

ORDER OF PROCEEDINGS

The congregation is requested to stand while the choir sings Gaudeamus Igitur and the procession enters the Auditorium.

The Chancellor will constitute the Congregation.

The Vice-Chancellor will welcome the Congregation.

The Public Orator, Distinguished Professor Paul R Maylam, will present Glenda Gray for the Degree of Doctor of Laws, *Honoris Causa*.

Professor Glenda Gray will address the Congregation.

The Deans of Faculties will present the candidates for the Award of Diplomas, Degrees of Bachelor, Bachelor with Honours, Master and Doctor of Philosophy.

The Deputy Vice-Chancellor (Academic and Student Affairs) will present Professor Carolyn Palmer for the Vice-Chancellor's Award for Distinguished Community Engagement.

The Congregation will stand and sing the National Anthem.

The Chancellor will dissolve the Congregation.

The congregation is requested to stand while the procession leaves the Auditorium.

With the exception of the commencement and the conclusion of the ceremony and the singing of the National Anthem, members of the congregation are requested to remain seated throughout the proceedings.

INKQUBO

Ingqungquthela iyacelwa ukuba iphakame ngexesha iKwayala icula uGaudeamus Igitur, umkhosi wemithika ungena ngaphakathi.

INgqonyela imisela iNgqungquthela.

USEkelangqonyela wamkela iNgqungquthela.

ISithethi, uNjingalwazi oBekekileyo uPaul R Maylam unikezela uGlenda Gray ukuze afumane i*Degree of Doctor of Laws, Honoris Causa*.

UNjingalwazi Glenda Gray wenza intetho kwiNgqungquthela.

IiNtloko zeFakalthi zibiza abaza kuwongwa ukuze kunikezelwe Kubo ii*Diploma*, iziDanga ze*Bachelor*, isiDanga se*Honours*, i*Masters* ne*Doctor of Philosophy*.

UMncedisi weSekelangqonyela (imiCimbi yezeMfundo naBafundi) wazisa uNjingalwazi Carolyn Palmer oza kuthweswa iMbasa kaSekelangqonyela yokugqwesa kuThathonxaxheba kwezoLuntu.

INgqungquthela iza kuphakama ivume uMhobe weSizwe.

INgqonyela iza kuchitha iNgqungquthela.

Ingqungquthela iyacelwa ukuba iphakame ngexesha uMkhosi wemithika uphuma.

Ngaphandle kwaxa kuqalwa naxa kusongwa uMsitho, naxa kuculwa uMhobe weSizwe, abantu abakwiNgqungquthela kufanele bahlale phantsi ngalo lonke ixesha kuqhutywa inkqubo.

VOLGORDE VAN VERRIGTINGE

Die vergadering word versoek om te staan terwyl die koor Gaudeamus Igitur sing en die prosessie die Ouditorium binnekom.

Die Kanselier sal die vergadering tot orde roep.

Die Vise-Kanselier sal die vergadering verwelkom.

Die Openbare Orator, Uitgelese Professor Paul R Maylam, sal Glenda Gray voorstel vir die Doktorsgraad in die Lettere, *Honoris Causa*.

Professor Glenda Gray sal die vergadering toespreek.

Die Dekane van die Fakulteite sal die kandidate voorstel vir die toekenning van Diplomas, Baccalaureusgrade, Honneurs-Baccalaureusgrade, Meestersgrade en Doktorsgrade in die Wysbegeerte.

Die Adjunk Vise-Kanselier (Akademie en Studente) sal Professor Carolyn Palmer voorstel vir die Vise-Kanselier se Uitnemende Gemeenskapskakingstoekenning.

Die vergadering sal staan en die Volkslied sing.

Die Kanselier sal die vergadering verdaag.

Die vergadering word versoek om te staan terwyl die prosessie die Ouditorium verlaat.

Met die uitsondering van die aanvang en afsluiting van die seremonie, sowel as met die sing van die Volkslied, word die vergadering versoek om tydens die verrigtinge te bly sit.

FACULTY OF PHARMACY

DEGREE OF BACHELOR OF PHARMACY

ABDUL LATEEF KHAN, Sadehya
AMOD, Thufayl
APLENI, Samkelo
AUGUST, Sibulele
BALOYI, Nicole Fortunate
BENSARIE, Divaksha Kiara
BOODHOO, Pravesh, **with distinction**
CHEPAPE, Mosa
CHETTY, Renita
CHIDZIWA, Tinotenda Vanessa
CHIVERE, Vanessa Tendai
COX, Dylan, **with distinction**
DAODARY, Jivesh
DASRAM, Mendhi Henna
DAWOOD, Muhammad Ahmed Ahriff
DAYA, Bhavir
DAYA, Misha, **with distinction**
DEKEDA, Khanya
DHABICHARAN, Yajna
DHEGE, Clarence Tivakudze, **with distinction**
DHLIWAYO, Rumbidzai Sarudzai
DLAMINI, Nomakha
DLOVA, Lisoletu
DURGAHEE, Adilah, **with distinction**
FEKA, Cedric Nyahchong
GAMA, Lindokuhle Pearl
GANIE, Zakariyya
GOVENDER, Kreshnee Lauren
GOVENDER, Sasha-Lee
GOVENDER, Shivani
GWABINI, Sanele Zizile Queen
HARAKRAJ, Dhamini
HLATSHWAYO, Sinegugu
HLEKWAYO, Londeka Sinethemba, **with distinction**
HLUNGWANI, Masana Rose-Mary
HOOLEN, Fathima-Zahraa
HUTCHISON, Amelia Joan
JACKA, Luke Dominic
JASSON, Alexander Luke
JAUNKY, Chandika Devi, **with distinction**
JEEWA, Mohammed, **with distinction**
JERAM, Jeshal-Kumar Rama
JONHERA, Shumirai Junior, **with distinction**
JOOSUB, Ayesha
KANYANGARARA, Vimbainashe Shirley, **with distinction**
LEDIRETSE, Botshelo Tshepo

LEKOLOANE, Noko Jacqueline
LEMBEDE, Londiwe Zamandima
LEVE, Sesethu
LOBELO, Ogone
MABVIRA, Samantha
MADIDE, Hlelumusa Pearl
MADONDO, Rennifer
MAHALINGAM, Amandus
MAHOMED, Taufeeq
MAHWAYI, Sibusiso Marvin
MAKELENI, Vuyiseka
MAKHARI, Ndivhuwo
MAKWARA, Godknows Xavier
MALAKWANE, Teboho Johannes
MAMODE ALLY, Ruwaydah, **with distinction**
MANICKUM, Joshlyn
MANIKI, Pauline Tendai
MANSOOR, Muhammed
MAQASHU, Chumani
MARTHINUS, Tasha Kyla
MASHAU, Tshimangadzo Ivy
MASHIGO, Siphesihle Fortunate
MASHIYA, Mbali Fortunate
MASIWA, Ruvimbo Rumbidzai
MAZIBUKWANA, Zukhanye
MBABELA, Noluvo
MBAWULI, Zandisiwe, **with distinction**
MBUSI, Monwabisi
MHLANGA, Asavela
MJAMBA, Sikholiwe
MKWAKWAMI, Kudzai Susan
MOGOALE, Chueuekgolo Oscar
MOKWELE, Kwena Cedric
MOLOI, Nthabiseng Sebatso
MOOSA, Sumaiyah
MOROPA, Koketso
MOTALA, Khadija
MOYO, Terrence Methembe
MPHAHLELE, Katlego Sharon
MTATANA, Ayanda
MTSHALI, Lungelo Hope
MUDAU, Rhodah Munyadziwa
MUNYAYI, Prudence Vimbai
MUTINGWENDE, Fadzai Patricia
MUZONDO, Mufaro Ronica
MVUKWE, Talkmore
MVULANA, Athenkosi
NDABANGAYE, Babalwa
NDHLOVU, Lloyd Tsepo
NDONDE, Johnson Dadirai

NDWANDWE, Bongumenzi Mthulisi
NGQOLONGO, Akhona Ayabonga
NKWANE, Matildah Keitumetse
NTOYI, Qhamani Nande
NTUTU, Siyabonga
NZAMA, Silungile
OSMAN, Aqeela
PADAYACHEE, Uriel Jade
PATEL, Aadelah Riyaz
PATHER, Saveshen
PAUL, Gomolemo
PHAKATHI, Zuzokuhle Nkosisizwile
PLAATJIE, Langa-Liphumile
PONNUSAMY, Leevashni
QHEKEZA, Ncebakazi
QOYO, Siphivosoxolo
RAJA, Muhammad Imtiaz
RAJCOOMAR, Yashmika
RAMAROTHOLE, Amohelang
RAMDUKHI, Mishka Darshana
RAMPEARIE, Aatish
ROSSAN, Ruqhayya Bibi
SAIB, Tasmiya
SCOTT, Kelsey
SEEPARSAD, Shriya
SHARIFF, Bibi Aysha
SHONIWA, Chenai Vivian
SIDZATANE, Abenathi
SIHLONGONYANA, Sabelo Sakhile
SINGH, Bivash
SINGH, Jutika
SINGH, Kuvashna
SINGH, Micallum, **with distinction**
SOLWA, Muhammad
TAPFUMANEYI, Pronalis Rudorwashe
TAPOLISI, Tshepo
TEMBE, Busisiwe
TEYISE, Qhawe
TILANA, Phumza
TSHABALALA, Simphiwe
TSHABENI, Vuyolwetu
TSHONA, Kutala
TUNDUWANI, Samantha Joy
TUYISHIME, Lambert
VAHED, Safwaan
VAHED, Yusuf Suleman
WINTOLA, Zainab Mojisola
YAMBA, Glenda Sashi
ZIDE, Athi

FACULTY OF LAW

DEGREE OF BACHELOR OF LAWS

BAIJNATH, Nashreen
BODEUX, Mikaella Alison
BOUAH, Matthew Keanu
BOUCHIER, Dylan Lee
BOUWER, Jessica Jayne
BROMHAM, Rowan Charles
CHAWANDA, Tanatsa Stacey
CHINOINGIRA, Tinashe
CHISWETO, Maxine
CHIUNZI, Samantha Tanyaradzwa
CHIWESHE, Tatenda Hatiwande
CHIZANGA, Tinotenda Tariro
CURTIS, Greg
DENHERE, Munyaradzi Blessing
DUMISA, Ndzalama Vukosi Madala
DUNCAN, Taona Emmanuel
DUNN, Joshua Thomas
DYOFFILE, Prudence Thandeka
FOSTER, Tasmyn June
GELDENHUYS, Joshua
GREEFF, Nicholas James
HOOLE, Andra Elizabeth
HOWE, Wesley Francis
JOSEPH, Silke
KARAGO, Wairimu Cege
KARIUKI, Christine Wangui
KHUMALO, Siphosethu Kevin, **with distinction**
KOBUSCH, Jarred Wesley
KODISANG, Bronwyn Kytloano Thabang
KUNDIONA, Lancelot Kudzai
KUPEMBA, Nadene Chido
MAKHUBELE, Trecia Mpumelelo
MAPHALA, Ithabiseng Thandeni Tiffany
MARTHINUS, Lauren
MAUNGWA, Takudzwanashe Nash
MOLEWA, Annekie Molatelo
MTHIYANE, Thembelihle Chantal
MTSWENI, Mlandu Solomon
MUKOZHIWA, Olivia Natasha
MUPFUMI, Simbarashe Isau
MUVINGI, Chido Sharon
MZOBE, Kelly Nombuyiselo
NDEMERA, Tinotenda James
NDORO, Ruvimbo
NEL, Sarah-Leigh Dolores
NHEMACHENA, Tichakunda Charles

NYAMWIHURA, Bradley
NYARAMBI, Tapiwa
NYATHI, Mholiwethu
NYATSANZA, Daniel
NYAZENGA, Rachel
ORABI, Sabreene Nazera
OWENS, Lauren Olivia
PARATEMA, Eulitah Nyasha
PARKIN, Tuscany Rayne, **with distinction**
PHEPHU, Thembeke Amanda
PUNUNGWE, Munyaradzi Terence
RATSOMO, Rethabile Michelle
SEFAKO, Laurraine
SHAVA, Samuel Vulindlela
SIBIYA, Nobuhle
SMITH, Robin
SOKATSHA, Viwe
STEELE, Jessica Anne, **with distinction**
TSHABALALA, Aaliyah Gugu Kgothatso
TSVETU, Kudzanai Winnet
TUSI, Nomcebo Nontando Zanele
VOGES, Tegan Robyn
WHITE, Christopher John, **with distinction**
YEYE, Somila

FACULTY OF COMMERCE

POSTGRADUATE DIPLOMA IN TAXATION

CHIKUKWA, Rutendo Shelter
KHUMALO, Prudence
LETSELA, Alfred Modupe, **with distinction**
MADENYUKA, Andisiwe
MANESE, Amokelani
MANNGO, Hakhakhi
MVUBU, Siyanda Cyril
NDAMASE, Sipokazi
NKABINDE, Kgonani Thusoetsile
PHIRI, Ellen Mamohau
TAMAKLOE, Lindokuhle Efui
TICHIWANGANA, Ngonidzashe Stanley
TIMM, Meghan Jessica
ZONDI, Phumelela Denzel

POSTGRADUATE DIPLOMA IN ACCOUNTANCY

ALLAN, Nicola Bridget
APPADU, Tyron
CHIKARA, Kudzai Audrey
COLVILLE, Jodie Francis

DHANRAJ, Tersia
DUBE, Abberlisa Tinashe
DUKASHE, Thandile Lumphumlo
FORGE, Jade Michelle
FUMBA, Yonela
JIJINGUBO, Asive
JIZA, Simtembile
KALE, Christopher Khuselo
KWEDINANA, Tamsanqa
MABASO, Hlobisile Banele
MACINGWANA, Lutho
MAKHUBELA, Tatati Ronny
MALAPANE, Mamotshira Itumeleng
MANONA, Zizipho
MAPHALA, Tebogo Harmony Eric
MASUKU, Amanda Gugulethu
MATTHEWS, Paige Anderson
MAYOYO, Gcobani
MFANTA, Liso
MGEDEZI, Aviwe Lwandile Khetshe Ngobile
MNDAWO, Vuyolwethu
MOLOKOMME, Mpho Bryn
MUKWEVHO, Martha Letlhabile
MULANDANA, Pfunzo
MUSYANI, Lusubilo
NDEBELE, Vincent Sandile
NDLOVU, Nhlakanipho Freedom
NDOU, Wavhudi
RAULIMI, Farelani Elsie
SABUKA, Lulamile
SANSOM, Thomas Alastair
SAULS, Richard Pierre
SIDLABANE, Yolanda
SITHOLE, Likho Vincent
TYAM, Odwa
UREMENA, Mahepisa
USHER, Jason Chad
YASE, Yamkela
ZWELIBANZI, Loyiso Khanya Lesedi

DEGREE OF BACHELOR OF COMMERCE WITH HONOURS

AMBROS, Kyle Conner, in Economics, **with distinction**
ANTROBUS, Aidan Craig, in Economics
BARTLETT, Robert Julian Napier, in Information Systems
BELL, Kayleigh Jane, in Information Systems
BHEBHE, Nonceba Fikile, in Economics
BONOKWANE, Boingotlo Fidel*A, in Information Systems
BRILL, Justin Gray, in Economics
BRUIN, Sheldon Anthony Boris, in Economics, **with distinction**

BUTLER, Angus Johnathan, in Financial Management
 CAMPBELL, Guy John, in Economics
 CHETTY, Tarusha, in Financial Management
 CHRISTIAN, Ibanez Yolán Chrisella, in Information Systems
 CLAYTON, Robert Patrick, in Information Systems
 COLLINS, Matthew Daniel, in Management
 COWPER, Andrew Richard Vivian, in Information Systems, **with distinction**
 COWPER, Michael John Anthony, in Economics, **with distinction**
 CRANIEY, Samantha Amy, in Management
 DATZER, Carl-Ludwig, in Economics
 DE SOUSA, Lawrence Antony Picardo, in Management
 DU PLESSIS, Octavia Natalie, in Management
 DU PREEZ, Wilhelmus Petrus, in Economics
 FOSTER, Sivuyile Siphosethu, in Financial Management
 HARRY, Nita, in Management, **with distinction**
 HITCHCOCK, Siobhan Caitlin, in Economics, **with distinction**
 JOHNSON, Richard Cowper, in Economics
 KERS, Lindiwe, in Economics
 KHUMALO, Lulu Wendy, in Information Systems
 KINT, Solomon Anthony, in Economics
 KRAUSS, Arthur Lindsay, in Information Systems
 MAGGS, Rowan Anthony, in Information Systems
 MANYONGANISE, Joshua Anesu, in Management
 MATAPURI, Fadzai Valerie, in Economics
 MCCANN, Ronald Dylan, in Financial Management
 MEAD, Jake Peter Maynard, in Information Systems, **with distinction**
 MGENGO, Chumani, in Economics
 MNIKI, Thembelani Yongama, in Economics
 MORAR, Dillan, in Economics
 MOTLOUNG, Lefapa Peter, in Information Systems
 MULLINS, Leah Kathleen, in Management
 NCALA, Nonduduzo Thembelihle, in Financial Management
 NELLEMAN, Sven Karl, in Information Systems
 NOMNQA, Kayakazi, in Financial Management
 NORONGO, Siviwe Yolanda, in Information Systems
 NTSHANGASE, Lulama Gabrielle, in Information Systems
 NTSOANE, Tebogo, in Information Systems
 NYAMUGAFATA, Tafadzwa, in Financial Management
 OWEN, Michael Robert, in Economics
 PANTON, Kate, in Information Systems, **with distinction**
 PATEL, Kamlesh, in Information Systems
 PILLAY, Tamara, in Economics, **with distinction**
 RULUMENI, Nkosazana Lady Di Princess, in Financial Management
 SANGARWE, Chenjerai Philemon, in Financial Management
 SANGWENI, Nompumelelo Portia, in Information Systems
 SHUNQU, Sinxolo, in Economics
 SIDZATANE, Phelisa, in Information Systems
 SITYANA, Asemahle, in Mathematical Statistics
 SOKWEBA, Noxolo Joyce, in Accounting
 STAUB, Ophelie Nathalie, in Management

TAYLOR, David Anthony, in Information Systems
TJIVIKUA, Kauzuvasana Memory, in Economics
VAN BERGEN, Robyn Ann, in Management, **with distinction**
VAN HEERDEN, Jennifer Margaret, in Economics
WHITE, Richard Basil, in Economics
MBOOI, Sivuyise, in Economics *Posthumous award*

DEGREE OF BACHELOR OF ECONOMICS WITH HONOURS

BHEBE, Amanda Zibusiso, in Economics
MBATHA, Zonke Xolile Philile, in Economics
MDHLULI, Usanda, in Information Systems
MOKWENA, Pule Daniel, in Information Systems
SISHI, Thabile Busisiwe, in Economics
SODZEME, Nontando Cleopatra, in Economics

FACULTY OF PHARMACY

DEGREE OF MASTER OF SCIENCE (PHARMACY)

NAIDU, Hariska, BPharm (Rhodes), in Pharmaceutics, **with distinction**, in the Faculty of Pharmacy. Degree by thesis. Thesis: Formulation, development and assessment of an orodispersible taste-masked sildenafil film for paediatric use.

DEGREE OF MASTER OF PHARMACY

DUXBURY, Theodore Orlando, BPharm (Rhodes), in Pharmacy Practice, in the Faculty of Pharmacy. Degree by thesis. Thesis: Collaborative health literacy development: A World Health Organization workplace health promotion approach to address tobacco use.

MANHZANVA, Rufaro Immaculate, BPharm (Rhodes), in Pharmacy Practice, **with distinction**, in the Faculty of Pharmacy. Degree by thesis. Thesis: Antimicrobial resistance awareness program at Settlers Hospital.

MARARA, Praise, BPharm (Rhodes), in Pharmacy Practice, in the Faculty of Pharmacy. Degree by thesis. Thesis: Workplace health promotion at Rhodes University: harmful use of alcohol.

FACULTY OF SCIENCE

DEGREE OF MASTER OF SCIENCE

AKAMAGWUNA, Frank Chukwuzo, BSc (Delta), in Water Resource Science, in the Institute for Water Research. Degree by thesis. Thesis: Taxonomic and trait-based responses of the orders Ephemeroptera, Plecoptera, Odonata and Trichoptera (EPOT) to sediment stress in the Tsitsa river and its tributaries, Eastern Cape, South Africa.

AKOTO-DANSO, Alexander, MPhil Comp (Nuc Sciences & Engineering) (Ghana), in Physics, in the Department of Physics and Electronics. Degree by thesis. Thesis: A pilot wide-field VLBI survey of the GOODS North field.

BAILEY, Lauren Ashleigh, BScHons (NMMU), in Zoology, in the Department of Zoology and Entomology. Degree by thesis. Thesis: The influence of artificial light on the foraging efficiency and diet of insect-eating bats.

BERNARDO, Louis Francois, in Computer Science, in the Department of Computer Science. Degree by coursework and thesis. Thesis: Targeted attack detection by means of free and open source solutions.

BRINKLEY, Erin Reed, BSc (Texas), in Zoology, **with distinction**, in the Department of Zoology and Entomology. Degree by thesis. Thesis: Re-surveying the insectivorous bats of Northern Kruger National Park, South Africa.

BUSANE, Emmanuel Aganze, BScHons (DRC), in Exploration Geology, in the Department of Geology. Degree by coursework and thesis. Thesis: Sulphide textures and compositions associated with the hydrothermal/magmatic system of the Twangiza gold deposit, (South Kivu, DRC).

CENTANE, Sixolile Sibongiseni, BScHons (Rhodes), in Chemistry, in the Department of Chemistry. Degree by thesis. Thesis: Substituent effects on the electrocatalytic activity of cobalt phthalocyanine in the presence of graphene quantum dots.

CLARKE, Matthew David, BSc (NMMU), BScHons (Rhodes), in Biochemistry, in the Department of Biochemistry and Microbiology. Degree by thesis. Thesis: Biochemical characterization of the β -mannanase activity of *Bacillus licheniformis* SVD1.

DAVIS, Michael Reginald, in Computer Science, in the Department of Computer Science. Degree by coursework and thesis. Thesis: Categorising network telescope data using big data enrichment techniques.

DE JONG, Martyn, BScHons (Rhodes), in Fisheries Science, **with distinction**, in the Department of Ichthyology and Fisheries Science. Degree by thesis. Thesis: The integration of effluent treatment using constructed wetlands with crop production and aquaculture.

DERRY, Leigh-Anne Tracy Kim, BScHons (Rhodes), in Biochemistry, in the Department of Biochemistry and Microbiology. Degree by thesis. Thesis: Investigating assay formats for screening malaria Hsp90-Hop interaction inhibitors.

DESCHODT, Christian Michel, in Entomology, **with distinction**, in the Department of Zoology and Entomology. Degree by thesis. Thesis: Using four different methods to reach a taxonomic conclusion in dung beetles (*Scarabaeinae*).

DUBE, Ishmael, BScHons (Zimbabwe), in Computer Science, in the Department of Computer Science. Degree by coursework and thesis. Thesis: An analysis of the use of DNS for malicious payload distribution.

DYANTYI, Sipelele Buntu, BScHons (WSU), in Zoology, in the Department of Zoology and Entomology. Degree by thesis. Thesis: Mesoscale along-shore and cross-shore transport and settlement of invertebrate larvae on the south east coast of South Africa.

ELLERY, Steven Grant, BScHons (Rhodes), in Geography, in the Department of Geography. Degree by thesis. Thesis: The origin of bedrock depression wetlands in the Southern Cape of South Africa: a changing perspective.

HERD-HOARE, Shannon Claire, BSocSciHons (Rhodes), in Environmental Science, in the Department of Environmental Science. Degree by thesis. Thesis: The relative roles of ecosystem services and disservices rural livelihoods in the Eastern Cape, South Africa.

JOHNSON, Yestin, BScHons (Wits), in Computer Science, **with distinction**, in the Department of Computer Science. Degree by coursework and thesis. Thesis: Modernisation and extension of Inetvis: a network security data visualisation tool.

KABUDI, Tumaini John, BScHons (Rhodes), in Information Systems, in the Department of Information Systems. Degree by thesis. Thesis: The predictors of student performance in a blended learning environment at Higher Education Institutions (HEIs) in Tanzania: a case study conducted at the University of Dar es Salaam.

KECHE, Priscilla, BPharm (Rhodes), in Biotechnology, **with distinction**, in the Biotechnology Innovation Centre. Degree by thesis. Thesis: Exploration of challenges in bringing traditional medicine into SA's healthcare system, using medicinal plants for treatment of waterborne diarrhoeal diseases as a case study.

KEET, Thomas Oliver, BCom, BScAgric (Stell), in Fisheries Science, in the Department of Ichthyology and Fisheries Science. Degree by thesis. Thesis: The development of a larval feeding regimen for dusky kob, *Argyrosomus japonicus*, with specific focus on the effect of weaning period on larval development and survival.

KHAIRALLAH, Afrah Yousif Hussein, BScHons (Pret), in Bioinformatics, in the Department of Biochemistry and Microbiology. Degree by coursework and thesis. Thesis: The identification of natural inhibitory compounds against the plasmodium GTP Cyclohydrolase 1 (GCH1) Enzyme.

KHAN, Farrah Dilshaad, BScHons (Rhodes), in Biochemistry, **with distinction**, in the Department of Biochemistry and Microbiology. Degree by thesis. Thesis: The development of high-throughput assays to screen for potential anticancer and antimalarial compounds that target ADP-ribosylation factor 6 and its signaling machineries.

KING, Andrew Thomas, BScHons (Rhodes), in Environmental Science, **with distinction**, in the Department of Environmental Science. Degree by thesis. Thesis: The extent of urban Green Collar employment, its contribution to poverty alleviation and potential for growth in the Eastern Cape, South Africa.

KLUTSE, Diana Yawa, BSc (Ghana), in Physics, in the Department of Physics and Electronics. Degree by thesis. Thesis: Foreground simulations for observations of the global 21-cm signal.

KRELE, Viwe, BScHons (Fort Hare), in Microbiology, in the Department of Biochemistry and Microbiology. Degree by thesis. Thesis: Biological properties and interactions of *Kalahatituber pfeilii*.

MAC ALEER, Clint, Dip (Production Management) (Damelin), in Entomology, in the Department of Zoology and Entomology. Degree by thesis. Thesis: An intergrated management system to reduce False Codling Moth, *Thaumatotibia leucotreta* (Meyrick) (Lepidoptera: Tortricidae) infested citrus fruit from being packed for export.

MADUNA, Bongani Cyprian, BScHons (Rhodes), in Human Kinetics & Ergonomics, in the Department of Human Kinetics and Ergonomics. Degree by thesis. Thesis: The time-course changes in selected fatigue indicators in moderately trained participants.

MAHLANGU, Daniel Fiso, BSc (Pret), BScHons (Wits), in Physics, **with distinction**, in the Department of Physics and Electronics. Degree by thesis. Thesis: Statistical study of travelling ionospheric disturbances over South Africa.

MANYANI, Amanda, BScHons (Zimbabwe), in Environmental Science, **with distinction**, in the Department of Environmental Science. Degree by thesis. Thesis: How do urban dwellers identify with features within urban green spaces in the Eastern Cape?

MAPUKATA, Sivuyisiwe, BScHons (UJ), in Chemistry, **with distinction**, in the Department of Chemistry. Degree by thesis. Thesis: Photocatalytic treatment of organic and inorganic water pollutants using zinc phthalocyanine-cobalt ferrite magnetic nanoparticle conjugates.

MASEBE, Conslih Tebogo, BScHons (Rhodes), in Geography, in the Department of Geography. Degree by thesis. Thesis: Ground thermal regimes in western Dronning Maud Land, Antarctica in 2016.

MGIDLANA, Sithi, BScHons (WSU), in Chemistry, in the Department of Chemistry. Degree by thesis. Thesis: Effect of substituents on the photophysical properties and nonlinear optical properties of asymmetrical ZN(II) phthalocynine when conjugated to semiconductor quantum dots.

MICKLEM, Isabel Andrea, BSc (UCT), BScHons (Rhodes), in Marine Biology, in the Department of Zoology and Entomology. Degree by thesis. Thesis: Using captive seabirds to assess knowledge gaps in stable isotope analysis of diets.

MILLER, Benjamin Erich, BScHons (Rhodes), in Entomology, **with distinction**, in the Department of Zoology and Entomology. Degree by thesis. Thesis: Post-release evaluation of *Megamelus scutellaris* Berg. (Hemiptera: Delphacidae): a biological control agent of water hyacinth *Eichhornia crassipes* (Mart.) Solms-Laub (Pontederiaceae) in South Africa.

MKABILE, Qawekazi, BScHons (UFS), in Water Resource Science, in the Institute for Water Research. Degree by thesis. Thesis: Mapping and predicting potential distribution patterns of free-range livestock in the rural communal rangelands of Mgwala, Eastern Cape, South Africa.

MNGUNI, Sandiso, BSc (WSU), BScHons (Pret), in Entomology, in the Department of Zoology and Entomology. Degree by thesis. Thesis: Reproductive isolation mechanisms of two

cryptic species of *Eccritotarsus* (Hemiptera: Miridae), biological control agents of water hyacinth, *Eichhornia crassipes* (Martius) Solms-Laubach (Pontederiaceae).

MOLUPE, Nthabeleng Regina, BScHons (Rhodes), in Chemistry, **with distinction**, in the Department of Chemistry. Degree by thesis. Thesis: The preparation of BODIPY and porphyrin dyes and their cyclodextrin inclusion complexes and Pluronic® F-127 encapsulation micelles for use in PDT and PACT.

MOODLEY, Holisha, BScHons (Rhodes), in Microbiology, in the Department of Biochemistry and Microbiology. Degree by thesis. Thesis: An investigation into the interaction partners of the scaffold protein human CNK1 in the NF- κ B pathway.

MOORE, Natasha Jade, BScHons (Rhodes), in Geography, **with distinction**, in the Department of Geography. Degree by thesis. Thesis: The remote sensing of fires and their effects on soil properties in the uKhahlamba Drakensberg Park.

MPITI, Unako Bongani, BScHons (Rhodes), in Chemistry, **with distinction**, in the Department of Chemistry. Degree by thesis. Thesis: Synthesis, characterisation and spectroscopic studies of Diazine-*N*-oxide complexes of iron (II) towards the development of sensors.

MPOPETSI, Pule Peter, BScHons (Rhodes), in Fisheries Science, in the Department of Ichthyology and Fisheries Science. Degree by thesis. Thesis: Towards defining the tipping point of tolerance to CO₂-induced ocean acidification for the growth, development and metabolism of larval dusky kob *Argyrosomus japonicus* (Pisces: Sciaenidae).

MTWA, Sithayanda, BScHons (Rhodes), in Mathematical Statistics, in the Department of Statistics. Degree by coursework and thesis. Thesis: The application of classification trees in the banking sector.

MULATELI, Thifhelimbilu, BScHons (Venda), in Entomology, in the Department of Zoology and Entomology. Degree by thesis. Thesis: Augmentative releases of *Dactylopius austrinus* De Lotto (Dactylopiidae: Hemiptera) for biological control of *Opuntia aurantiaca* (Cactaceae), in South Africa.

MUNRO, Catherine Elizabeth, BScHons (Rhodes), in Human Kinetics & Ergonomics, in the Department of Human Kinetics and Ergonomics. Degree by thesis. Thesis: Time-motion analyses of one-day international and Twenty/20 matches and the development of a simulated batting protocol specifically designed for female cricket players.

MUSEDELI, Jufter Nndwamato, BScHons (Venda), in Entomology, **with distinction**, in the Department of Zoology and Entomology. Degree by thesis. Thesis: Interaction between the root-feeding beetle *Longitarsus bethae* (Coleoptera: Chrysomelidae) and the root-knot nematode *Meloidogyne javanica* (Nematoda: Heteroderidae): implications for the biological control of *Lantana camara* L. (Verbenaceae) in South Africa.

NAIDU, Prinavin, BScHons (UKZN), in Botany, in the Department of Botany. Degree by thesis. Thesis: The invasion ecology of *Nymphaea mexicana* Zucc. (Mexican water lily) in South Africa.

NDEBELE, Nobuhle, BScHons (Rhodes), in Chemistry, **with distinction**, in the Department of Chemistry. Degree by thesis. Thesis: BODIPY and porphyrin dyes for direct glucose sensing and optical limiting applications.

NJWAXU, Afika, BSc (WSU), BScHons (Rhodes), in Environmental Science, in the Department of Environmental Science. Degree by thesis. Thesis: Assessing the abundance of non-timber forest products in relation to forest succession on the Wild Coast, South Africa.

NKABELANE, Ndifelani Oriel, BScHons (Venda) in Exploration Geology, in the Department of Geology. Degree by coursework and thesis. Thesis: Petrography and geochemistry of the Masoke Iron Formation and its associated ferruginous counterparts, Kanye Basin, Botswana.

NOMBEMBE, Lwazi, BScHons (WSU), in Fisheries Science, in the Department of Ichthyology and Fisheries Science. Degree by thesis. Thesis: The use of filter-feeding fish (*Clarias gariepinus* and *Oreochromis mossambucis*) to remove microalgae from brewery effluent treatment ponds.

NQAYI, Slindile Brightness, BSc (UKZN), in Entomology, **with distinction**, in the Department of Zoology and Entomology. Degree by thesis. Thesis: Climatic suitability of *Dichrorampha odorata* Brown and *Zachariades* (*Lepidoptera: Tortricidae*), a shoot-boring moth for the biological control of *Chromolaena odorata* (L.) R.M. King and H. Robinson (Asteraceae) in South Africa.

NUTTALL-SMITH, Gareth David, BScHons (Rhodes), in Zoology, in the Department of Zoology and Entomology. Degree by thesis. Thesis: The impact of elephants on thicket vegetation and other mammals in the Eastern Cape Province, South Africa.

NWAHARA, Nnamdi Ugochinyere, BScHons (Rhodes), in Chemistry, **with distinction**, in the Department of Chemistry. Degree by thesis. Thesis: Photophysicochemical properties and surface-enhanced Raman scattering of phthalocyanine-nanoparticle conjugates.

NYAMELA, Namso, BScHons (Rhodes), in Geography, **with distinction**, in the Department of Geography. Degree by thesis. Thesis: The suspended sediment yield and provenance of the Inxu river catchment, Eastern Cape.

OKEKE, Chiamaka Jessica, BScHons (Nigeria), in Bioinformatics, in the Department of Biochemistry and Microbiology. Degree by coursework and thesis. Thesis: Targeting allosteric sites of *Escherichia coli* heat shock protein 70 for antibiotic development.

ONOSI, Oikwathaile, BSc (Botswana), in Microbiology, in the Department of Biochemistry and Microbiology. Degree by thesis. Thesis: Recovery and molecular identification of aichi virus 1, enteric human bocaviruses and enteric human adenoviruses in untreated sewage and mussel samples collected in the Eastern Cape province of South Africa.

OREE, Glynis, BScHons (Rhodes), in Biochemistry, in the Department of Biochemistry and Microbiology. Degree by thesis. Thesis: Chitin hydrolysis with chitinolytic enzymes for the production of chitoooligomers with antimicrobial properties.

PETENI, Siwaphiwe, BScHons (Fort Hare), in Chemistry, **with distinction**, in the Department of Chemistry. Degree by thesis. Thesis: Syntheses and photophysico-chemical properties of phthalocyanines in the presence of silica nanoparticles.

RADEBE, Denis Siphosihle, BSocSciHons (UKZN), in Environmental Science, in the Department of Environmental Science. Degree by thesis. Thesis: An assessment of amount, distribution and use of urban green spaces in small towns of the Eastern Cape.

RADLOFF, James Victor, BScHons (Rhodes), in Zoology, in the Department of Zoology and Entomology. Degree by thesis. Thesis: Recruitment of bivalve molluscs with specific emphasis on *Mytilus galloprovincialis* in the Knysna estuarine embayment, South Africa.

RALEKHETLA, Mateboho Mary, BSc (Lesotho), BScHons (Rhodes), in Water Resource Science, in the Institute for Water Research. Degree by thesis. Thesis: Investigating epistemic justice in an adaptive planning process: towards developing a local catchment management strategy.

RAMMALA, Isabella Dineo, BScHons (UFS), in Physics, in the Department of Physics and Electronics. Degree by thesis. Thesis: The dispersion measure in broadband data from radio pulsars.

REGENSBERG, Mark Alan, BComHons (UCT), in Computer Science, **with distinction**, in the Department of Computer Science. Degree by coursework and thesis. Thesis: A study of malicious software on the macOS operating system.

ROUSSEAU, Robert Pierre, BScHons (Rhodes), in Biochemistry, in the Department of Biochemistry and Microbiology. Degree by thesis. Thesis: Functional characterization of the nuclear localisation and export signals of the human Hsp70/Hsp90 organising protein (HOP).

SANABRIA, Natasha Mary-Anne, PhD (UJ), in Bioinformatics, **with distinction**, in the Department of Biochemistry and Microbiology. Degree by coursework and thesis. Thesis: Evaluation of SNPs of G6PD, with regard to the 3D conformational structural and stability alterations, in order to investigate the clinical implications and potential applications.

SCHEEPERS, Martinus Johannes, BScHons (Rhodes), in Fisheries Science, **with distinction**, in the Department of Ichthyology and Fisheries Science. Degree by thesis. Thesis: Secret sex lives in the intertidal: insights into the mating systems of clinid fishes from molecular parentage analyses.

SCHMIDT, Nicholas Conrad, BScHons (Rhodes), in Ichthyology, in the Department of Ichthyology and Fisheries Science. Degree by thesis. Thesis: The effects of bait in fine-scale habit associations of reef fish investigated with remote underwater video systems.

SCHMITT, Veronica, Dip (Crim Justice & Forensic Invest) (UJ), in Computer Science, **with distinction**, in the Department of Computer Science. Degree by coursework and thesis. Thesis: A comparative study of CERBER, MAK TUB and LOCKY ransomware using a hybridised-malware analysis framework.

SEKGOTA, Wendy Maphefo, BScHons (Venda), in Microbiology, in the Department of Biochemistry and Microbiology. Degree by thesis. Thesis: Arbuscular Mycorrhizal fungi as a bio-indicator of soil health under agricultural management practices in South Africa.

SHOLTO-DOUGLAS, Craig Chisholm, BScHons (Rhodes), in Environmental Science, in the Department of Environmental Science. Degree by thesis. Thesis: Factors influencing survivorship of *Portulacaria afra* cuttings in restoration of degraded lands.

SINDELO, Azole, BScHons (Rhodes), in Chemistry, **with distinction**, in the Department of Chemistry. Degree by thesis. Thesis: Synthesis of indium phthalocyanines for photodynamic antimicrobial chemotherapy and photo-oxidation of pollutants.

SISHI, Sibusiso Teboho, BA (Stell), in Computer Science, in the Department of Computer Science. Degree by coursework and thesis. Thesis: An investigation of the security of passwords derived from African languages.

SMETHERHAM, Kyle Norman, BScHons (Rhodes), in Hydrology, in the Institute for Water Research. Degree by thesis. Thesis: A hydrogeological investigation of Grahamstown, assessing both the dynamics and quality of the local groundwater system.

SMIT, Liam, BComHons (UCT), in Computer Science, in the Department of Computer Science. Degree by coursework and thesis. Thesis: Towards understanding and mitigating attacks leveraging zero-day exploits.

SMITH, Caitlin Jeanne, BScHons (NMMU), in Hydrology, **with distinction**, in the Institute for Water Research. Degree by thesis. Thesis: Determining the hydrological functioning of the Palmiet Wetlands in the Eastern and Western Cape of South Africa.

SMITH, Timothy Graham, BScHons (Rhodes), in Ichthyology, in the Department of Ichthyology and Fisheries Science. Degree by thesis. Thesis: The morphological and molecular variation of Southern African *Nannocharax* (Characiformes: Distichodontidae), and its taxonomic implications.

SOLIMAN, Omar Samir Abdel Ghaffar, BBiotech (MISR), in Bioinformatics, **with distinction**, in the Department of Biochemistry and Microbiology. Degree by coursework and thesis. Thesis: Identification of possible natural compounds as potential inhibitors against *Plasmodium M1* alanyl aminopeptidase.

SWEENEY, Michael John, MSc, MEng (Wits), in Computer Science, **with distinction**, in the Department of Computer Science. Degree by coursework and thesis. Thesis: A framework for scoring and tagging NetFlow data.

TRASSIERRA, Jaqueline Anne, BSc (UCT), in Marine Biology, in the Department of Zoology and Entomology. Degree by thesis. Thesis: Environmental drivers of the composition and distribution of larval fish assemblages off the South Coast of South Africa.

TWUM, Samuel Nyarko, BA (Ghana), in Physics, in the Department of Physics and Electronics. Degree by thesis. Thesis: TiRiFiG, a graphical 3D kinematic modelling tool.

UAZEUA, Kakunauua, BScHons (Stell), in Economic Geology, in the Department of Geology. Degree by coursework and thesis. Thesis: Mineralogical, geochemical and lead isotopic analysis of the lead mineralization of the Skorpion Deposit, South Western Namibia.

WILLIAMS, Stephanie Paige, BA (Stell), BSocSci (UCT), in Environmental Science, in the Department of Environmental Science. Degree by thesis. Thesis: Encouraging pro-environmental behaviour in households in a medium-sized suburban area of Johannesburg, South Africa.

ZITHA, Simphiwe Nhlanhla, BScHons (Limpopo), MSc (AIMS/UWC), in Physics, in the Department of Physics and Electronics. Degree by thesis. Thesis: Machine learning methods for calibrating radio interferometric data.

FACULTY OF PHARMACY

DEGREE OF DOCTOR OF PHARMACY

FOUCHE, Nolene

MDAZUKA-DLANI, Nocawe

What is graduation?

Graduation is a time of enormous celebration for students and their families. It is a time to revel in a sense of achievement, to take photographs and store memories, to applaud and, of course, to dress up with the dignity that the ceremony deserves.

Graduating students traditionally wear an academic gown that marks them as 'special' and different to others attending the ceremonies. They walk across the stage, kneel before the Chancellor, who then taps them on the head with a ceremonial hat, before proceeding to the Registrar who 'hoods' them according to the degree they have earned.

For many attending the graduation ceremonies, a key question is what all this ceremony and procedure, much of which originated in Europe hundreds of years ago, actually mean in contemporary South Africa. One way to answer this question is to focus on the graduates themselves. As students walk across the stage today, they are not the same people they were who enrolled in the University three, four or more years ago. If the University has done its job well, they are completely different people.

The graduate looks at the world with an entirely different set of eyes. They now look for evidence for what is stated and to contest anything that does not appear to them to be valid or fair on the basis of the evidence presented.

At a university like Rhodes, graduates have also been trained to look through the lenses of theory. Theory is exactly like the lenses in a pair of spectacles. It allows us to see things we would not see without the spectacles, or to see things differently. Because theory allows us to see things we would not normally see, it allows us to imagine a world which does not yet exist, a world transformed from the one we currently inhabit. These are valuable attributes in the workplace and this is why graduates are highly sought after. They are especially important, however, in a fledgling democracy like ours.

As graduates walk across the stage today and participate in rituals which do not have their roots in African soil, one way to understand the proceedings is to see them as signifying an identity shift. Much as the way young men in some cultures, for example, may wear new clothes after an initiation ceremony, the wearing of an academic gown symbolises a shift in who the graduates have become. This shift is recognised by the Chancellor who taps them on the head and by the Registrar who places the hood over their shoulders. The Deans, academics, together with the entire University community, look on - celebrating and acknowledging our students' achievements.

Enjoy the ceremony today, but, more importantly, remember its significance in the lives of our young graduates and, indeed, in the history of our country.

Amended: A contribution by Dr Chrissie Boughey – Deputy Vice Chancellor Academic and Student Affairs - Rhodes University.