

RESEARCH INSTITUTES AND UNITS

THE ALBANY MUSEUM

Director

Manzi Vabaza

Assistant Director

Vacant

Department of Entomology and Arachnology

Curator: J. Midgley

Curator Emeritus: S. Gess, BSc, MSc, PhD(Rhodes)

Department of Freshwater Invertebrates

Curator: H.M. Barber-James, PhD (Rhodes)

Assistant Curator: M.C. Mlambo

Curator Emeritus: F. C. de Moor, PhD (Wits)

Department of Earth Sciences

Curator: R. Prevec, PhD (Natal) , PhD (Wits)

Curator Emeritus: W.J. de Klerk, PhD(Rhodes)

Herbarium: (staffed jointly by Rhodes University and the Albany Museum)

Curator: T Dold

Assistant Curator: P.V. Cimi

Department of Archaeology

Curator: C. Booth

Historical Anthropology

Curator: P Mntonintshi

Department of History

Curator: A. Van Wezel

Curator Emeritus: W.F. Way-Jones

Exhibitions Officer: P. Janse

Education Officer: L. Mahlasela

Mobile Museum: N Madinda

Communications and Marketing Officer: L. Snam

Visitor Services: N. Mtyobo

Technical Services: H. Köhl

The Albany Museum, the second oldest museum in southern Africa, was founded in September 1855. The Museum acquired its own building in 1902 when the core block of the present Natural Sciences Museum was built. The palaeontological and geological collections have their origins with the collections of Andrew Geddes Bain and Dr W Guybon Atherstone; Dr Schonland built up the herbarium and the library.

With Dr Schonland, came the historic ties which the Museum has with Rhodes University. He addressed the Cape Parliament, speaking for the establishment of a university in Grahamstown, and persuaded the trustees of Cecil Rhodes's estate to pledge funds for the establishment of Rhodes University College. When the College was established in 1904, the

Director, Dr Schonland became its first professor of Botany. Dr Schonland was succeeded as director by Dr John Hewitt.

John Hewitt's research lay in the fields of vertebrate zoology and archaeology. During this period Grahamstown's longstanding affaire with fishes started. In 1930 Dr JLB Smith, Senior Lecturer in Chemistry at Rhodes, identified and catalogued the Museum's marine fish collection.

On 6 September 1941 the Museum was burnt down. The library and most of the collections were saved but there was a great loss of exhibited material. The Museum was rebuilt and the displays were reconstructed.

In 1952 the Museum's collection of fishes was loaned to the University 's Department of Ichthyology. Three years later the Museum celebrated its centenary and, in 1957, its staff became Provincial employees. Dr John Hewitt retired the following year, and was succeeded by Dr TH Barry.

During Dr Barry's tenure of five years the Hewitt and Rennie Wings were added to the Natural Sciences Museum and the 1820 Settlers Memorial Museum was built.

The period between 1965 and 1977, the directorship of Mr CF Jacot Guillarmod, was one of consolidation. The National Collection of Freshwater Organisms was transferred from the CSIR to the Museum. Fort Selwyn was restored by the Province and handed over to the Museum in 1977.

Under Mr Jacot Guillarmod's successor, Mr B Wilmot, the Museum entered a new period of growth. De Beers Consolidated Mines Limited purchased and restored the Observatory and the Priest's House and donated them to the Museum. The Old Provost was restored by the Province.

The freshwater fish collections of the Transvaal and Cape Nature Conservation authorities, the Natal Museum and the South African Museum were transferred to the Albany Museum. Museum staff started teaching short courses at the University and, in 1983, the Museum became an Associated Research Institute of Rhodes University.

The Museum's close relationship with the University was expanded with the consolidation of the herbaria of the two institutions and the formation of the Selmar Schonland Herbarium, housed in the Museum.

The Museum has a staff complement of 68. The Museum falls under the Department of Sport, Recreation, Arts and Culture in the Eastern Cape government.

BIOPHARMACEUTICS RESEARCH INSTITUTE

Executive Director

I Kanfer, BSc(Pharm), BSc(Hons), Phd(Rhodes)

Director

MF Skinner, PhD (Rhodes)

The Biopharmaceutics Research Institute (BRI) is a Contract Research Organization dedicated to conducting bioavailability/bioequivalence and pharmacokinetic studies in accordance with international specifications. A full range of services for the clinical, statistical and report generation aspects of bioavailability/bioequivalence and pharmacokinetic studies are undertaken according to Good Clinical Practice and standard operating procedures.

Studies are conducted in a clinic staffed by experienced investigators with substantial international experience together with a resident medical practitioner, registered pharmacist and QA officer. In addition, the Institute has a pool of well-trained professional nurses who assist in general clinical activities. The on-site Rhodes University Ethical Standards Committee offers rapid review of BRI protocols for ethical approval according to GCP principles and in accordance with the requirements of the Declaration of Helsinki.

Motivated and responsible volunteers are recruited from the 4 000 male and female members of the Rhodes University student body. The clinic is ideally situated on the Rhodes University campus and is within easy walking distance of volunteers residing in University residences or off-campus - over 50% of the student body reside on campus.

The BRI enjoys excellent working relationships with a number of internationally-renowned bioanalytical companies which provide the Institute with the opportunity to out source sample analysis for a vast range of validated assays. Excellent specialist international courier services ensure safe, rapid and efficient transport of biological samples under dry-ice with temperature monitoring to analytical sites around the world.

In addition, the BRI provides services for the analysis and quality control of pharmaceutical and phytochemical products.

The Institute also provides facilities for postgraduate projects leading to MSc and PhD degrees.

CENTRE FOR SOCIAL DEVELOPMENT

Director

Dr G Harrison

Coordinator: B ED

Ms J. Hodgskiss

Co-ordinator: Community Development

Manager

Mr T Moss

Co-ordinator: Early Childhood Development

M. R Nomwebu

Co-ordinator: Curriculum and Quality

Assurance

Ms C Larkin

ECD facilitators

P Jali

N Ralo

Ms H van Niekerk

Mr T Moss

Ms B Hayward

CD facilitators

J Makgati

B Msingi

Administrative staff

Ms Z Dili

Ms I. Harrison

Ms L Marechal

Financial Administrator

Ms N Stokes

The core educational service offered by the CSD is underpinned by a philosophy that combines leading theoretical approaches to education development with practices that improve the educational outcomes of the target children (1 -9 year olds). Simultaneously the CSD integrated educational model aims to improve the livelihoods of the learners through targeted community development practices.

The CSD Rhodes University ECD Career path:

Course

Level 4 FET certificate in ECD (EDTP SETA)

Duration, credits, supervision

Two years part-time while working throughout as an ECD practitioner under CSD supervision.

Focussing on young children from birth to 5 years

Course

Level 5 National Diploma in ECD

Duration, credits, supervision

Two years part time while working throughout as an ECD practitioner under CSD supervision
Focussing on young children from birth to 5 years

Course

Level 6 BEd. (Foundation Phase)

Duration, credits, supervision

Three years part-time while working throughout as an ECD practitioner under CSD supervision
Focusing on young children from 5 years until 9 years, within the Foundation Phase

Course

Level 4 FET Certificate in Community Development (CD) ETDP Seta

Duration, credits, supervision

Two years part-time while working throughout as a CD Practitioner under CSD Supervision
Focussing on young children, families and community.

DICTIONARY UNIT FOR SOUTH AFRICAN ENGLISH (DSAE)

Director & Editor-in-Chief

EJ Wolvaardt, BA, Dip Ed(Stirling)

Managing Editor

T van Niekerk, BA(Hons), MA(Rhodes)

Associate Editors

R Bowker, BA(Hons)(Rhodes)

The DSAE formally began researching South African English vocabulary and usage in 1969. The project was led by the late Professor Bill Branford, Rhodes University's first professor of English Language and Linguistics, assisted over the years by a dedicated team of linguists and lexicographers, including his wife Dr Jean Branford. Almost 30 years later, in 1996, the fruits of this research were published as *A Dictionary of South African English on Historical Principles (DSAEHist)*, by Oxford University Press (see dsae.co.za). The archives of the DSAE's research constitute a unique resource for students of the English language as it is used in South Africa. As well as computerised holdings and a comprehensive library, the resources include an extensive file of cards collected between 1969 and the 1990s showing contexts for words and phrases in South African English. Sources range from early explorers' and settlers' journals to printed books, contemporary newspapers, and oral sources.

In July 2014, aided by funding from Rhodes University, the Dictionary Unit published an electronic version of *DSAEHist* as a pilot edition (see dsae.co.za). In 2015 work will begin on revising and updating this online edition, with emphasis on new developments in South African English since 1994. At the same time the Unit is expanding its electronic database with records of South African English that it has been collecting since the mid-1990s. In 2012, also with seed funding from Rhodes University, the DSAE embarked on a pilot project with the departments of English Language and Linguistics and Computer Science to construct a comprehensive corpus of South African English. The first phase, a one-million-word snapshot corpus of South African English in 2011 (SAE11), was completed in 2013, and the second phase, an ongoing monitor corpus of online texts, was initiated in 2014. At the end of 2014 the latter comprised approximately 60 million words. Investigation is also under way into the possibility of digitising the substantial archive of card-indexed citations.

In addition to its dictionary projects, the DSAE assists both national and international researchers as well as the general public with enquiries about South African English. It also contributes to the promotion of multilingualism in South Africa by maintaining regular contact with the lexicography units for all the other official languages and participating in the wider language community.

The DSAE is an Associated Institute of Rhodes University, and is a registered Non-Profit Company. As one of eleven National Lexicography Units it is funded by the Pan South African Language Board. In addition the DSAE receives royalties from the sales of its two commercial publications, the *Francolin Illustrated School Dictionary for Southern Africa* (Francolin 1997/Longman 2001), and the *Oxford South African Concise Dictionary* (OUP Southern Africa 2010).

For more information, see www.ru.ac.za/dsae/

INSTITUTE FOR ENVIRONMENTAL BIOTECHNOLOGY (EBRU)

Professor and Director

AK Cowan, BSc(Hons), PhD(Rhodes)

Researchers

RK Laubscher, BSc(Hons), MSc(Rhodes), MBA(UCT)

Administrative Officer:

G Eustace

Technical Staff:

A Magaba

N Toto

N Singapi

O Baba

Professor Emeritus & Founding Director:

PD Rose, BSc(Hons)(UCT), PhD(Rhodes)

Fellows:

K Wittington-Jones, PhD(Rhodes)

BI Pletschke, PhD(UPE)

H Tsikos, PhD(Rhodes)

OO Hart, PhD(PUK)

The Institute for Environmental Biotechnology, Rhodes University (EBRU) targets research in environmental biotechnology at the interface between the fundamental and applied sciences. In doing so it undertakes the innovation and development of bioprocess solutions to environmental problems, and focuses on the diffusion and transfer of environmental technology from laboratory to full-scale industrial application. This activity targets excellence in the capacity building and contributing to the development of the associated academic and applied disciplines. Historically innovation and development of environmental bioprocesses related to water treatment was the main focus area. More recently, the scope of research and bioprocess development has been widened to include contemporary fields such as alternative energy and bio-fuels. As part of our human resource development programme the institute offers intensive Masters' and Doctoral research. The various research programmes are focused on the development of human resource capacity and link the application of biotechnology to industrial and municipal related environmental degradation, and clean energy generation.

Environmental biotechnology may be defined as the development, use and regulation of biological systems and their derivatives and processes for the sustainable

socio-economic benefits in environmental protection, remediation and energy generation. It is a knowledge-intensive, research-driven field which addresses a broad spectrum of environmental sector needs in the major areas of soil, air, and water, and in co-product (waste) valorisation. EBRU is a self-funded institute and is located in Belmont Valley, Grahamstown about 6 km from the main campus and is equipped with analytical, molecular microbial ecology, microbiology and bioprocess laboratories. Integrated Ponding Systems, anaerobic digesters and mine water treatment pilot plants are also to be found here.

EBRU welcomes applications from interested candidates wanting to undertake post-graduate research work in various aspects of environmental biotechnology. Opportunities are available for MSc and PhD candidates in industrial and municipal wastewater bioremediation and beneficiation, land rehabilitation, algal biotechnology, atmospheric carbon sequestration biotechnology, and alternative energy. The entrance requirements for research MSc and PhD degrees are provided in the General Rules section of the Rhodes University calendar. Candidates with an Honour's degree in the Natural and/or Life Sciences are welcome to apply for the MSc positions, while PhD candidates are required to already be in possession of a relevant postgraduate qualification at time of application. Applications are also welcome from candidates interested in a Post-doctoral Fellowship at the Institute. For further information, please visit the Institute's website (<http://www.ru.ac.za/static/institutes/ebru/>).

THE INSTITUTE FOR THE STUDY OF ENGLISH IN AFRICA

Director

Associate Professor MG Hendricks, BA, HDE (UCT), BA (Hons), MEd (Rhodes), PhD (Wits)

Alan Macintosh Research Fellow

Dr M Mbelani, BA (Educ) (UNITRA), BEd (UNISA), ACE (ELT), Med, PhD (Rhodes)

Honorary Professor of Poetry Rhodes University

Professor CM Mann, BA (Wits), MA (Oxon), MA (London), Hon DLitt (Durban-Westville)

Research Officers

NC Fulani, BEd (Hons) (Rhodes), SPDT (Cape College)

Research Associates

RS Berold, BSc (Eng) (Wits), MA (Cantab)
 Dr WR Quince, BA, HDE (UNISA), MA, PhD
 (Southern Illinois)
 Dr B Willan, BA Hons, MA, PhD (London)
 Emeritus Professor LS Wright, BA Hons (Rhodes),
 MA (Warwick), D Phil (Oxon)

Secretary, Shakespeare Society of Southern Africa

C Leff, BA (Wits), BA (Hons), MA (Rhodes)

Co-ordinators Creative Writing Programme

RS Berold, BSc (Eng) (Wits), MA (Cantab)
 P Wessels, MA (Rhodes)

Associate Professionals

Poetry:

Robert Berold, Joan Metelerkamp, Mxolisi
 Nyezwa, Vonani Bila, Lesego Rampolokeng

Fiction:

Stacy Hardy, Anton Krueger, Lesego Rampolokeng,
 Eben Venter, Paul Wessels, Ingrid Winterbach

Memoir and non-fiction:

Rian Malan

Scriptwriting:

Anton Krueger

Xhosa:

Mxolisi Nyezwa

Afrikaans:

Eben Venter, Ingrid Winterbach

Mellon Writers in Residence 2015

TBC

Editor: English in Africa

Professor G Cornwell, BA Hons, MA, PhD
 (Rhodes)

Editor: New Coin Poetry

Gary Cummiskey

Editor: Shakespeare in Southern Africa

CJ Thurman, BA (Hons) (Rhodes), MA (London),
 PhD (UCT)

Editor: Shakespeare Society Occasional Papers and Reviews

H M Slinger HDE (Natal), TLSD (UNISA), LTCL
 (London), Dip. Television (Natal Technikon)

Administrative Officer

C Leff, BA (Wits), BA (Hons), MA Rhodes

Publications Officer

B Cummings-Penlington

Secretary

N Kelemi

The Institute was established in July 1964 during the University's Diamond Jubilee celebrations,

at the suggestion of Professor Guy Butler. The mission of the ISEA is to "sponsor research, collect information, provide liaison with South African and overseas scholarship and organize conferences and courses of training for teachers and others interested in language". Since its inception, the Institute has given rise to three independent organizations:

- The National English Literary Museum
- The Dictionary Unit for South African English
- The Molteno Language and Literacy Institute

The first two are separate, nationally funded institutions, while the Molteno Language and Literacy Institute, the largest and most successful language-learning programme in primary education in Southern Africa, is now an independent project of Rhodes University.

Today the ISEA fulfils the aims of its founders in large-scale research and development projects in English education, in the publication of journals devoted to the English language in South Africa, and by providing a research base for scholars working in the field covered by the Institute.

The **Secondary Schools Language Project (SSLP)** conducts research to improve the quality of English education principally in the Eastern Cape, in all learning areas. The ISEA offers a BED course for English Language Teachers in cooperation with the Faculty of Education and a BA (Hons) module in collaboration with the African Languages Department. Current SSLP research comprises investigations into the impact of the ISEA's BED programme, into the quality of writing and reading pedagogy in South Africa, into visual literacy in rural areas, and into contrasts between textbooks aimed at English (FAL) and Xhosa (L1) learners. **Other research** under way in the ISEA includes the history of Shakespeare in South Africa; an international collaborative investigation into "The Southern Hemisphere Spread of Shakespeare", involving scholars from Australia, the UK, South Africa and New Zealand; a study of South African language policy; research into the nature of the humanities; and work on the novels of JM Coetzee.

The ISEA offers a **Masters in Creative Writing** which specialises in cross-genre, multilingual, innovative and experimental fiction, poetry, non-fiction, and hybrids in English, isiXhosa, Afrikaans

and combinations or variations thereof. The programme is delivered and administered in English but supervision is available in Afrikaans, English or isiXhosa, and creative work may be offered in these languages as well.

Only the full-time programme is offered in 2015. The two-year part-time programme will be available in 2016. Candidates require an Honours degree in any discipline or the equivalent (e.g. a 4-year B. Journ degree) plus a 20-page portfolio of writing. A full course outline is available from <http://www.ru.ac.za/isea/macw/> or from isea@ru.ac.za

The ISEA mounts an extra-curricular **Creative Writing Programme** each year during the first semester, which is open to staff, students and members of the public. Contact isea@ru.ac.za

The Institute runs **Wordfest**, a multilingual, multicultural celebration of language and literature held annually during the National Arts Festival in Grahamstown. The event includes lectures, book launches, poetry performances and readings, exhibitions, short courses, its own newspaper, live interviews and word-based shows.

Publications

Periodicals published by the ISEA include *English in Africa* (from 1974), a scholarly journal devoted to African writing in English, *New Coin Poetry* (from 1964), and *Shakespeare in Southern Africa* (from 1987). In addition, the ISEA publishes research reports, scholarly monographs, anthologies and collections of poetry.

The ISEA is a research institute within the University subsidized largely by private donations and endowments, and it retains complete independence in its research.

INSTITUTE OF SOCIAL AND ECONOMIC RESEARCH

Associate Professor of Social Policy & Director

Robert van Niekerk, BA(Hons) (UCT), MSc Sociology (LSE), MPhil, DPhil (Oxon)

Professor of Social Policy

Rebecca Surender, BA(Hons) Sociology (Essex) MSc Social Policy, DPhil (Oxon)

Professor and Matthew Goniwe Chair in Development and Society

Vacant

Senior Researcher & Head, Neil Aggett Labour Studies Unit (NALSU)

John Reynolds, BA, BSocSc(Hons) (UCT), MSocSc, PhD (Rhodes)

Senior Researcher, Neil Aggett Labour Studies Unit (NALSU)

Michael Rogan, BA (Washington-Seattle), MA, PhD (UKZN)

Project Administrator, Neil Aggett Labour Studies Unit (NALSU)

Valance Wessels

Administrative Assistant

Bulelani Mthlabane

Copy Editor, Journal of Contemporary African Studies

Jamie Alexander, MA (Rhodes)

Financial Administrator

Gail Bint

General Assistant

Beauty Mboyi

Professor Emeritus

Valerie Møller, Lic. Phil, PhD (Zurich)

Visiting Professors

Wale Adebani, MSc, DPhil (Ibadan) MPhil, DPhil (Cam)

Ben Fine, BA, BPhil (Oxon), PhD (London)

Di McIntyre, MA, PhD (UCT)

Michael Noble, MA, MSc (Oxon), CBE

Edward Webster, BA (Hons) (Rhodes), MA (Oxon), BPhil (York), PhD (Wits)

Gavin Williams, BA (Stell), MPhil (Oxon), DLitt (Rhodes)

Research Associates

Rosalie Kingwill, BA (Hons) (Stell), PGCE (UCT), PhD (UWC)

Yusuf Sayed, PhD(Bristol), MBA(Brighton)

Gemma Wright, BA, MSt, DPhil(Oxon)

The Institute of Social and Economic Research (ISER) was established in Rhodes University in 1954. Strongly grounded in the Eastern Cape since its inception, the ISER soon developed a diverse portfolio of research initiatives involving its own staff and staff members of other Rhodes academic departments. Throughout its existence, engagement by academics from a range of departments within the university in the work of the ISER contributed not only to the content and quality of ISER's research

work, but also enriched teaching within those academics' home departments.

Scholars associated with the ISER in the early period of its establishment produced a series of scholarly volumes comprising the Keiskammahok Rural Survey (1947-1952) and the Border Regional Survey (1956-1964) amongst others. Although the former documented changes in Keiskammahok since the establishment of the apartheid regime in 1948, the ISER, in its early years, generally did not engage with the consequences of apartheid for the well-being of the black majority, and did not challenge the status quo of repressive, white minority rule. This approach gradually changed in later years, when the ISER came to engage more actively with the social conditions and development problems of the Eastern Cape through empirical research and public policy engagement.

Under Prof Peter Vale's Directorship from 1984, the ISER's research agenda directly and indirectly exposed the consequences of the apartheid political economy on the black inhabitants of the Eastern Cape. The ISER developed a research specialisation on well-being studies under Professor Valarie Møller, a leading internationally recognised scholar in the field and Director of the ISER between 1998 and 2006. From 2006 to 2010, the ISER was led by Professor Greg Ruiters, who introduced a vibrant, large-scale programme of research rooted in concerns of political economy and municipal service provision in the Eastern Cape. Prof Ruiters also introduced the annual ISER Winter School, which drew together community-based organisations and leading academics into in-depth discussions on topical social, developmental and political concerns for the province and the country. The Winter School continues to form an important part of the ISER's portfolio of external public engagement activities.

Since 2009, the ISER has been developing Social Policy as a core research and teaching focus area, joined, in late 2012, by labour studies. Led by Prof Robert van Niekerk, the Social Policy focus area has developed into a number of collaborative research programmes including programmes on health, social policy and the developmental role of the state and social citizenship. This focus area has attracted Masters and Doctoral students from a range of academic backgrounds, including politics

and sociology, and has been strengthened by the appointment of Prof Rebecca Surender in 2014.

The establishment of the Neil Aggett Labour Studies Unit (NALSU) in 2012 under the leadership of Dr John Reynolds has laid the foundation for the development of a vibrant programme of engaged scholarship in the field of labour studies. NALSU leverages its location in the Eastern Cape in its engagement with the broader South African political economy. NALSU undertakes both academic and applied research, and contributes to policy development. The complementary focus areas of social policy and labour studies currently form the core of the ISER's work, which is driven by a commitment to the building of a more equitable society and a more inclusive form of social citizenship based on social solidarity.

The ISER has had an abiding influence on a number of institutions within Rhodes University and the wider Eastern Cape. In 1979, the International Library of African Music was moved to Rhodes University under the auspices of the ISER, where it was hosted until its incorporation into the Rhodes Department of Music and Musicology in the mid-nineties. Also in 1979, a Development Studies Unit, headed by a Chair in Development Studies, was started; that unit was discontinued in 1994, when Prof Bill Davies joined the new Eastern Cape Provincial Government, where he built an economic planning and research unit in the Department of Economic Affairs, Environment and Tourism. An International Studies Unit was established in the ISER in 1988 and, in 1992, was migrated to the Rhodes Department of Political Studies, into which it was fully incorporated in the early 2000s, changing the name of the department to the Department of Political and International Studies. In 2003, the East London branch of the ISER was incorporated into the University of Fort Hare as the Fort Hare Institute of Social and Economic Research (FHISER).

The ISER publishes its own books and research reports, and has been the home of the Journal of Contemporary African Studies (JCAS) since 1991. Historically, the ISER has published a Working Paper Series, which is being re-launched in 2015 in a new format and organised in terms of social policy and labour studies editions.

The ISER runs an annual programme of public lectures, seminars and its Winter School. The public lectures include the annual Dr AB Xuma Memorial Lecture and the annual Dr Neil Aggett Labour Studies Lecture. The seminars support both the social policy and labour studies focus areas within the ISER.

POSTGRADUATE DEGREES

The ISER offers both Master's and Doctoral degrees in Social Policy and Labour Studies.

Master's Degree

A Master's degree by thesis may be undertaken on a full-time or part-time basis. To be accepted as a Master's student in the ISER, applicants would usually require an Honours degree with at least a good second class pass in a social science discipline. Applications for Master's study would usually need to be submitted by 15 November of the year preceding the first year of study, and would require approval of the ISER Research Committee, which would also consider supervisory capacity.

Students complete a thesis proposal that is approved by the ISER Research Committee and the Higher Degrees Committee of either the Humanities or Commerce Faculties. Under the supervision of an academic staff member, students produce a full-length research thesis on a topic negotiated with a supervisor and approved by the Faculty in which they are registered.

Doctoral Degree (PhD)

A PhD may be taken by thesis (see the General Rules and Higher Degrees Guide). Prospective students must usually be in possession of a good Master's degree in a social science discipline. Applications for PhD study would require approval of the ISER Research Committee, which would also consider supervisory capacity.

Students complete a thesis proposal that is approved by the ISER Research Committee and the Higher Degrees Committee of either the Humanities or Commerce Faculties. Under the supervision of an academic staff member, students produce a full-length research thesis on a topic negotiated with a supervisor and approved by the Faculty in which they are registered.

THE INSTITUTE FOR WATER RESEARCH

Incorporating the Unilever Centre for Environmental Water Quality (UCEWQ)

Professor and Director

DA Hughes, PhD (Wales), Pr.Sci.Nat.

Professor and Director of UCEWQ

CG Palmer, PhD (Rhodes).

Research Officers

N Griffin, PhD (Cape Town)

SK.Mantel, PhD (University of Hong Kong)

A Slaughter PhD (Rhodes)

Consultancy Partners

Research Officers

D Louw, BSc(Hons)(Nat. Cons.)

GB Huggins, MSocSc (UCT)

SJL Mallory, MSc (Eng.)(Wits)

Emeritus Professor

C de Wet, PhD (Rhodes)

Research Fellow

BR Allanson, PhD(UCT), DSc(Natal), FSSAf, Pr.Sci.Nat.

The Institute for Water Research (IWR) is a multi-disciplinary group that contributes to the understanding and sustainable management of water resources in southern Africa. These objectives are achieved through fundamental and applied research into the structure, function and components of natural water systems and the dissemination of research results. Consulting services are offered to solve specific problems through the application of research developments. The IWR contributes to teaching at both undergraduate and postgraduate levels, as well as offering professional training courses and other capacity building initiatives. Specifically, postgraduate students can register in the Institute for MSc and PhD degrees (by thesis) in both Hydrology and Water Resource Science. Staff members of the IWR serve on various research, management and policy making committees both within South Africa and overseas. The staff of the Institute actively collaborate with other departments and institutes at Rhodes University including the departments of Geography, Zoology and Entomology, Environmental Science, Ichthyology and Fisheries Science, The South African Institute for Aquatic Biodiversity and the Albany Museum. The Institute also cooperates with other universities,

state departments and private consulting companies, both in South Africa and internationally.

The Institute has expertise in several areas within the broad field of water resource science, including hydrology, integrated and transdisciplinary water resource management, freshwater ecology, water quality and toxicology, biomonitoring, the management of water services and community education. The combination of research and practical problem solving within the IWR allows recently developed research methods to be rapidly deployed for water resource planning and management. Within the field of ecology, the Institute has focused on understanding the processes and requirements of aquatic ecosystems and the effects of flow variability. Much of the work has been directed at assessing the environmental water quantity and quality requirements of rivers, an important component of the 'Reserve' determination process designed to ensure the sustainable use of water resources under the national Water Act of 1998. This research has been supported by the IWR's long history (over 30 years) of research into the development and application of methods for analysing and modelling hydrological information for various water resource planning and management purposes. The focus has been on combining a sound understanding of hydrological processes with the development of practical simulation tools. This has included the development of computer software designed to facilitate access to hydrological information and the integration of modelling and data visualisation tools with databases. Recent work has focused on issues of uncertainty (including climate change effects) associated with hydrological estimation and how imperfect information impacts on decision making.

The Unilever Centre for Environmental Water Quality (UCEWQ) focuses on ecotoxicology, biomonitoring and water chemistry. Ecotoxicology at the IWR concentrates on determining the tolerances of indigenous riverine macroinvertebrates and algae, under controlled laboratory conditions, to selected water quality variables and complex effluents. Ecotoxicology is included in an integrated approach to assessing the water quality of a water resource and is being practically applied to evaluate the effects of industrial effluents on rivers. UCEWQ is actively involved in the development of policies and strategies for improving the quality of the

nation's freshwater resources. In recent years, UCEWQ has initiated research into complex social-ecological systems and the need to account for multiple perspectives and adopt transdisciplinary approaches to solving water resources management problems.

The IWR is largely self-funded and managed through a Board of Control, made up of representatives of Rhodes University, private, government and other university groups who have an interest in water resources. It derives part of its income from research contracts with agencies such as the Water Research Commission, as well as from international research support organisations (e.g. Unilever and the Carnegie Foundation). The majority of the remaining income base is from shorter term consultancy projects through partnerships with consulting companies.

NATIONAL ENGLISH LITERARY MUSEUM

Director

BA Thomas, BFA(Rhodes), BA(Hons)(UNISA), PG Prof Dip Mus(Stell)

Manager: Curatorial Division

CA Warren, HdipLIS (PE Technikon) BA (Hons) (UNISA)

Manager: Education and Public Programmes Division

ZT Matshoba, PTD (Senior)(Masibulele), ACE (Science Education)(Rhodes), PGdip JMS(Rhodes), BEd(Hons)(Fort Hare)

Chief Financial Officer

CW Malan

In the 1960s Professor Guy Butler assembled a small collection of manuscripts and in 1972 the Institute for the Study of English in Africa sponsored the foundation of the Thomas Pringle Collection for English in Africa. Its aim was to collect books and manuscripts illustrating the role of English as a language in South Africa. Two years later the National English Documentation Centre was established as an independent body. In 1980 the Centre, renamed the National English Literary Museum and Documentation Centre, became an independent declared cultural institution. The name was later changed to the National English Literary Museum. NELM is funded by the Department

of Arts and Culture and although autonomous, maintains close links with the ISEA and is an associated research institute of Rhodes University. In 1981 the museum moved to the Priest's House in Beaufort Street and will move into a state-of-the-art purpose built facility in 2016.

NELM houses the world's most comprehensive collection of resources relating to South African literature in English. In addition, the museum collects works from Namibia, Botswana, Zimbabwe, Mozambique, Lesotho and Swaziland. The collections include authors' manuscripts, printers' proofs, diaries, correspondence, publishers' archives, photographs, posters, play-scripts, theatre programmes and over 20 000 published works. All forms of literature are represented: poems, short stories, novels, plays, autobiographies, travel writing and children's literature.

NELM's satellite museums, Schreiner House in Cradock and the Eastern Star Gallery in Grahamstown, conserve and present two important aspects of the writing and publishing heritage of South Africa.

Olive Schreiner (1855-1920), author of *The Story of an African Farm*, lived at No. 6 Cross Street, a small, typically Karoo house, and one of the oldest still standing in Cradock. The exhibitions at Schreiner House explore her life and work and recognise her significance as a writer, a feminist and a champion of human rights and include some of her personal possessions as well as part of her fascinating library. The exhibitions in the Ikhamanga Hall present the local history of Cradock from the time of its earliest inhabitants to the present day – illustrated and with associated extracts from literature.

The first copy of *The Eastern Star* was printed in Grahamstown in 1871. The Eastern Star Gallery is housed in a building that dates back to the mid-19th century and was donated to NELM by the Argus Group. Exhibition highlights include a 120 year-old Wharfedale printing press and the editorial desk that belonged to John Fairbairn, co-founder in 1823 with Thomas Pringle, of the *South African Journal* and the *South African Commercial Advertiser*, and prime mover for a free press in South Africa.

NELM's education section offers programmes and environmental camps for learners and regularly

presents talks to adult groups. The museum's collections are available to researchers on request.

See <http://www.nelm.org.za> for further information, or e-mail: nelm@ru.ac.za.

RHODES UNIVERSITY MATHEMATICS EDUCATION PROJECT (RUMEP)

Director

T Penlington, HDE (PE College of Education), BA (UPE); B.Ed (Hons); M.Ed. (Rhodes)

Projects Coordinator

T Haywood, DESP (Dower College), ACE (Mathematics), B.Ed (Hons) (Rhodes)

Facilitator (FET) Northern Cape

S Matlala, STD (Sekhukhune College of Education), HED (Vista) BA (Hons) (University of Pretoria)

Research coordinator/Facilitator

C Chikiwa, D.E. (University of Zimbabwe), BEd, MEd (University of Zimbabwe)

Facilitator (Primary Schools)

Vacant

Cluster Schools Coordinator

F Mkhwane, STD, BA (UNITRA), B.Ed (UNISA), B.Tech (Bus Adm.) (PE Tech), MBA (NMMU)

IT Consultant

P. Brooks

The Rhodes University Mathematics Education Project is an outreach programme of the University. RUMEP engages in the professional development of teachers, and develops curriculum resources for use in schools. It publishes reports, articles and newsletters in the field of mathematics education, and provides a centre for research in mathematics education.

RUMEP offers an accredited three year BEd course (in-service) for practicing Mathematics teachers in all phases. It also conducts short courses for the Department of Education and other NGO's.

**SOUTH AFRICAN INSTITUTE FOR
AQUATIC BIODIVERSITY (SAIAB)**

Managing Director

AW Paterson, PhD (Rhodes)

Director's Personal Assistant

N Nyoka

RESEARCH DIVISION:

Chief Scientist

A Whitfield, PhD (Natal)

Research Scientists

P Cowley, PhD (Rhodes)

O Weyl, PhD (Rhodes)

G Gouws, PhD (Stell)

N James, PhD (Rhodes)

A Chakona, PhD (Rhodes)

Vacant

Research Support Officer

V Rouhani, MSc (Rhodes)

Biodiversity Information Manager

W Coetzer, MSc (UCT)

Senior Molecular Laboratory Assistant

TL Bodill, MSc (Rhodes)

SCIENCE SERVICES:

**African Coelacanth Ecosystem Programme
(ACEP)**

ACEP Research Advisor

F Porri, PhD (Rhodes)

ACEP Human Capital Development Manager

G van Heerden, MSc, MBA (Rhodes)

ACEP Technical & Scientific Manager

R Palmer, MSc (Rhodes)

ACEP Marine Technician

J Smith

Collections Manager

R Bills, MSc (Rhodes)

Collections Officers/Assistants

D Mazungula, BSc (Hons) (Rhodes)

Z Adam, BSc (Hons) (Rhodes)

B Konqobe

M Dwani

V Hanisi

Senior Librarian

S Schramm, BBibl (Hons) (UCT)

Assistant Librarian

M Meltaf, Nat Dipl Info Studies (PE Tech)

SUPPORT SERVICES:

Operations Manager

L Coetzee, Nat Dipl Commerce (CATE)

Finance Manager

E Wolhuter

Manager: Communications & Governance

P Haworth, BA (Hons), HDE (PG) Sec (Rhodes)

IT Systems Administrator

A Grant, BSc (Rhodes)

Senior Technical Officer

F Lamont

Professor Emeritus

PH Skelton, PhD (Rhodes)

Curators Emeritus

E Anderson, PhD (College, William & Mary, USA)

O Gon, MSc (Jerusalem), MA (Rhodes)

P Heemstra, PhD (Miami)

HONORARY RESEARCH ASSOCIATES:

Ms H Barber-James

Dr M Lipinsky

Dr A Becker

Dr K Magellan

Dr S Blaber

Dr N Mandrak

Dr A Bok

Dr K Moots

Prof. P Bloomer

Dr TF Naesje

Dr R Chalmers

Dr S Parker-Nance

Dr L Compagno

Dr B Paxton

Dr AD Connell

Dr S Plön

Dr W Conradie

Dr W Potts

Dr F Cotterill

Dr J Rall

Dr M Cunningham

Dr M Smale

Dr N Deacon

Dr N Strydom

Dr F De Moor

Dr E Swartz

Dr D Ebert

Dr J Taylor

Prof. M Elliott

Dr J Turpie

Dr TD Harrison

Mr D Twedde

Mrs E Heemstra

Dr F Uiblein

Mr W Holleman

Dr J van der Molen

Dr M Jordaan

Prof B van der Waal

Prof B Kramer

Prof M Villet

Dr S Lamberth

HONORARY FELLOWS:

Prof. BR Allanson

Prof. MN Bruton

SCIENTIFIC ADVISORY COUNCIL:

Prof Warwick Sauer - HOD, Department of

Ichthyology & Fisheries Sciences, Rhodes University
Prof Jay O'Keeffe - Professor and Research Associate, Rhodes University, Grahamstown
Dr Lawrence Oellermann - Oceanographic Research Unit, Durban
Dr Mmbofheni Stanley Liphadzi - Water Research Commission, Pretoria
Dr Harrison Pienaar - Council for Scientific and Industrial Research, Pretoria
Dr Michelle Hamer - South African National Biodiversity Institute, Pretoria
Prof Charles Griffiths - University of Cape Town

The South African Institute for Aquatic Biodiversity (SAIAB) is a National Facility of the National Research Foundation (NRF). SAIAB serves as a major scientific resource for knowledge and understanding of the biodiversity and functioning of Africa's aquatic ecosystems. By virtue of its unique position with regard to both marine and freshwater biogeographical boundaries, southern Africa is ideally placed to monitor and document climate change. From a marine perspective South Africa forms the southern apex of a major continental mass, flanked by very different marine ecosystems on the east and west coasts, and projecting towards the cold Southern Ocean. The biodiversity of inland waters is equally relevant to the national interest and SAIAB's scientific leadership and expertise in freshwater aquatic biodiversity is vital when dealing with issues arising from exponentially increasing pressures of human population growth and development.

SAIAB's research scope spans the full spectrum of aquatic environments: from marine offshore to inland freshwater catchments. Scientific investigations cover conservation biology issues that link biodiversity at the molecular, organism and community levels with the environment. **Conservation Biology & Ecology** research focuses on understanding the processes underpinning aquatic biodiversity in order to inform the conservation of those resources. **Molecular Biology & Systematics** research focuses on the exploration and description of southern African aquatic biodiversity from a molecular to a faunal level. The geographical focus of projects extends from the primary focus area, South Africa, through southern Africa to the African continent.

Scientists are involved in numerous collaborative research programmes concerned with aquatic biodiversity and serve on several national fisheries advisory committees. They are also involved in teaching undergraduate and postgraduate courses, supervising Honours, MSc and PhD projects particularly through Rhodes' Department of Ichthyology and Fisheries Science, as well as through other universities, both nationally and internationally.

SAIAB has an internationally recognised profile in ichthyological research and has a dynamic and active research staff and post graduate student school. With respect to platform provision within the National System of Innovation (NSI), as a National Facility SAIAB is required to provide platforms which are generally not available in other institutions to the research community.

SAIAB defines a Platform as a unique set of skills and/or infrastructure which is made available to the broader research community within the NSI. Despite its remote situation in the rural Eastern Cape, SAIAB provides four primary research platforms to the broader national and regional aquatic biodiversity research community: **Marine Research Platforms:** The African Coelacanth Ecosystem programme (ACEP) and Acoustic Tracking Array Platform (ATAP) which offer among other support, technical expertise, ships' time, coastal craft, specialised equipment, monitoring networks and dive units.

The African Coelacanth Ecosystem Programme (ACEP) is SAIAB's flagship marine research programme funded by the Department of Science and Technology (DST). ACEP is the largest inter-institutional, multi-disciplinary, marine programme in South Africa. ACEP provides two 13m catamaran research vessels, *uKwabelana* and *Kadouw* and a Remote Observation Vehicle (ROV) capable of diving to 300m depth, for use by the South African marine research community. Through ACEP, SAIAB plays the key interface role between researchers and other South African research platforms. ACEP has developed an excellent track record of training the next generation of marine scientists, technicians and innovators. The last phase involved no less than 50 postgraduate students. The current programme places far more emphasis on building and training black students to ensure the accelerated development

of a demographically representative marine science community. To this end ACEP launched the *Phuhlisa* Programme in early 2012: this is a dedicated transformation programme undertaken, in its first phase, with the University of Fort Hare and Walter Sisulu University. The response to this programme has been exceptional and marine science human capital development in these two HBUs is growing significantly, with a number of BSc Hons and MSc students on the programme having graduated from these universities since the programme's inception.

SAIAB's General Aquatic Biodiversity Platform offers a range of specialised and customised equipment for working in the aquatic environment in and around South Africa. These include specialised trailers, electro-fishers, inflatable and fixed hull boats, nets and environmental monitoring instruments.

The Collections and Associated Specialised Laboratories Platform includes a molecular preparation laboratory, an X-ray laboratory with a digital X-Ray inspection system and a specialised, insulated micro-otolith preparation laboratory and, in association with the Rhodes Department of Ichthyology and Fisheries Sciences (DIFS), a brand new ecological modelling laboratory. SAIAB is the recognised leader in wet collection management and curation in South Africa. The JLB Smith Collection Management Centre provides a collection-sorting laboratory, accommodation for collection staff and for visiting scientists and students. The Wet Collections Storage Facility provides storage for the National Fish Collection, African Amphibian Collection, a new and developing Cephalopod Collection and Aquatic Biodiversity Tissue Bank. Back-up support includes a separate ultra-cold storage tissue biobank and preparation room; a bulk inflammable liquid storage chamber with automated preservative mixing and delivery; specialised specimen preservation laboratories and glass storage; and an isolated dermestarium for the preparation of vertebrate skeletal specimens. SAIAB also manages the National Diatom Collection which is housed at the University of the North-West. These are dynamic research platforms for molecular, systematic and conservation orientated studies.

The Biodiversity Information Platform includes the Margaret Smith Library which is a shared resource with Rhodes University. The modern Margaret Smith Library houses one of the largest document collections and resource centres for African aquatic biodiversity research in Africa. The Library was established in the 1940s with a small collection of books and scientific papers belonging to Professor JLB Smith. The early indexing system and card catalogue were developed by Margaret Smith. The collection was first stored in a small room in Artillery Road, which was then part of the Rhodes University Ichthyology Department. The library moved to the present premises in Somerset Street in 1975. The holdings include about 5000 books and 2000 serial titles, a large reprint collection dating back to the 1800s and 206 titles in the rare book collection. The Margaret Smith Library serves SAIAB as well as DIFS.

SAIAB also works in close partnership with the Coastal (Elwandle) Node of the South African Environmental Observation Network (SAEON). This partnership with SAEON is being strengthened through projects involving researchers from both the Conservation Biology & Ecology and Molecular Biology & Systematics research groups, with emphasis on the Sundays River catchment and SAEON Algoa Bay Sentinel Site. The synergies with the SAEON Elwandle Node are highly significant and position the SAIAB as an international and regional centre for South Western Indian Ocean (SWIO) marine research.

SAIAB's **Science Advancement** is closely aligned with SAIAB's research structures. SAIAB uses the NRF PhD Pipeline Project as driver for project-driven Science Advancement in the facility. Through targeted outreach to HEIs, and the ACEP *Phuhlisa* Programme, SAIAB is establishing a student network from undergraduate to postgraduate level to grow human resource capacity in the biodiversity sector. Research staff also provide development training programmes for aquatic scientists and fisheries personnel from many African countries.

One of SAIAB's core activities is the dissemination of knowledge, and amongst other publication avenues, this is done through its own publications to which SAIAB staff and associates contribute. The Institute has published a number of books on

the freshwater fishes of southern Africa, fishes of the Southern Ocean, the biology and ecology of southern African estuarine fishes and coastal fishes of southern Africa as well as the *Smithiana* monograph and Special Publications series. Popular guides to estuaries and coastal fisheries resources have also been published and SAIAB's research and conservation efforts are increasingly present in the media. Funding permitting, SAIAB looks forward to the publication of a successor to the seminal reference for ichthyologists, marine biologists and fisheries officials world-wide, *Smiths' Sea Fishes*, which was edited by Margaret Smith and Phil Heemstra and published in 1986.

SOUTHERN OCEAN GROUP

Director

PW Froneman, PhD(Rhodes)

Senior Research Officer

CD McQuaid, PhD(UCT)

The Southern Ocean Group was established in the Department of Zoology and Entomology in 1981 under the directorship of Professor Brian Allanson. The group was the first unit in South Africa involved in the study of biological oceanography in the Southern Ocean, Antarctica and in the vicinity of the Prince Edward Islands. This programme forms part of the oceanographic component of the South African National Antarctic Research Programme (SANAP) and is concerned with the spatial variability in Southern Ocean ecosystems and its response to global climate change. Present projects concern the spatial and temporal patterns in the plankton community structure and food web dynamics in the Southern Ocean. This research provides opportunities for research towards Honours, Master's and Doctoral degrees, and postgraduates form a very active part of the group. The group has close collaborative links with research institutes in South Africa and other countries and is funded by the Department of Science and Technology.