dr Tanner hosted an Africa Groundwater Network workshop in Malawi to focus on increasing understanding of surface water and groundwater interactions in Africa. Hydrology researchers and students travelled to the UK and to the DRC for a series of workshops and field trips as part of the Royal Society - DFID Africa Capacity Building Initiative CRuHM (Congo Rover User Hydraulic and Morphology) Project. The project is carrying out large-scale hydraulic and geomorphological science research on the main navigable channels of the Congo River.

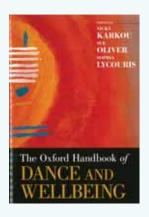


Professor CG (Tally) Palmer, IWR Director and Head of Department

Mr Matthew Weaver receiving the 2017 Rhodes University Environmental Award (Individual) from DVC Research and Development Dr Peter Clayton. Photo: Emily Stander/Grocott's Mail.







Dr Mantel and Dr Januchowski-Hartley at Rhodes University. Photo: IWR.



PUBLICATIONS

Books/Chapters/Monographs

Copteros, A. and Palmer, T.

Copteros, A., Karkou, V. and **Palmer, T.** (2017) Cultural Adaptations of Dance Movement Psychotherapy Experiences: From a UK Higher Education Context to a Transdisciplinary Water Resource Management Research Practice. In: Karkou, V., Oliver, S. and Lycouris, S. (eds.). *The Oxford Handbook of Dance and Wellbeing.* New York: Oxford University Press. p.681-698. ISBN: 9780199949298.

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Odume, O.N. (2017) Ecosystem Approach to Managing Water Quality. In: Tutu, H. and Grover, B.P. (eds.). *Water Quality*. Croatia: InTech. p.3-22. ISBN: 9789535128816.

Peer Reviewed Subsidy-Earning Journal Research Publications

Auta, Y., Odume, O.N. and Keke, U.

Arimoro, F.O., **Auta**, **Y.**, **Odume**, **O.N.**, **Keke**, **U.** and Mohammed, A.Z. (2017) Mouthpart deformities in Chironomidae (Diptera) as bioindicators of heavy metals pollution in Shiroro Lake, Niger State, Nigeria. *Ecotoxicology and Environmental Safety*. (2017). p.1-5.

Choruma, D.J.

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Clifford-Holmes, J.K.

Biggs, H.C., **Clifford-Holmes, J.K.**, Freitag, S., Venter, F.J. and Venter, J. (2017) Cross-scale governance and ecosystem service delivery: A case narrative from the Olifants River in north-eastern South Africa. *Ecosystem Services*. 28 (2017). p.173-184.



Margaret Wolff and Notiswa Libala engage with residents to discuss catchment concerns and actions during a workshop. Photo: IWR

Dowse, R. and Palmer, C.G.

Dowse, R., Palmer, C.G., Hills, K., Torpy, F. and Kefford, B.J. (2017) The mayfly nymph *Austrophlebioides pusillus* Harker defies common osmoregulatory assumptions. *Royal Society Open Science*. 4 (160520). p.1-9.

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Mûnch , Z., Okoye, P.I., Gibson, L., **Mantel, S.K.** and **Palmer, A.** (2017) Characterizing Degradation Gradients through Land Cover Change Analysis in Rural Eastern Cape, South Africa. *GeoSciences Journal.* 7 (7). p.1-22.

Mantel, S.K., Rivers-Moore, N. and Ramulifho, P. (2017) Small dams need consideration in riverscape conservation assessments. *Aquatic Conservation - Marine and Freshwater Ecosystems*. 27 (2017). p.748-754.

Mantel, S.K. and Gwate, O.

Palmer, A., Finca, A., Mantel, S.K., Gwate, O., Mûnch, Z. and Gibson, L. (2017) Determining fPAR and leaf area index of several land cover classes in the Pot River and Tsitsa River catchments of the Eastern Cape, South Africa. *African Journal of Range & Forage Science*. (2017). p.1-5.

Mensah, P.K., Mgaba, N., Griffin, N.J., Odume, O.N. and Palmer, C.G.

Mensah, P.K., Mgaba, N., Griffin, N.J., Odume, O.N. and Palmer, C.G. (2017) Development of a procedure for determining the mixing ratios in ecotoxicological experiments and its application in binary salt mixture experiments. *Ecotoxicology.* 26 (2017). p.1011-1017.

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Ndzabandzaba, C. and Hughes, D.A. (2017) Regional water resources assessments using an uncertain modelling approach: the example

Professor Tally Palmer engaging with community members during the Adaptive Planning Process workshop. Photo: IWR.



Institute for Water Research





Dr Odume giving the keynote address at the Environmental awards ceremony. Photo: Emily Stander/Grocott's Mail.

of Swaziland. *Journal of Hydrology: Regional Studies.* 10 (2017). p.47-60.

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Slaughter, A.R. (2017) Simulating Microbial Water Quality in Data-Scarce Catchments: an Update of the WQSAM Model to Simulate the Fate of *Escherichia coli. Water Resources Management.* 31 (2017). p.4239-4252.

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Taljaard, S., **Slinger, J.H.** and van Niekerk, L. (2017) A screening model for assessing water quality in small, dynamic estuaries. *Ocean & Coastal Management.* 146 (2017). p.1-14.

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Slinger, J.H. (2017) Hydro-morphological modelling of small, wavedominated estuaries. *Estuarine Coastal and Shelf Science*. 198 (2017). p.583-596.

Vellemu, E.C., Mensah, P.K., Griffin, N.J. and Odume, O.N. Vellemu, E.C., Mensah, P.K., Griffin, N.J. and Odume, O.N. (2017) Sensitivity of the mayfly *Adenophlebia auriculata* (Ephemeroptera: Leptophlebiidae) to MgSO4 and Na2SO4. *Physics and Chemistry of the Earth*. 100 (2017). p.81-85.

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Weaver, M.J.T., O'Keeffe, J., Hamer, N. and Palmer, C.G. Weaver, M.J.T., O'Keeffe, J., Hamer, N. and Palmer, C.G. (2017) Ms Mgaba receiving a certificate of attendance of SPAS in São Paulo, Brazil. Photo: IWR



Water service delivery challenges in a small South African municipality: Identifying and exploring key elements and relationships in a complex social-ecological system. *Water SA.* 43 (3). p.398-408.

Peer-reviewed Proceedings

Clifford-Holmes, J.K. and Slinger, J.H.

Carnohan, S., **Clifford-Holmes**, J.K., **Slinger**, J.H., Pollard, S. and Biggs, H. ResiMod: A Model to Assist Facilitating Strategic Conversation in the Olifants River Catchment of South Africa. *35th International Conference of the System Dynamics Society 2017.* Cambridge, Massachusetts. USA. July 2017.

Research Papers Presented at Academic/Scientific Conferences (Non-peer-reviewed Proceedings)

Mantel, S.K.

De moor, F.C., Bellingan, T.A., Barber-James, H.M. and Mantel, S.K. Insights from South Africa: the importance of geological history in riverine biomonitoring. *28th International Congress for Conservation Biology (ICCB), Insights for sustaining life on Earth.* Cartagena. Colombia. July 2017.



PSAM Public Service Accountability Monitor

The Public Service Accountability Monitor (PSAM) is an affiliated institute of the School of Journalism and Media Studies at Rhodes University. During the course of 2017 the PSAM staff engaged in various research and capacity building initiatives that seek to give effect to its 2016 - 2019 Strategic Plan.

Distinguished Visitors / International Visits

Dr Vanessa Malila, head of the Advocacy Impact Programme at the PSAM, presented a paper entitled, *Challenging the legacies of apartheid in a new democracy* at the 5th Global Conference on Transparency Research, held 19-21 June 2017 at the University of Limerick.

On 3-6 December 2017, Zukiswa Kota presented a conference poster looking at opportunities for using open data to improve food security at the 3rd Global International Conference on Global Food Security. This was a valuable opportunity to engage with scientists, activists and public officials while advocating for the use of open data for enhanced resource governance and planning.

Between 29 November and 1 December, Dr Vanessa Malila represented PSAM at the OSF Fiscal Governance Programme Monitoring, Evaluation and Learning Jamboree held in New York, USA.

The Partnership for Social Accountability Alliance (PSAA) is a consortium of organizations including PSAM, contracted by the Swiss Agency for Development and Cooperation (SDC) to implement the PSAM approach to improve accountability and service delivery in the HIV/AIDS/SRH and Food Security sectors in Tanzania, Zambia, Mozambique and Malawi. Thirteen (13) people attended the PSAM Fundamentals Courses during 2017 to support the PSAA's objectives.

The PSAM also undertook and supported Training of Trainers courses in Malawi, Mozambique, Tanzania and Zambia. Trainers have since delivered a course at national level and another at district level with PSAM staff observing and providing feedback to the trainers. The PSAM's Annual Learning Workshop took place in Johannesburg during August 2017. Approximately thirty-five (35) participants were present from the five (5) countries in which PSAM has been active this year. Several spaces were also provided to the PSAA so that they could benefit from the hindsight within our regional community.

Significant Research Aligned Events

One of the key activities of PSAM's Advocacy Impact Programme (AIP) is the production of case study research within the social accountability field, and its dissemination across stakeholders to communities of practice, academics, citizens and government.

In 2017 the AIP carried out two (2) case studies. The first was a knowledge distribution case study which examined the way in which local community members receive social accountability-related information. The study also examined the extent of their understanding of public administration processes and structures. The findings were telling in that most community members preferred to receive information in ways other than how they currently receive it.

The final report also shows that community members have a poor understanding of service delivery processes and the structures which govern public resource management at the local and national levels. In an effort to disseminate the findings widely, the final report and a summarised pamphlet were circulated electronically, on the PSAM website, and in hard copy to PSAM partners and stakeholders. In addition, a knowledge distribution event was hosted where local community members, government officials, councillors, ward committees, and local CSOs, NGOs and CBOs were invited to exchange information and gather knowledge from each other. The findings were presented at an international conference, published in the local newspaper, and are currently awaiting a decision on publication by an academic journal.

The second case study analysed social accountability monitoring of the Eastern Cape Department of Education by the PSAM and mainstream media. It provides an in-depth analysis of the work of the education programme within PSAM and a study of newspaper coverage of education in the Eastern Cape with the aim of providing a better understanding of the role of civil society and the media in social accountability monitoring.

The findings have been presented at an international conference, as well as a local conference, and the final research report is scheduled for dissemination across a range of platforms during March 2018. The research will also be drafted into an academic article for publication in 2018.

The Monitoring and Advocacy Programme (MAP) of the PSAM liaised during 2017 with the provincial office of the South African Human Rights Commission (SAHRC) and then developed a draft memorandum in September 2017.¹ With a particular focus on the areas of education and health, the

Public Service Accountability Monitor



Members of the PSAM with the Provincial Manager of the South African Human Rights Commission (SAHRC), Mr Abongile Sipondo (first from left), Zukiswa Kota, Esteri Msindo, Lungile Penxa and Nicola Sulter. PSAM has prioritised the SAHRC as key strategic partner. Photo: PSAM.

MoU will attempt to support engagement and oversight within the provincial administration.

In July and December 2017, the Local Government Budget Brief and Strategic Plan Evaluation (SPE) were respectively produced and used in direct engagement with municipal duty bearers, citizens and local CSOs.

The efforts of PSAM's environmental governance researcher, Nicholas Scarr remain centred on advocacy aimed at eliciting appropriate outcomes in regulatory scenarios, and, in the process, entrenching sound generic State agency decisionmaking and law enforcement frameworks. Interventions were effected in seventy-one (71) different situations, with emphasis being placed on activities which have the potential to impact negatively on the integrity of South Africa's coastal zone. Nicholas Scarr has continued during 2017 to contribute to coastal management solutions in the Eastern Cape through his presence on the Provincial Coastal Committee.²

During September 2017 the PSAM also engaged with the Open Government Partnership (OGP) by contributing to the

Independent Reporting Mechanism (IRM) Progress Report for 2016 - 2018. PSAM provided input on engagements between the National Treasury and CSOs in relation to Commitment 2 of SA's 3rd Country Action Plan: Open Budgeting. Leveraging a range of opportunities to interrogate and support OGP initiatives has created additional scope to engage with key decision and policy-makers in other government departments.

During 2017, the PSAM monitored and/or presented submissions during parliamentary meetings, resulting in a high number of submissions including inputs on the National Health Public Health Institute of South Africa (NAPHISA) and the Communal Land Tenure Bill (CLTB).³ In alignment with PSAM objectives of fostering collaborative work and sustaining budget advocacy, Zukiswa Kota facilitated the development of a CSO Medium Term Budget and Policy Statement (MTBPS) and joint media commentary. This included the production of a written submission by a range of organisations which was presented before Parliament's Standing and Select Committees on Appropriations which was televised on 24 November 2017.⁴

¹ The PSAM is currently awaiting the approval of the most recent draft from the SAHRC

² A state-civil society platform provided for in the Integrated Coastal Management Act (ICMA)

³ The latter was informed in part by ongoing MAP research and engagements with the Eastern Cape Department of Human Settlements looking at title deed and access to housing and presented a valuable opportunity to connect with sector experts such as Dr Rosalie Kingwill and Professor Ben Cousins. Examples are noted in the MAP Lograme and include submissions presented in partnership with CSO experts with varied backgrounds as a means of strengthening advocacy messages and building partnerships.

⁴ This included the Rural Health Advocacy Project, Section 27, Equal Education, The Studies in Poverty and Inequality Institute, PSAM and the National Shelter Movement.



Supporting research and advocacy on budget transparency and open data is an important component across PSAM. Jay Kruuse, was lead researcher for the 2017 Open Budget Survey of South Africa which will culminate in the survey's release in January 2018. Zukiswa Kota and Jay Kruuse are members of the Steering Committee and Operational Working Group that are assisting in the creation of an online budget data portal spear-headed by the South African National Treasury. The PSAM has also been central to the creation of a CSO coalition called IMALI YETHU whose mandate is to promote public participation in the development of the online budget data portal. Activities in 2017 included facilitating the naming of the portal, budget outreach meetings as well as bilateral meetings with CSOs. PSAM has also sought to use its stewardship within GIFT to strengthen public participation in the development of the budget portal.

PUBLICATIONS

Books/Chapters/Monographs

Malila, V.

Malila, V. (2017) We are not the 'born frees': The real political and civic lives of eight young South Africans. In: Garman, A. and Wasserman, H. (eds.). *Media and Citizenship: Between marginalisation and participation*. Cape Town: HSRC Press. p.217-232. ISBN: 9780796925565.

Other Publications

Kota, Z.

Kota, Z., Hendricks, M.G., Matambo, E. and Naidoo, V. (2017) The governance of basic education in the Eastern Cape. In: *ESID Working Paper No.83*. Manchester: University of Manchester.

Peer Reviewed Subsidy-Earning Journal Research Publications

Malila, V.

Garman, A., and Vanessa M. (2017) "Listening and the ambiguities of voice in South African journalism." *Communicatio* 43. no. 1: 1-16.

The PSAM's Health Budget Brief and Education Expenditure Tracking Report were produced in December 2017.



Mr Jay Kruuse, Director: PSAM

Research Papers Presented at Academic/Scientific Conferences (Nonpeer-reviewed Proceedings)

Kruuse, C.J. and Malila, V.

Kruuse, C.J. and **Malila**, **V.** Confronting global corruption: What are the mechanisms required to eradicate corruption, and is it truly possible? *African Perspectives on Global Corruption*. Birchwood Hotel and Conference Centre, Johannesburg. South Africa. February 2017.

Malila, V.

Malila, V. Challenging the legacies of apartheid in a new democracy. *5th Global Conference on Transparency Research*. University of Limerick, Limerick. Ireland. June 2017.

Malila, V. The role of the media in social accountability advocacy understanding impact and visibility in the case of education service delivery in the Eastern Cape. *SACOMM Highway Africa*. Rhodes University, Grahamstown. South Africa. August 2017.

Nxele, L.

Nxele. L. Partnership Development for social accountability information distribution: Activism Research. *Building Bridges in a Complex World, Interdisciplinary Conference.* Crete, Greece. July 2017.



RUMER Rhodes University Mathemathics Education Project

During the year, the RUMEP staff were engaged in a number of research and capacity building activities. Three (3) staff members participated in the 25th SAARMSTE Congress in January in Bloemfontein where two (2) short and one (1) long paper were presented.



Ms Gomolemo Dithebe presenting her research paper at the *How I teach* conference in Kuruman. Photo: RUMEP.

Mr Tom Penlington and Dr Clemence Chikiwa acted as editors for the 25th AMESA Congress held in Port Elizabeth in July, which was attended by over eight hundred (800) delegates from all over South Africa and beyond. One of the keynote speakers at the conference was Professor Nosisi Feza from Central University of Technology, one of the first alumni students to graduate at RUMEP more than twenty (20) years ago.

Two (2) "How I teach conference" presentations by our final year students took place in September and October 2017. The first group, all from the Northern Cape, presented their research papers in Kuruman, while a further twenty-five (25) students presented their papers in Grahamstown. The standard of presentations was extremely pleasing considering that our research coordinator resigned from RUMEP at the end of July.

RUMEP is constantly being asked to train Mathematics teachers from different districts of the Eastern Cape and this is affirmation of the quality of the professional development work that RUMEP produces. Training sessions were held in Matatiele, Bizana and Mount Frere.

Postgraduates / Graduations

RUMEP graduated a cohort of forty-five (45) students. Three (3) final year BEd students, two (2) from the Northern Cape and one (1) from the Eastern Cape namely, Mr Tapiwanashe Manyumbu, Ms Martha Munetsi and Ms Caroline Muchineripi all graduated with distinction.

Distinguished Visitors / International Visits

Dr Matthias Ludwig, the Project Manager of The MathCityMap Project, from Goethe University, Frankfurt visited RUMEP in July and worked with our BEd 1 students by introducing a fun mathematics trail around the St Peter's campus.

The MathCityMap Project involves using mobile technology such as a smart phone and the app leads students via GPS to a series of mathematics tasks which gives automatic feedback to the user. In addition the app provides hints in case one gets stuck on a certain problem.

The MathsCityMap Project helps students explore, discover, enjoy and celebrate maths concepts and problems in real world contexts. These types of activities stimulate engagement and foster enthusiasm for mathematics.



Mr Thomas Penlington, Director: RUMEP

Rhodes University Mathematics Education Project



PUBLICATIONS

Concerts, Exhibitions, Performances, Workshops, Events

Balele, S. and Haywood, T.

Balele, S. and Haywood, T. Workshop. *Senior Phase Workshop: Patterns and Geometry*. Department of Education, Mt Frere. South Africa. 16 - 19 October 2017.

Haywood, T.

Haywood, T. Workshop: Pentominoes. *AMESA 2017: Restoring the Dignity of Mathematics Learners through Quality Teaching and Learning.* Nelson Mandela University, Port Elizabeth. South Africa. 3-7 July 2017.

Jack, N.

Jack, N. Workshop. *Foundation Phase Workshop: Numeracy.* Department of Education, Bizana. South Africa. 7 - 11 August 2017.

Jack, N. & Mkhwane, F.

Jack, N. & Mkhwane, F. Workshop. *Intermediate Phase Workshop: Fractions, Time Zones, Division, Viewing objects and Properties of 3D objects.* Department of Education, Bizana. South Africa. 14-18 August 2017.

Mkhwane, F.

Mkhwane, F. Workshop. *Senior Phase Workshop: Patterns and Geometry.* Department of Education, Bizana. South Africa. 7-11 August 2017.

Penlington, T.

Penlington, T. Workshop. *Foundation and Intermediate Phase Workshop: Number Talks and the four basic operations.* Bedford Country School, Bedford. South Africa. 18 October 2017.

Penlington, T. Fun Games Afternoon. CM Vellem School, Joza, Grahamstown. South Africa. July 2017.

Wood, S.

Wood, S. Workshop. The order of operations: Putting the term back into BODMAS. *AMESA 2017: Restoring the Dignity of Mathematics Learners through Quality Teaching and Learning*. Nelson Mandela University, Port Elizabeth. South Africa. July 2017.

Peer-reviewed Proceedings

Chikiwa, C.

Chikiwa, **C**. Creating Critical Thinking Multilingual Mathematics Classes through Questioning: Are Teachers Truly cultivating it? *AMESA 2017: Restoring the Dignity of Mathematics Learners through Quality Teaching and Learning.* Nelson Mandela University, Port Elizabeth. South Africa. July 2017.

Chikiwa, C. and Schafer, M. Teaching Mathematics in Multilingual Classrooms: Oral Questioning as a Formative Assessment Technique. *Research to learn and teach for diversity in Mathematics, Science and Technology Education.* Central University of Technology, Free State. South Africa. January 2017.



Mr Mpumelelo Nkomana presenting his research paper at the How I teach Conference in Grahamstown.
Photo: RUMEP.

Research Papers Presented at Academic/Scientific Conferences (Nonpeer-reviewed Proceedings)

Chikiwa, C.

Chikiwa, **C.** and **Schafer**, **M**. Teacher Code Switching in Mathematics Multilingual Classrooms: Oral Questioning as a Formative Assessment Technique. *25th Southern African Association dedicated to the advancement of research in Mathematics, Science and Technology Education (SAARMSTE)*. Central University of Technology, Free State. South Africa. January 2017.

Haywood, T.

Haywood, T. An exploration of educators' understanding of geometry with respect to van Hiele's theory of geometric thinking: A case study of rural secondary school educators. *25th Southern African Association dedicated to the advancement of research in Mathematics, Science and Technology Education (SAARMSTE).* Central University of Technology, Free State. South Africa. January 2017.

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Penlington, T. Fraction proficiency of a group of in-service science teachers. *25th Southern African Association dedicated to the advancement of research in Mathematics, Science and Technology Education (SAARMSTE).* Central University of Technology, Free State. South Africa. January 2017.



SAFAB South African Institute for Aquatic Biodiversity

The NRF-SAIAB National Facility continues to break historic institutional records in terms of Postgraduate students supervised and annual research outputs, especially the number of ISI rated publications.



A team from NRF-SAIAB with colleagues from Addo Elephant National Park seine netting on the Wit River. Photo: Olaf Weyl.

Altogether ten (10) BSc Honours, thirty-two (32) MSc and twenty-five (25) PhD projects were undertaken in 2017, a fine achievement by a staff of only eight (8) full-time scientists and a small cohort of Postdoctoral Research Fellows.

In addition, twenty (20) students received their Postgraduate degrees in 2017. Of a total of twenty-seven (27) projects/programmes conducted in 2017, fourteen (14) were linked primarily to the Molecular Biology & Systematics focus and thirteen (13) dealt mainly with Conservation Biology & Ecology issues.

The Acoustic Tracking Array Platform (ATAP) continues to show growth in terms of the numbers and diversity of animals tagged with acoustic transmitters in southern African coastal waters. The ATAP also featured on the front cover of *African Journal Marine Science* and included an article by Professor Paul Cowley and his team that reflected on the first five (5) years of this internationally recognised research platform.

NRF-SAIAB's biotelemetry researchers initiated two (2) exciting new projects in 2017. The first, in collaboration with researchers from ORI, aims to unravel one of David Attenborough's Blue Planet mysteries on giant kingfish that frequents the Mtentu Estuary. The other addresses a knowledge gap on the movement ecology and migrations of several stingray species, including duckbill, diamond and blue stingrays.

Professor Alan Whitfield's - who is due to retire soon - two (2) MSc students; Nokubonga Mbandzi, who investigated the

link between river flow and the abundance of two zooplanktivorous fish species in the Kariega Estuary, and Melissa Pollard, who studied the use of different types of littoral habitats by fishes in the Knysna Estuary using an underwater GoPro camera, successfully submitted their theses during the year.

Mandla Magoro is busy writing up his PhD on the ecology of Eastern Cape coastal micro-outlets and micro-estuaries, and he will be handing in his thesis for examination in the first half of 2018.

Professor Whitfield published a number of important global and local review papers on fishes in estuaries during the year and is finalising a revision of his 1998 monograph on the biology and ecology of fishes in southern African estuaries, a major work that will be published in second half of 2018.

Dr Nikki James and her research team continued their research into the impact of climate change (extreme events, pH and temperature) and exploitation on fish communities and the relative value of different nursery habitats for coastal and estuarine fish species. This research expanded into the inshore areas of Algoa Bay, with two (2) PhD students Phakama Nodo and Carla Edworthy starting their PhD projects in 2017.

Phakama is assessing the use of nearshore and estuarine nursery habitats by early juvenile demersal fish species in Algoa Bay and Carla is monitoring ocean acidification in the Bay and looking at how life-history determines the response of fish species to ocean acidification.

A highlight for the year was seven (7) presentations delivered by the team at the South African Marine Science Symposium, with two (2) students Bernard Erasmus and Carla Edworthy being awarded first and second prizes for the best student presentations, respectively.

Notable progress in the development of deep-water baited remote underwater stereo-video systems (stereo-BRUVs) under the leadership of Dr Anthony Bernard was achieved in 2017. These BRUVs can be used to survey benthic and demersal fishes from the outer edges of the continental shelf down into the bathyal zone.

Firstly, successful fish community surveys of the Wright Canyon and the adjacent shelf-edge and slope were undertaken in the iSimangaliso Wetland Park marine protected area. Calm oceanic conditions allowed for sampling between seventy



(70) and two hundred and fifty (250) metre depths, using traditional stereo-BRUVs, and revealed diverse fish assemblages dominated by very large serranid and sparid fish.

Secondly, through funding received from the NRF Research and Technology Fund it was possible to develop and successfully test an untethered stereo-BRUV (i.e. one that does not have ropes connecting it to buoys on the sea surface) capable of working down to one thousand one hundred and ten (1110) metre depth.

During 2017, research on larval ecology by the Coastal and Ocean Sciences Team (COST) led by Dr Francesca Porri focused on mainly two (2) systems, coastal environment rocky shores (natural and man-made) and mangroves. Larval distribution and settlement/recruitment of invertebrates has been investigated in relation to prevailing winds, under the broader project funded by the African Coelacanth Ecosystem Programme (ACEP) on the pathways of larval dispersal. The role of mangrove microhabitats as nurseries for fish and invertebrate larvae is also one of the main projects initiated during 2017. Most samples have been collected and laboratory analyses are currently underway. Physiological experiments on larval metabolism have been initiated, while bacterial metabolism from mangrove substrates are also being investigated.

The major research focus for Dr Gavin Gouws during 2017 was the study of phylogeography and diversity of freshwater crabs in the under sampled eastern part of South Africa, supported by the extension of an NRF-CPRR programme.

Research investigating the connectivity of marine fishes between the east coast of South Africa and Madagascar on the ACEPIII Suitcase Project was concluded, with new projects incorporating estuarine fishes being initiated.

The large collaborative FBIP "SeaKeys; Unlocking Foundational Marine Biodiversity Knowledge" programme, under which NRF-SAIAB led the DNA barcoding, drew to a close.

Collaborative research on goatfish systematics and taxonomy with Dr Franz Uiblein continued through 2017.

Students; Bruce McClure and Frankie de Beer both registered to continue their research on freshwater crabs, as did Martinus Scheepers with his MSc on paternity and mating strategies in clinid fishes. Yonela Sithole submitted a successful MSc thesis on the systematics of the undulated moray eel (*Gymnothorax undulatus*), and Sibusiso Yokwana started an MSc study on the genetic stock structure of blue bream (*Pachymetopon aeneum*).

Professor Olaf Weyl's research produced thirty-three (33) papers, one (1) book chapter and graduated five (5) PhD and three (3) MSc students.

Research successes were in the three (3) core areas: conservation biology, invasions, freshwater ecology and inland fisheries.



A new species of *Amnirana*, a golden backed frog, from the Cuito Source Lake in southern Angola. Photo: Roger Bills.

A paper in the journal Conservation Biology highlighted the role of man-made impoundments as refugia for native fishes in water stressed regions. This role is becoming increasingly important as the increasing demands on water can result in complete dewatering of rivers during water stressed periods, such as the current drought in the Western Cape. The group also published a review of the biology and status of Cape Fold Ecoregion freshwater fishes which will provide a basis for directing future research and conservation efforts in this important biodiversity hotspot.

In the field of invasion biology, the research group contributed to the development of a new metric to understand and predict the ecological impacts of existing, emerging and future invasive alien species. Two (2) major reviews were also completed to better understand invasion status and impacts of brown trout and redclaw crayfish in Africa.

In the fields of freshwater ecology and inland fisheries, the works by PhD graduates Geraldine Taylor and Richard Peel have contributed to a better understanding of how to analyse and interpret food webs in the large floodplain ecosystems. Inland fisheries research has also progressed well and several research papers were published describing inland fisheries in South Africa and created a better understanding of the link between low initial population sizes and the ultimate success of fishes that are important in fisheries. This research also contributed to developing a better understanding of how to manage fisheries for species that also have biodiversity impact.

During 2017 NRF-SAIAB and SANBI jointly coordinated the reassessment of the conservation status and extinction risk for all freshwater fishes of South Africa according to the latest IUCN Red List Categories and Criteria. A decision was made to include all recently identified genetic lineages in published literature, even before they are formally described, to guide the development and implementation of appropriate conservation management strategies. Each species assessment was reviewed by at least two experts to ensure that the IUCN criteria had been followed and applied correctly, and that all relevant information was presented.

During the year, researchers from Ezemvelo KZN Wildlife and NRF-SAIAB, led by Dr Albert Chakona, also documented the



freshwater rediscovery of the century on the African continent following the discovery of the Maloti minnow, *Pseudobarbus quathlambae*, from the Mzimkhulu River in KwaZulu-Natal.

This species was originally described based on specimens that were collected from the uMkhomazana River in KwaZulu-Natal in 1938. However, subsequent surveys failed to find specimens of the Maloti minnow in the uMkhomazana or elsewhere in South Africa. The species was therefore declared extinct in South Africa. For a long time, extant populations of this species were considered to be confined to various streams in the Lesotho Highlands. The rediscovery of the Maloti minnow after almost eighty (80) years since the original collections were made from South Africa is significant, because it is the first record of the species from the Mzimkhulu River system. This confirms the assertion that this species is likely to have been previously widely distributed in the Drakensberg streams of KwaZulu-Natal prior to human impacts. The rediscovery of the Maloti minnow creates obligations and responsibilities for all parties involved, especially the conservation authorities responsible for the area, to implement measures that will prevent loss of this species in South Africa.

In conclusion, the productivity of NRF-SAIAB research staff, students, Postdoctoral Research Fellows and Honorary

PUBLICATIONS

Books/Chapters/Monographs

Bruton, M.

Bruton, M. (2017) *The Annotated Old Fourlegs: The Updated Story of the Coelacanth*. USA: University Press of Florida. ISBN: 9780813064642.

Skelton, P.H.

Kerezsy, A., Gido, K., Magalhaes, M.F. and **Skelton, P.H.** (2017) The Biota of Intermittent Rivers and Ephemeral Streams: Fishes. In: Datry, T., Bonada, N. and Boulton, A. (eds.). *Intermittent Rivers and Ephemeral Streams: Ecology and Management*. San Diego, CA (USA): Academic Press. p.273-298. ISBN: 9780128038352.

Peer Reviewed Subsidy-Earning Journal Research Publications

Becker, A., Whitfield, A.K., Cowley, P.D. and Cole, V.J.

Becker, A., Whitfield, A.K., Cowley, P.D. and Cole, V.J. (2017) Does water depth influence size composition of estuary-associated fish? Distributions revealed using mobile acoustic-camera transects along the channel of a small shallow estuary. *Marine and Freshwater Research.* 68 (2017). p.2163-2169.

Bennett, R.H., Cowley, P.D. and Naesje, T.F.

Bennett, R.H., Cowley, P.D., Childs, A.R., Attwood, C.G., Swart, L. and Naesje, T.F. (2017) Movement patterns of an endangered fishery species, *Lithognathus lithognathus* (Sparidae), and the role of no-take marine protected areas as a management tool. *African Journal of Marine Science*. 39 (4). p.475-489.

Bills, R.

Day, J.J., Fages, A., Brown, K.J., Vreven, E.J., Stiassny, M.L.J., Bills,

Research Associates continued at a high level during 2017, with a record one hundred and sixteen (116) ISI rated scientific papers and four (4) other peer-reviewed papers being published.

It was also a bumper year in terms of conference and symposium papers, with ninety-one (91) delivered at a wide variety of national and international venues.

In addition to the above more formal activities, our scientists continue to communicate information about their research for use by managers, scholars and the wider public. This is evidenced by the sixteen (16) seminar and workshop presentations, fifteen (15) public presentations delivered, and twenty-one (21) research related popular articles produced by NRF-SAIAB staff during 2017.



Professor Alan Whitfield, Chief Scientist

R., Friel, J.P. and Ruber, L. (2017) Multiple independent colonizations into the Congo Basin during the continental radiation of African *Mastacembelus* spiny eels. *Journal of Biogeography*. 44 (2017). p.2308-2318.

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Kubheka, P.S., **Chakona, A.** and **Mazungula**, **D.N.** (2017) The Maloti minnow *Pseudobarbus quathlambae* (Barnard, 1938) is not extinct in South Africa. *African Journal of Aquatic Science*. 42 (3). p.303-306.

Chakona, A. and Skelton, P.H.

Chakona, A. and **Skelton, P.H.** (2017) A review of the *Pseudobarbus afer* (Peters, 1864) species complex (Teleostei, Cyprinidae) in the eastern Cape Fold Ecoregion of South Africa. *ZooKeys.* 657 (2017). p.109-140.

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Busschau, T., **Conradie**, **W**., Jordaan, A. and Daniels, S.R. (2017) Unmasking evolutionary diversity among two closely related South South African Institute for Aquatic Biodiversity (SAIAB)





ABOVE: MSc student, Siphelele Dyantyi, and Postdoctoral Research Fellow, Dr Paula Pattrick, deploy a plankton pump from the ACEP coastal research vessel, R/V uKwabelana, using a motorised winch. Principal Investigator, and NRF-SAIAB Senior Scientist, Dr Francesca Porri, looks on. Photo: Harold Marchand.

RIGHT: Plankton sampling being conducted by MSc student Makalobe Mabotje, during a cruise on the R/V Angra Pequena, yielding interesting records of fish larvae. Photo: Tamsyn Livingstone.

African legless skink species (Acontinae: *Acontias*) using molecular data. *Zoology.* 121 (2017). p.72-82.

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Conradie, W. and **Bills**, R. (2017) Correspondence - Wannabe Ranid: Notes on the morphology and natural history of the Lemaire's Toad (Bufonidae: Sclerophrys lemairii). *Salamandra*. 53 (3). p.439-444.

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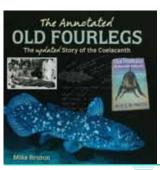
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ACEP ROV high definition camera captures the beauty of life on deep reefs. Photo: ACEP ROV with Ryan Palmer and Kerry Sink.





Cover of the book "The Annotated Old Fourlegs: The updated story of the coelacanth" by Mike Bruton Photo: Struik Nature website.

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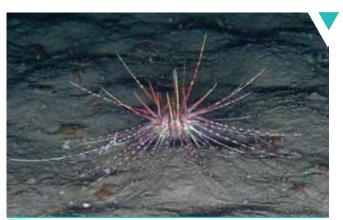
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ACEP ROV high definition camera captures the beauty of life on deep reefs Photo: ACEP ROV with Ryan Palmer and Kerry Sink.

South African Institute for Aquatic Biodiversity (SAIAB)



Roxanne Erusan, Biotechnician at Addo Elephant National Park and Jeff Hean, NRF-SAIAB Post-Doctoral fellow, measure and record fish sampled with a fyke net in Addo Elephant National Park Photo: Lucky Dlamini.



Professor Olaf Weyl, Senior Scientist at NRF-SAIAB, with Roxanne Erusan, Biotechnician at Addo Elephant National Park and students, Avuzwa Bomvana and Christoff Heidmann, preparing a fyke net for a sampling trip up the Wit River.

Photo: Photo: Lucky Dlamini.

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ACEP Phuhlisa students collecting grab samples on the Bushman's River.

Photo: Ryan Palmer





Nkosinathi Mazungula, SAIAB Senior Curation Officer, setting a multi-mesh gill net fleet in the Cuanavale source lake, Angola, as part of a multidisciplinary taxonomic survey of the Okavango source region in south-eastern Angola. Photo: Ben van der Waal.

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UHURU Unit for the Humanities at Rhodes University

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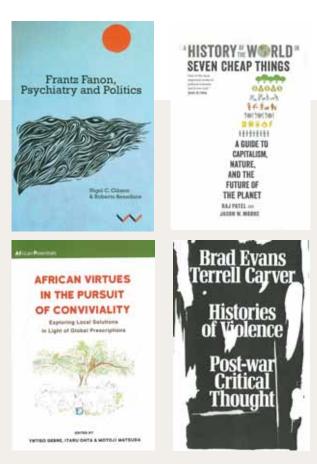
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