



Beste Matie-graduandus

Hartlik geluk met die kwalifikasie wat jy vandag verwerf. Jy is 'n sprekende voorbeeld van die uitnemendheid waarna die Universiteit Stellenbosch (US) streef. Ons is trots op jou!

Jy is deel van 'n uitgelese groep, want ons gedenk vanjaar ons eeuwording as universiteit. Die US het in 1918 met vier fakulteite, 503 studente en 40 dosente begin. Vandag spog ons met tien fakulteite en 'n dinamiese gemeenskap van meer as 31 000 studente en 3 000 personeellede op vyf kampusse in die streek.

Ons bedank almal wat hierdie instelling help vorm en sy reputasie as 'n wêreldklas-akademiese instelling help vestig het. Terselfdertyd erken ons die Universiteit se bydrae tot die onregte van die verlede, waarvoor ons diepe berou het. Ons vra onvoorwaardelik om verskoning aan diegene wat uitgesluit was van die historiese voorregte wat die US geniet het. Ons vereer ook die kritiese Matiestemme van daardie tyd, wat aanhou praat het al is hulle verstoot. En uit verantwoordelikheid teenoor huidige en toekomstige geslagte verbind die US hom tot die ideaal van 'n inklusiewe wêreldklasuniversiteit in en vir Afrika.

Die US is jou akademiese tuiste. Bly asseblief 'n aktiewe lid van die Matie-familie via die alumniwebblad, sosiale media en gereelde alumni-funksies. Stuur vir die alumnikantoor (alumni@sun.ac.za) jou nuwe kontakbesonderhede sodat jy uitnodigings, nuusbriewe en die US-alumnitydskrif *Matieland* kan ontvang. Studies dui daarop dat betrokkenheid by sterk alumni-netwerke vrugte afwerp sover dit professionele ontwikkeling betref.

Ons beste wense vergesel jou!

Prof Wim de Villiers
Rector en Visekanselier

Dear Matie Graduate

We warmly congratulate you on the qualification that you will be receiving here today. You exemplify the excellence that Stellenbosch University (SU) strives for. We are proud of you!

You are part of a very special group, because the University is commemorating its centenary this year. Starting out with four faculties, 503 students and 40 lecturing staff in 1918, SU today is home to 10 faculties, a dynamic community of more than 31 000 students and 3 000 staff members, spread over five campuses in the region.

We thank everyone who has helped to mould this institution and cement its reputation as a world-class academic institution. At the same time, SU acknowledges its contribution towards the injustices of the past. For this we have deep regret. We apologise unreservedly to those who were excluded from the historical privileges that SU enjoyed. We also honour the critical Matie voices of that time who would not be silenced despite being ostracised. And in responsibility towards the present and future generations, SU commits itself to the ideal of an inclusive, world-class university in and for Africa.

SU is your academic home. Please remain an active member of the Matie family via our alumni website, social media and regular alumni functions. Keep the alumni office (alumni@sun.ac.za) updated with your latest contact details so that you can receive invitations, newsletters and the SU alumni magazine, *Matieland*. Studies have shown that involvement in strong alumni networks pays dividends in terms of professional development.

Our best wishes accompany you!

Prof Wim de Villiers
Rector and Vice-Chancellor

Mthwali-sidanga we-Matie othandekayo

Siyavuyisana nawe ngesingqini-mfundo oza kuyifumana apha namhlanje. Wena ungumzekelo wobalasele ezamela wona le Yunivesithi yaseStellenbosch (SU). Sinebhongo ngawe!

Uyinxalenye yeqela elikhethekileyo kakhulu, kuba iYunivesithi ibhiyozela iKhulu layo leminyaka kulo nyaka. Ukuqalela kwiifakhalithi ezine, abafundi abangama-503 kunye nabasebenz abangabahlohi abangama-40 ngo-1918, i-SU namhlanje ilikhaya kwiifakhalithi ezili-10, uluntu olunamandla lwabafundi abangaphezulu kwama-31 000 kunye nabahlohi abangama-3 000, abathe tshitshilili kwiikhampasi ezintlanu kummandla.

Sibamba ngazo zozibini kuye wonke ubani oye wanceda ekubumbeni eli ziko waza waqinisa igama lalo lodumo njengeziko lezemfundo elikumgangatho wehlabathi. Kwangaxesha linye, i-SU iyazivuma izenzo zayo ezigwenxa zexesha eladlulayo. Sinokuzisela okunzulu ngako konke oku. Sixolisa ngokungazenzisiyo kwabo bathi bakhutshelwa ngaphandle kumalungelo awodwa ezembali eyathi yawaxhamla i-SU. Sikwanayo nembeko ngamazwi abalulekileyo e-Matie yelo xesha eyathi ayabi nako ukuvalwa umlomo nakubeni yayikhutshelwa ngaphandle isenziwa ikheswa. Kwakhona ngakuxanduva lwexesha langoku nelezizukulwana ezizayo, i-SU iyazibophelela kwingcinga yoqukwano, iyunivesithi ekumgangatho wehlabathi eAfrika nekwewayeAfrika.

I-SU iya kuhlala ilikhaya lakho kwezemfundo. Nceda uhlale ulilungu lethu elikhutheleyo losapho lwe-Matie ngokuqhagamshelana nathi ngewebhusayithi yethu ye-alumni, amajelo eencoko kwakunye nemicimbi ye-alumni, ebanjwa rhoqo. Hlala uyazisa iofisi ye-alumni (alumni@sun.ac.za) ngeenkcukacha zakho ukuze ukwazi ukufumana izimemo, iincwadi zeendaba kwakunye nimagazini yethu ye-alumni i-Matieland. Uphando lubonisile ukuba ukuzibandakanya kakhulu kuthungelwano lwe-alumni kuhlalwula izabelo ngokwemiqathango yophuhliso lobungcali.

Iminqweno yethu emihle mayihambe nawe!

Njing Wim de Villiers
INqununu noSekela-Tshansila

Visie 2030

Ons sien die Universiteit Stellenbosch as 'n inklusiewe, innoverende en toekomsgerigte plek van ontdekking en uitnemendheid waar sowel personeel as studente denkleiers is wat tot diens van alle belanghebbers kennis bevorder.

Missie

Ons streef om ons visie van die Universiteit Stellenbosch te verwesenlik deur volgehoue transformasie en, op ons ontdekkingsreis deur die akademie tot diens van ons belanghebbers, ondemeem ons om:

- 'n akademiese gemeenskap te skep waarin sosiale geregtigheid en gelyke geleenthede tot sistemiese volhoubaarheid lei;
- toepaslike en volhoubare benaderings tot Afrika-ontwikkeling te ondersoek en innoverend toe te pas;
- ons navorsing te rig volgens die volle spektrum uitdagings waarmee die wêreld, Afrika, ons land en die plaaslike gemeenskap te kampe het;
- student- en toekomsgerigte leer en onderrig, wat 'n passie vir lewenslange leer vestig, te handhaaf;
- in die innoverende akademieskap en kreatiewe vermoëns van al ons mense te belê;
- die inherente krag van diversiteit te ontgin; en
- sinergistiese netwerke te vestig en uit te bou, waarin die Universiteit 'n dinamiese vennoot is.

Vision 2030

We see Stellenbosch University as an inclusive, innovative and future-focused place of discovery and excellence, where staff and students are thought leaders in advancing knowledge in service of our stakeholders.

Mission

We strive to achieve our vision for Stellenbosch University through sustained transformation and, on our journey of discovery through academia in the service of our stakeholders, we have resolved to:

- create an academic community in which social justice and equal opportunities will lead to systemic sustainability;
- investigate and innovatively implement appropriate and sustainable approaches to the development of Africa;
- align our research with a wide-ranging spectrum of challenges facing the world, Africa, our country and the local community;
- maintain student-centred and future-oriented learning and teaching that establish a passion for lifelong learning;
- invest in the innovative scholarship and creative ability of all our people;
- leverage the inherent power of diversity; and
- establish and extend synergistic networks in which our University is a dynamic partner.

Umbono 2030

Sibona iYunivesithi yaseStellenbosch njengendawo equkayo, yezinto ezintsha kunye negxile kwikamva yokufumana neyobalasele, apho abasebenzi nabafundi baziinkokheli abanegunya nabaziingcaphephe ekwandiseni ulwazi kwinkonzo yabathathi-nxaxheba bethu.

Umsebenzi

Sizama ukufikelela kumbono wethu ngeYunivesithi yaseStellenbosch ngenguquko ezinzileyo kwaye, ngohambo lwethu lokufumana ngemfundo kwinkonzo yabathathi-nxaxheba bethu, sikuxazulule:

- ukudala uluntu lwezemfundo ekulapho ubulungisa bezentlalo kunye namathuba alinganayo aya kukhokelela kwinkqubo yozinzo;
- ukuphanda nokuphumeza ngezinto ezintsha iindlela ezifanelekileyo nezinozinzo kuphuhliso lweAfrika;
- ukulungelelisa uphando lwethu kunye noluhlu olubanzi lwemingeni ejongene nehlabathi, iAfrika, ilizwe lethu kwakunye noluntu lwasekuhlaleni;
- ukulondoloza ukufunda nokufundisa okugxile kumfundi nokujonge kwikamva okumisela uthando lokufunda kubomi obude;
- ukwenza inzuzo kubufundi bokuvelisa izinto ezintsha kunye nobuchule obuyilayo babo bonke abantu bethu;
- ukuxhathisa amandla akhoyo okungafani; kwakunye
- nokumisela nokwandisa uthungelwano oluhlangeneyo ekulapho iYunivesithi yethu ingumlingane onamandla.

Kanselier | Chancellor

Dr JP Rupert, DCom hc (Stell), DCom hc (NMMU)

Rektor en Visekanselier | Rector and Vice-Chancellor

Prof WJS de Villiers, MB, ChB, MMed (Int), FCP (SA), DPhil, MHCM

Voorsitter van die Raad | Chairperson of Council

Mr GM Steyn, BA, LLB

Uitvoerende Bedryfshoof | Chief Operating Officer

Prof SA du Plessis, BComHons, MPhil, PhD

Viserektor (Sosiale Impak, Transformasie en Personeel) Vice-Rector (Social Impact, Transformation and Personnel)

Prof NN Koopman, BA, MTh, DTh

Viserektor (Leer en Onderrig) | Vice-Rector (Learning and Teaching)

Prof A Schoonwinkel, PrEng, MEng, MBA, PhD

Viserektor (Navorsing, Innovasie en Nagraadse Studies) Vice-Rector (Research, Innovation and Postgraduate Studies)

Prof TE Cloete, MSc, DSc

Viserektor (Strategie en Internasionalisering) | Vice-Rector (Strategy and Internationalisation)

Prof HC Kloppe, BCur, MCur, PhD, MBA, FAAN, MASSAf

Registrateur | Registrar

Dr P Retief, MA, DLitt

Dekane | Deans

AgriWetenskappe | AgriSciences
Prof D Brink, BScHons, MScAgric, PhD

Ekonomiese en Bestuurswetenskappe | Economic and Management Sciences
Prof I Woolard, BSc, BAHons, PhD

Geneeskunde en Gesondheidswetenskappe | Medicine and Health Sciences
Prof JA Volmink, BSc, MB, ChB, DCH (SA), MPH, DPhil, MASSAf

Ingenieurswese | Engineering
Prof JL van Niekerk, MEng, PhD, EMBA

Krygskunde | Military Science
Prof MS Tshehla, MSc, PhD

Lettere en Sosiale Wetenskappe | Arts and Social Sciences
Prof AJ Leysens, MA, DPhil

Natuurwetenskappe | Science
Prof L Warnich, MSc, PhD

Opvoedkunde | Education
Prof DJ Malan, MA, DPhil
(waarnemend | acting)

Regsgeleerdheid | Law
Prof N Smit, BLC, LLB, LLD

Teologie | Theology
Prof RW Nel, BA, BTh, MTh, DTh

Interessante van die plegtighede

Die prosesie, almal in akademiese drag, word so opgestel dat die mees junior lede eerste instap, maar die mees senior lid (gewoonlik die Kanselier of Visekanselier) lei die prosesie uit ná die plegtigheid.

By middeleeuse universiteite was die *cappa clausa*, 'n moulose mantel wat bo-oor 'n toga gedra is, die eerste vorm van akademiese drag. In die 16de eeu het Oxford en Cambridge weggedoen met die mantel en het akademiese drag bestaan uit die toga met moue, 'n kap met 'n lang 'stert' om die skouers en 'n hooftoisel. Streng riglyne het die ontwerp en kleure van akademiese drag bepaal. Hierdie tradisie het dus uit Europa oorgespoel na Suid-Afrika. Om ook erkenning te gee aan die Universiteit Stellenbosch se rol as integrale deel van die Afrika-vasteland, is die ampsdraers se togas herontwerp en met eenvoudige Afrika-motiewe geborduur.

Die taal verryk ook hierdie seremonie met interessante terme. Graduandi (persone wat op die punt staan om 'n graad te ontvang) stap met 'n kap oor die arm na die verhoog. Sodra die graad toegeken is, word die kap om die skouers van die graduandi (persone wat pas 'n graad ontvang het) gehang. U kan elke fakulteit se kandidaat uitken aan die kleur van die eerste graad se kap. Die honneursgraad se kap het 'n dubbele streep, die magistergraad s'n is swart met 'n geel satynvoering en die doktorsgraad s'n is maroen met geel satyn binne. Kandidate wat doktorsgrade ontvang, dra rooi togas.

Nuwe alumni kan gerus die alumni se webwerf, www.matiesalumni.com, dophou vir interessante nuus en konvokasievergaderings.

Interesting ceremonial details

The procession, wearing academic dress, is set up so that the junior members walk in first, although the most senior member (usually the Chancellor or Vice-Chancellor) leads the procession out after the ceremony.

The *cappa clausa*, a sleeveless cloak that was worn over a toga, was the first form of academic dress in mediaeval universities. Oxford and Cambridge got rid of the cloak in the 16th century and academic dress then consisted of a toga with sleeves, a hood with a long 'tail' around the shoulders and a headdress. Strict guidelines determined the design and colours of academic dress. This tradition therefore came to South Africa from Europe. So as to acknowledge the role played by Stellenbosch University as an integral part of the African continent, the togas of the office-bearers were redesigned and embroidered with simple African motifs.

The language used also enriches the ceremony with interesting terms. Graduands (people who are on the point of receiving a degree) walk to the stage with the hood draped over their arm. As soon as the degree has been conferred, the hood is draped around the shoulders of the graduates (people who have just been awarded a degree). The candidates of the various faculties can be recognised by the colour of the hood for the first degree. The hood for an honours degree has two stripes, while that for a master's degree is black with a yellow satin lining. The hood for a doctorate is maroon with a yellow satin lining, while candidates receiving doctorates wear red togas.

New alumni should keep an eye on the alumni website, www.matiesalumni.com, for interesting news and information about convocation meetings.

Inkcukacha enomdla malunga nemisitho

Umkhosi wemithika, onxibe umthika wemfundo, wenziwe ngohlobo lokuba amalungu asematsha ahambe kuqala, nangona elona lungu liphezulu kakhulu (lidla ngokuba yiTshansila okanye okanye liSekela-Tshansila) likhokela umkhosi wemithika ukuphuma emva komsitho.

I-*cappa clausa*, isambatho esingenamikhono esasinxitywa ngaphezu kwesinxibo somsitho (i-toga), sasiluhlobo lokuqala lesinxibo somthika wemfundo kwiyunivesithi zamandulo. I-Oxford ne-Cambridge yahlukana neso sambatho kwinkulungwane ye-16 nomthika wemfundo owawunesinxibo esinemikhono, umxakatho 'onesisila' eside emagxeni nesinxibo sasentloko. Yimiyalelo engqongqo emiselwe uyilo nemibala yomthika wemfundo. Esi sithethe ngoko seza eMzantsi Afrika sisuka emaNtla. Ukuze sothulele umnqwazi iYunivesithi yaseStellenbosch ngendima eyidlalileyo njengexenye egqibeleleyo yelizwekazi laseAfrika, izinxibo zomsitho (ii-toga) zamagosa olawulo zaphinda zayilwa ngokutsha zahonjiswa ngeemihombiso yesiAfrika.

Ulwimi olusetyeziswayo nalo luchumisa umsitho ngamagama enza umdla. Abathweswa izidanga baya eqongeni bethe bhije imixakatho ezingalweni zabo. Sakuba sinikeziwe isidanga, umxakatho uthiwa hatya emagxeni abo banikezwe izidanga. Abathweswa izidanga beefakhalthi ezahlukeneyo bangabonwa ngombala womxakatho kwisidanga sokuqala. Umxakatho wesidanga seeonazi unemigca emibini, ngelixa owesidanga semastazi umnyama unomaleko otyheli wesatini. Umxakatho wesidanga sobugqirha umaruni unomaleko otyheli wesatini, ngelixa abathweswa izidanga zobugqirha nabo benxiba izinxibo zomsitho ezibomvu.

Abo bangabathwali-zidanga abatsha bamelwe kukuqwalasela kwiwebhusayithi yabo babesakuba ngabathwali-zidanga (alumni), www.matiesalumni.com, ukufumana iindaba ezinika umdla kunye nenkcukacha emalunga neentlanganiso zekhonvokheyishini.

Diploma- en Gradeplegtighede | Diploma and Graduation Ceremonies

1. 10 Desember | December 2018 (17:30)

Fakulteit Ekonomiese en Bestuurswetenskappe Faculty of Economic and Management Sciences

Eregraad Honorary Degree	10
Lesetja Kganyago	
Doktorsgrade Doctorates	11
Ander kwalifikasies Other qualifications	12
[NGDip (AktWet), NGDip (Bemark), NGDip (MIV/Vigsbestuur), NGDip (Vervoer en Logistiek), BCom (ingesluit Regsgeleerdheid), HonsBCom, MPhil, MCom, PhD (Stellenbosch)]	
[PGDip (ActSc), PGDip (Marketing), PGDip (HIV/Aids Management), PGDip (Transport and Log), BCom (including Law), BComHons, MPhil, MCom, PhD (Stellenbosch)]	
Kanselierstoekenning Chancellor's Award	20

2. 11 Desember | December 2018 (10:00)

Fakulteit Geneeskunde en Gesondheidswetenskappe Faculty of Medicine and Health Sciences

Doktorsgrade Doctorates	24
Ander kwalifikasies Other qualifications	27
Kanselierstoekenning Chancellor's Award	36

3. 11 Desember | December 2018 (17:30)

Fakulteit Natuurwetenskappe | Faculty of Science

Doktorsgrade Doctorates	40
Ander kwalifikasies Other qualifications	46
Kanselierstoekenings Chancellor's Awards	52

4. 12 Desember | December 2018 (10:00)

Fakulteit Opvoedkunde | Faculty of Education

Doktorsgrade Doctorates	56
Ander kwalifikasies Other qualifications	59

Fakulteit Krygskunde | Faculty of Military Science

Doktorsgrade Doctorates	58
Ander kwalifikasies Other qualifications	65
Kanselierstoekenings Chancellor's Awards	66

Volg... | Continue...

5. 12 Desember | December 2018 (17:30)

**Fakulteit Ekonomiese en Bestuurswetenskappe
Faculty of Economic and Management Sciences**

Doktorsgrade Doctorates	70
Ander kwalifikasies Other qualifications	72
[Dip (Openbare Verantwoordbaarheid), NGDip (Besigheidsbest en -admin), NGDip (Dispuutbesl), NGDip (FinBepI), NGDip (Leierskapontw), NGDip (Omgewingsbes), NGDip (Ontwikkelingsfinansies), NGDip (Projekbest), NGDip (Toekomsstud), NGDip (VolhOntw), HonsBPA, MPhil (Bestuursaftr), MPhil (Omgewingsbes), MPhil (Ontwikkelingsfinansies), MPhil (Toekomsstud), MPhil (VolhouOntw), MPA, MBA, BRek, BRekLLB, HonsBRek, MRek, PhD (Bestuurskool)]	
[Dip (Public Accountability), PGDip (Business Managment and Admin), PGDip (DispRes), PGDip (FinPlan), PGDip (Leadership Dev), PGDip (EnvironMan), PGDip (Dev Finance), PGDip (ProjMan), PGDip (Futures St), PGDip (Sustainable Dev), BPAHons, MPhil (Management Coaching), MPhil (EnvironMan), MPhil (Dev Finance), MPhil (Futures St), MPhil (Sustainable Dev), MPA, MBA, BAcc, BAccLLB, BAccHons, MAcc, PhD (Business School)]	
Kanselierstoekenings Chancellor's Awards	80

Fakulteit*Ekonomiese en Bestuurswetenskappe*

NGDip (AktWet), NGDip (Bemark), NGDip (MIV/Vigsbestuur), NGDip (Vervoer en Logistiek), BCom (ingesluit Regsgeleerdheid), HonsBCom, MPhil, MCom, PbD (Stellenbosch)

Faculty*Economic and Management Sciences*

PGDip (ActSc), PGDip (Marketing), PGDip (HIV/Aids Management), PGDip (Transport and Log), BCom (including Law), BComHons, MPhil, MCom, PbD (Stellenbosch)

1

PROGRAM

- Staan asseblief* 1. Akademiese prosesie kom die saal binne.
- Staan asseblief* 2. Sing van die Nasionale Lied (kyk aan die binnekant van die agterblad).
- Sit asseblief* 3. Konstituering deur die Visekanselier.
4. Verwelkoming deur die Visekanselier en dr Ntozakhe Cezula.
5. Voorstelling van die eredoktorandus en toekenning van die eregraad deur die Visekanselier.
6. Voorstelling van kandidate wat kwalifikasies ontvang deur die dekaan van die fakulteit en toekenning van kwalifikasies deur die Visekanselier.
7. Voorstelling van kandidaat vir die Kanselierstoekenning en oorhandiging van die toekenning deur die Visekanselier.
8. Sluiting deur die Visekanselier.
- Staan asseblief* 9. Akademiese prosesie verlaat die verhoog.

PROGRAMME

- Stand please* 1. Entrance of academic procession into the hall.
- Stand please* 2. Singing of the National Anthem (see inside back cover).
- Sit please* 3. Congregation formally constituted by the Vice-Chancellor.
4. Welcome by the Vice-Chancellor and Dr Ntozakhe Cezula.
5. Presentation of the candidates for the honorary doctorates and conferment of the degrees by the Vice-Chancellor.
6. Presentation of candidates receiving qualifications by the dean of the faculty and conferment of qualifications by the Vice-Chancellor.
7. Introduction of the candidate for the Chancellor's Award and presentation of the award by the Vice-Chancellor.
8. Closing by the Vice-Chancellor.
- Stand please* 9. The academic procession leaves the stage.

*Fakulteit Ekonomiese en Bestuurswetenskappe
Faculty of Economic and Management Sciences*

Die graad Doktor in die Handelswetenskappe (DCom), *honoris causa*, aan
The degree Doctor of Commerce (DCom), *honoris causa*, to

LESETJA KGANYAGO

vir die bestendige wyse – selfs onder uitdagende omstandighede – waarop hy Suid-Afrika se monetêre beleid bestuur, vir sy formidabele intellektuele leierskap op beleidsgebiede soos prys- en finansiële stabiliteit, en vir sy rol as een van die land se voorste openbarebeleidmakers, asook sy bydrae tot die geloofwaardigheid en deursigtigheid van Suid-Afrika se fiskale en monetêre beleid.

As tiende President van die Suid-Afrikaanse Reserwebank (SARB), geniet Lesetja Kganyago internasionale erkenning vir sy formidabele intellektuele leierskap en in sy vorige rol as Direkteur-Generaal van die Nasionale Tesourie het hy hom as een van die voorste openbarebeleidmakers in die land onderskei.

Nadat hy die grade BCom (Rekeningkunde en Ekonomie) en MSc (Ontwikkelingsekonomie) verwerf het, lei verskeie poste in die bankbedryf hom uiteindelik na die Nasionale Tesourie. Hier het hy in verskillende ampte gedien, onder meer dié van Direkteur-Generaal van 2004 tot 2011. In dié tyd het hy 'n aantal hervormings in openbare finansies en finansiële markte suksesvol deurgevoer. Daarna sluit hy hom aan by die SARB, eers as Visepresident en, sedert 2014, as president. Toe die onafhanklikheid van die Reserwebank in gevaar was, het Kganyago die leiding geneem om dit met oorgawe te verdedig, en het hy pogings om die grondwetlike mandaat van die SARB te wysig met welslae afgeweer.

Afgesien van sy voorsitterskap van die Komitee van Sentralebankpresident van die Suider-Afrikaanse Ontwikkelingsgemeenskap, is hy in Januarie 2018 as voorsitter van die Internasionale Monetêre en Finansiële Komitee aangewys, die eerste sentralebankpresident van Afrika suid van die Sahara om hierdie amp te beklee.

Eerbewyse sluit in die GlobalMarkets se sentralebankpresident van die jaar vir Afrika suid van die Sahara (Oktober 2017), *Sunday Times* se sakeleier van die jaar (November 2017) en Central Banking se sentralebankpresident van die jaar (Maart 2018).

Vir sy onwrikbare leierskap en vergestaltung van waardes soos integriteit, verantwoordbaarheid en uitnemendheid is dit vir die Universteit Stellenbosch 'n voorreg om Lesetja Kganyago te vereer.

for his steady hand in directing South Africa's monetary policies – standing firm despite force of circumstances, for his formidable display of intellectual leadership in policy areas such as price and financial stability, and for his role as one of the finest public-policy minds in the country, as well as his immense contribution to the credibility and transparency of South Africa's fiscal and monetary policies.

As tenth Governor of the South African Reserve Bank (SARB), Lesetja Kganyago has gained international recognition for his formidable display of intellectual leadership, while in his prior role as Director-General of National Treasury he established himself as one of the finest public policy minds in the country.

Holding the degrees BCom (Accounting and Economics) and MSc (Development Economics), various positions in the banking industry eventually led Kganyago to the National Treasury. There he served in a range of capacities, including that of Director-General from 2004 until 2011. During this time, he successfully steered several reforms in public finance and financial markets. He then moved to the SARB, first as Deputy Governor and, since 2014, as Governor. Leading from the front, Kganyago jealously guarded the independence of the Reserve Bank when it came under attack, and has succeeded in warding off efforts to have the SARB's constitutional mandate amended.

Apart from chairing the Committee of Central Bank Governors of the Southern African Development Community, he was also appointed chair of the International Monetary and Financial Committee in January 2018, the first central bank governor from Sub-Saharan Africa to hold this post.

Accolades include GlobalMarkets Sub-Saharan Africa Governor of the Year (October 2017), *Sunday Times* Business Leader of the Year (November 2017) and Central Banking's Governor of the Year (March 2018).

Stellenbosch University wishes to honour him for his steadfast leadership and the embodiment of the values of integrity, accountability and excellence.

*Fakulteit Ekonomiese en Bestuurswetenskappe
Faculty of Economic and Management Sciences*

**Doktor in die Wysbegeerte
Doctor of Philosophy**

CARSTENS, Margaretha (Business Management)

Foreign investment and South African real estate investment trusts

The introduction of the South African Real Estate Investment Trust (SA REIT) structure in 2013 encapsulated the global REIT standard, thereby making SA REITs more attractive to foreign investors. The purpose of this study was to 1) establish whether SA REITs add diversification benefits to foreign REIT portfolios; 2) determine the drivers of foreign investment in SA REITs and 3) assess whether the introduction of the REIT regime improved foreign investment and market liquidity. The findings suggest that the portfolio inclusion of SA REITs improves diversification benefits. In addition, the study identified a number of local and offshore investment drivers and captured the multidimensional impact of foreign investment on liquidity.

External supervisor: Prof J Freybote
Supervisor: Prof JU de Villiers

DARE, Chengetai (Economics)

Tax revenue mobilisation: Improving personal income tax compliance in South Africa

To stimulate compliance, the South African government has instituted various policy measures, such as audits, penalties and reprieves, making it imperative to investigate the efficacy of these measures. Equally important is the need to understand the extent of non-compliance. Using microsimulations and laboratory experiments, this study reveals that South Africa loses significant revenue because of non-compliance by provisional taxpayers. The findings also show that although audits and penalties are effective, their implementation should be given careful consideration, as they may reduce compliance. The results further reveal that reprieves are effective (in the short run) only when augmented by increased enforcement.

Supervisor: Dr SWF du Plessis
Co-supervisor: Prof A Jansen

KAMPER, Francois (Mathematical Statistics)

Regularised Gaussian belief propagation

Belief propagation has been applied as an approximation tool in a variety of inference problems. Belief propagation does not necessarily converge in loopy graphs and, even if it does, is not guaranteed to provide exact inference. Nevertheless, belief propagation is useful in many applications due to its computational tractability. On a high level, this study addressed the issues of application of belief propagation to loopy Markov graphs by formulating the principle of node regularisation. The main contribution is mathematical and empirical evidence that this principle can achieve convergence and good inference quality when applied to Gaussian Markov graphs.

Supervisor: Prof SJ Steel

VERMOOTEN, Nicola (Industrial Psychology)

Variance in employee engagement among public school teachers in the Western Cape province: An exploratory study

This study contributes to the body of knowledge regarding employee engagement among public school teachers in the Western Cape. A mixed-methods approach was used to identify the most salient antecedents of variance in employee engagement and the relationships that exist among these antecedents. The results demonstrated that antecedents of variance in employee engagement emanate from teachers themselves and the environments that surround them. Accordingly, it is recommended that a socio-ecological perspective be adopted when studying employee well-being phenomena, such as employee engagement, and when developing human resource practices.

Supervisor: Prof DJ Malan
Co-supervisor: Dr B Boonzaier

ANDER KWALIFIKASIES | OTHER QUALIFICATIONS

Fakulteit Ekonomiese en Bestuurswetenskappe Faculty of Economic and Management Sciences

Magister in die Handelswetenskappe

Master of Commerce

Barrett, RONALDA (Human Resources Management)
Bing, CAMERON MICHAEL (Economics)
Botha, ANNA ELIZABETH (Computer Auditing)
Dean, ALICIA ELEANOR (Industrial Psychology)
Du Toit, DANIEL ERNST (Agricultural Economics)
Edmayr, MARK ANTHONY (Economics)
Gouws, TAMMY LEE (Industrial Psychology)
Grove, TAMSI NICHOLE (Economics)
Janicki, STEVEN VICTOR (Transport Economics)
Leigh, RICHARD ALISTAIR (Economics)
Reynecke, BAREND HERMANUS (Economics)
Seale, CANDICE (Industrial Psychology)
Smith, LIEZL (Computer Auditing)
Theron, ANDRIA (Economics)
Van Reenen, NATALIE (Economics)
Van Rooyen, CHARLES (Operations Research)
Wünnenberg, NIKOLAS (Economics)

Magister in die Handelswetenskappe Cum Laude

Master of Commerce Cum Laude

Burger, NADIA COMELIA (Financial Risk Management)
Enslin, CHRISMARIE (Mathematical Statistics)
Muller, ANNREGRET (Mathematical Statistics)
Perrang, JUSTIN (Financial Risk Management)
Pienaar, HUGO (Economics)
Reitz, ALINA ISABELL TARAZIEH (Economics)
Solomons, RUTH (Business Management)
Stips, FELIX (Economics)
Von Loeper, MAXIMILIAN JOHANN GEORG (Economics)

Magister in die Wysbegeerte

Master of Philosophy

Coakley, CHelsea MORGAN (HIV/AIDS Management)
Ferreira, THAIS CHRYSINA (HIV/AIDS Management)
Letwaba, ROSINA RAMOKONE (HIV/AIDS Management)
Membe, CHITUWA NAWALE (HIV/AIDS Management)
Mwamba, KABAMBA TWITE CHRISTOPHE (HIV/AIDS Management)
Nanguti, LISSA NDAFUDHA (HIV/AIDS Management)

Magister in die Wysbegeerte Cum Laude

Master of Philosophy Cum Laude

Grosser, KATHARINA (HIV/AIDS Management)

Honneurs-baccalaureus in die Handelswetenskappe

Bachelor of Commerce Honours

Ackermann, WILLEM BRUWER (Actuarial Science)
Adams, ZOË-MAE (Statistics)
Adendorff, JE-HANN DAVID FRANCO (Statistics)
Arangies, JANI CARIN (Financial Risk Management)
Asrak, GULPERIM (Business Management: Financial Management)
Austen, GARETH WADE (Business Management: Financial

Management)

Barty, AMY ELIZABETH (Business Management: Financial Management)
Basson, JEANI (Management Accounting)
Beneke, SIMONE (Management Accounting)
Bezuidenhout, BLANCHÉ CHENAY (Agricultural Economics)
Bezuidenhout, ROBYN (Logistics Management)
Booyesen, ILZE-MARIE (Management Accounting)
Botes, JANICE (Business Management: Marketing Management)
Botha, JASON DILLON (Management Accounting)
Botha, LEZAR SAREL (Management Accounting)
Bouwer, DANA ELSABE (Financial Analysis)
Bovijn, MARCEL (Economics)
Brand, INNEKE BEATRI (Management Accounting)
Brettschneider, KAI-UWE ALBERT (Management Accounting)
Britz, MATTHEW KENNETH (Management Accounting)
Brogden, LANCE WILFRED (Actuarial Science)
Browett, HELEN LOUISE (Management Accounting)
Brussow, CHAD KYLE (Financial Analysis)
Bruwer, ETIENNE (Statistics)
Buitendag, DANIEL (Financial Risk Management)
Carter, SHANNON LEIGH (Business Management: Marketing Management)
Christians, TAMLYN (Logistics Management)
Coetzee, INUS (Transport Economics)
Corbett, SEON CHARMINE (Management Accounting)
Cupido, AMBER (Business Management: Marketing Management)
Dagnin, MONIQUE (Quantitative Management)
Dames, FRANK EDWARD (Management Accounting)
Davids, NADINE MONIQUE (Management Accounting)
De Beer, KLARA (Business Management: Financial Management)
De Clippel, MAXIME PHILIPPE (Management Accounting)
De Kock, ANDRIES PETRUS (Financial Analysis)
De Kock, WILLAIM (Economics)
De Koker, CORINE (Mathematical Statistics)
De Wet, ROSEANNE (Management Accounting)
Defty, GARETH CRAIG (Economics)
Dewar, ROSS NEAL (Management Accounting)
Du Plessis, DEON (Actuarial Science)
Du Plessis, GERIT NIEUWOUTD (Industrial Psychology)
Du Plessis, LINE (Management Accounting)
Du Plessis, MICHAEL-JOHN (Economics)
Du Plessis, PIERRE EDUARD (Actuarial Science)
Du Plooy, ABRAHAM JOHANNES (Management Accounting)
Du Preez, MURRAY LEON (Statistics)
Du Toit, STEFAN MARIUS (Actuarial Science)
Du Toit, STELLA SUZAAN (Management Accounting)
Ehlers, UYS (Management Accounting)
Eigelaar, QUINTA SARAH (Business Management: Strategy and Innovation)
Engelberts, JASON ERIC (Financial Analysis)
Engelbrecht, JOHANNES COMELIUS (Management Accounting)
Ferreira, NICHOLAS JOHN EDWIN (Financial Analysis)
Ferreira, SOLOMON PETRUS (Logistics Management)

Filmer, THOMAS GEORGE (Financial Analysis)
Fourie, NADIA (Logistics Management)
Gerber, ELZETTE (Transport Economics)
Gerber, JEANNE-ALEX (Business Management)
Germishuys, LEONÉ (Business Management)
Graham, ANGIQUE (Financial Risk Management)
Griffiths, DANIELA RACHAEL (Actuarial Science)
Grobbelaar, CHARLES PETER (Actuarial Science)
Gstettner, MARKUS (Business Management: Marketing Management)
Haantjes, DEVON RUDI (Actuarial Science)
Hanly, GRACE ALICE (Business Management: Marketing Management)
Harris, MATTHEW IAN (Management Accounting)
Hattingh, JOHANNES HENDRIK (Actuarial Science)
Hayward, MATTHEW RUSSELL (Management Accounting)
Hendrikz, GUSTINE (Transport Economics)
Henman, ADAM ROGER (Actuarial Science)
Hestermann, STEFAN HUGO (Quantitative Management)
Heydenrych, LUKE CHARLES (Management Accounting)
Heydenrych, MATT CHARLES (Management Accounting)
Heyns, ELNÉ (Actuarial Science)
Hills Williams, LOIS (Industrial Psychology)
Hough, LUDOLPH TOBIAS (Management Accounting)
Hugo, JACOB PHILIPPUS PETRUS (Actuarial Science)
Jacobs, PIETER ERNEST (Actuarial Science)
Janse Van Rensburg, ANDRÉ THOMAS (Quantitative Management)
Janse van Rensburg, JANI (Management Accounting)
Jansen, MICAELYN (Management Accounting)
Johnson, CHANTINO BRUNLEY (Management Accounting)
Jolly, MIKAELA MONIQUE (Business Management: Financial Management)
Jones, GILLIAN JEAN (Actuarial Science)
Khan, JEHANGIR (Industrial Psychology)
Kilian, AIDAN PIERRE (Statistics)
King, JOSHUA PHILIP (Management Accounting)
Koegelenberg, JOHANNA MARGARETHA (Statistics)
Kotze, ANRI (Business Management: Marketing Management)
Kroukamp, CHRISTIAN WOUTER (Industrial Psychology)
Lalendle, CHUMASANDE (Logistics Management)
Lalla, BHAVEEN (Operations Research)
Lategan, LOUIS CHRISTIAAN (Actuarial Science)
Le Roux, CHRISTIAAN HUGO (Financial Risk Management)
Le Roux, NICHOLAS RUDWYN (Financial Analysis)
Leppan, MICHAELA (Financial Analysis)
Louw, SHAUN (Economics)
Lubanga, BUSISWA (Logistics Management)
Makhosonke, ZIZIPHO-ZAMANGWANE KUNENE ZINHLE (Logistics Management)
Malherbe, NELMARIE (Transport Economics)
Mare, ELVIS NYASHA (Business Management: Strategy and Innovation)
Maree, MARCEL (Management Accounting)
Martin, JAMES RICHARD (Statistics)
Martin, KIMBERLIN MICAELA (Industrial Psychology)
Martin, PATRICK O'NEILL (Management Accounting)
Mathee, SABRINA VINETTE (Business Management: Strategy and Innovation)

Matthysen, LARA (Logistics Management)
McLaren, ELIZABETH AUGUSTA (Business Management: Marketing Management)
Mellander, DANIEL (Transport Economics)
Mfanta, SIBULELO WILLAIM (Financial Analysis)
Miller, ASHLEIGH GARY (Financial Risk Management)
Morton, TARYN AGNES (Business Management: Marketing Management)
Mosime, NTEBOGENG MOTSWERE (Statistics)
Mtshali, SIZIPHIWE SIBONGOKUHE (Logistics Management)
Mulligan, MEGHAN CAROLINE (Quantitative Management)
Murray, JASON STEWART (Business Management: Financial Management)
Mutua, KEVIN JONES (Economics)
Nambandi, MARIA NDINELAGO (Statistics)
Ncanywa, ZISANDA (Logistics Management)
Nel, DELAINE (Mathematical Statistics)
Newton, AMBER DONNE (Financial Risk Management)
Ontong, SYDNEY VASILIOS (Logistics Management)
Oostenbrink, NADIA (Management Accounting)
Otto, MEGAN (Management Accounting)
Panagiotopoulos, ARI (Economics)
Pastorino, LOUIS GINO (Economics)
Paul, KEILAH ANJELIKA (Industrial Psychology)
Pearce, JAMES WILLIAM (Actuarial Science)
Pedro, TIFFANY ATHINA (Management Accounting)
Pema, BENITA (Industrial Psychology)
Pepler, ANTOINETTE ALIDA (Industrial Psychology)
Pienaar, LUCRETIA (Business Management: Marketing Management)
Pieterse, MADRI (Management Accounting)
Pillay, KRINIKI (Business Management: Strategy and Innovation)
Potgieter, BRENDAN (Statistics)
Potgieter, GELDRE HESTER (Industrial Psychology)
Pretorius, WILLEM LODEWIKUS (Mathematical Statistics)
Rainier, KARLIEN (Transport Economics)
Reid, DEVON HUNTER (Business Management: Financial Management)
Ressouw, LYLE JAMES-NORMAN (Actuarial Science)
Rhoda, SHUAIB (Actuarial Science)
Rocher, PASCAL MARIA (Quantitative Management)
Rodwell, DAVID TIMOTHY (Financial Risk Management)
Rossouw, COLETTE MICHELLE (Business Management: Marketing Management)
Rowlands, JEMMA LEIGH (Economics)
Sandilands, DELIA (Financial Risk Management)
Saramago, KEITH KHUMO MOILOA (Financial Analysis)
Schaap, ENJA (Industrial Psychology)
Schoeman, ANTOINETTE (Actuarial Science)
Schulenburg, NICOLA JOCAMA (Economics)
Schutte, GERHARDUS MARTHINUS (Actuarial Science)
Scriba, NICOLE LAUREN (Management Accounting)
Seabra, DANIELA (Actuarial Science)
September, RAQUEL MERYL (Management Accounting)
Shirley, LEILA (Economics)
Shrank, JORDAN (Mathematical Statistics)

Sibenya, Aphiwe Sonke (Industrial Psychology)
 Sieberhagen, Johan Georg (Management Accounting)
 Sieberhagen, Minette (Business Management: Strategy and Innovation)
 Smedley, Megan Rhoda (Business Management: Marketing Management)
 Smit, Leané (Financial Risk Management)
 Smit, Rése (Management Accounting)
 Smith, Gabriel Zacharias (Business Management: Strategy and Innovation)
 Smith, Lee-Thomas Malebyse (Transport Economics)
 Snel, Elmar (Actuarial Science)
 Soundiades, Caylen (Statistics)
 Spies, Alida Elizabeth (Transport Economics)
 Stanvliet, Jana (Management Accounting)
 Steere, James David (Management Accounting)
 Stevens, Jason Lynch (Financial Analysis)
 Steynberg, Daniel Petrus (Logistics Management)
 Strauss, Nicolaas Johannes (Financial Risk Management)
 Strydom, Jacobus Frederick Schoonraad (Financial Risk Management)
 Teessen, Gideon Johannes (Operations Research)
 Theron, Jan-Hendrik Louis (Management Accounting)
 Thiersen, Hendrik Johannes Albertus (Logistics Management)
 Tucker, Nicole (Transport Economics)
 Turner, Talbot Wayne (Business Management: Marketing Management)
 Uys, Elandi (Industrial Psychology)
 Van den Bergh, Corné (Actuarial Science)
 Van der Berg, Gavin Hendrik (Financial Analysis)
 Van der Merwe, Francois Jacobus (Management Accounting)
 Van der Merwe, Jenaé Maria (Management Accounting)
 Van der Merwe, Nicolaas Johannes (Logistics Management)
 Van der Venter, Nicholas Slade (Financial Analysis)
 Van der Westhuizen, Mari (Industrial Psychology)
 Van Dyk, Kaylin Anne (Quantitative Management)
 Van Heerden, Estelle (Industrial Psychology)
 Van Niekerk, Johan Andreas (Transport Economics)
 Van Rensburg, Nina (Financial Risk Management)
 Van Rooyen, Erika (Actuarial Science)
 Van Tonder, Ashley (Business Management: Strategy and Innovation)
 Van Zyl, Carla (Management Accounting)
 Van Zyl, Juan Johan (Logistics Management)
 Van Zyl, Roné (Actuarial Science)
 Venter, Ilse (Management Accounting)
 Venter, Sophia Johanna Lodewika (Management Accounting)
 Viljoen, Elizabeth Theresa (Operations Research)
 Viljoen, Elmarie (Management Accounting)
 Visser, Jasper Johannes Jacobus (Actuarial Science)
 Visser, Rulani (Business Management: Strategy and Innovation)
 Vlok, Charl Louwrens (Management Accounting)
 Vlok, Elri (Transport Economics)
 Vollgraaff, Ilse (Logistics Management)
 Von Stein, Heinrich Johannes Munting (Operations Research)
 Wahl, Louis Inus (Transport Economics)
 Walsh, Megan Lyn (Management Accounting)
 Walters, Carli (Business Management: Strategy and Innovation)
 Waynik, Jasmine Bianca (Business Management: Strategy and Innovation)
 Wessels, Annelie (Quantitative Management)

Wessels, Marnia (Financial Analysis)
 Williams, Keegan Grant (Management Accounting)
 Wolff, Trent Graham (Management Accounting)
 Worthington-Fitnum, Dermott James (Business Management)
 Wrench, Emma (Industrial Psychology)
 Wüst, Carli (Industrial Psychology)

Honneurs-baccalaureus in die Handelswetenskappe Cum Laude Bachelor of Commerce Honours Cum Laude

Adams, Tiffany Michelle (Logistics Management)
 Anderson, Graham (Business Management: Financial Management)
 Ballantine, Ashleigh (Industrial Psychology)
 Bingel, Christopher Andreas (Transport Economics)
 Boshoff, Mamé (Business Management: Marketing Management)
 Botha, Niel (Actuarial Science)
 Burdett, Ashley Tara (Business Management: Marketing Management)
 Campbell, Jamie (Statistics)
 Coetzee, Lisa (Industrial Psychology)
 Coetzee, Lizelle (Business Management: Financial Management)
 Comelissen, Nathan Brent (Industrial Psychology)
 Cronjé, Robert (Financial Risk Management)
 Davies, Shannon Caitlin (Statistics)
 De Wet, Meghan Robyn (Statistics)
 Drury, Kyle Nicolas (Business Management: Financial Management)
 Du Preez, Izaan (Business Management: Strategy and Innovation)
 Engelbrecht, Herman (Industrial Psychology)
 Esterhuizen, Rochelle (Industrial Psychology)
 Filter, Markus (Business Management: Marketing Management)
 Green, Carmen (Industrial Psychology)
 Groom, Rebecca Lynn (Logistics Management)
 Huysamer, Anna Jacomina (Industrial Psychology)
 Jaques, Shannon Lorna (Logistics Management)
 Jones, Stephanie Drew (Business Management: Strategy and Innovation)
 Kallis, Linda (Business Management: Financial Management)
 Korf, Erhica (Statistics)
 Louwrens, Maria Johanna (Logistics Management)
 Mac Kenzie, Maegan Gemma (Operations Research)
 McKenzie, Kristen Claire (Business Management: Financial Management)
 Mouton, Lizanne (Operations Research)
 Naude, Jean (Financial Risk Management)
 Nel, Kara (Business Management: Financial Management)
 Overton, Kelly Iris (Statistics)
 Payne, Megan Wendy (Mathematical Statistics)
 Reid, Cailin (Industrial Psychology)
 Richard, Anca (Industrial Psychology)
 Robertson, Amy Helen (Statistics)
 Rundle, Nicky (Industrial Psychology)
 Scheepers, Clarissa Dawn (Industrial Psychology)
 Smit, Helené Angeline (Industrial Psychology)
 Strauss, Bianca (Statistics)
 Strydom, Lisa-Mae (Industrial Psychology)
 Swart, Jacques Johannes (Quantitative Management)
 Swartz, Jumé Sabiena (Logistics Management)
 Tostee, Jean-Luc Travis (Management Accounting)
 Van Zyl, Marilee (Business Management: Financial Management)
 Weir, Jenna (Business Management: Financial Management)

Wilcox, Timothy Joel (Transport Economics)
 Wilson, Justin Dillon (Business Management: Marketing Management)

Honneurs-baccalaureus in die Handelswetenskappe in Informasiestelselbestuur Bachelor of Commerce Honours in Information System Management

Aras, Lara
 Broughton, Amy Lee
 Daly, Mila Danielle
 De Waal, Monique
 Donet, Matthew
 Eichstadt, Brent Daniel
 Goode, Stephanie Ann
 Jordaan, Jacques Roux
 Joubert, Nicholas James
 Kepa, Morakane Alice Makananelo
 Loebenberg Novitzkas, Daniel
 Magodla, Hluma Bianca
 Marx, Nickel-Jon
 Nieuwoudt, Michael Junior
 Noland, Jody Michael
 Pretorius, Anke
 Randall, Cheron Carey
 Schoonwinkel, Petrus
 Van der Merwe, André Petrus
 Vosloo, Ruan

Nagraadse Diploma in Vervoer en Logistiek Postgraduate Diploma in Transport and Logistics

Bulterman, Stuart
 Buthelezi, Halalisani Mzokhanyayo
 Grunewald, Nadia Christene
 Rossouw, Christopher Guillaume
 Van den Heever, Suzanne

Nagraadse Diploma in Bemarking Postgraduate Diploma in Marketing

Baard, Ashleigh Ellen
 Baderoen, Abdu-Shakoer
 Braithwaite, Charlotte
 Du Toit, Ruan
 Ekkerd, Alyssa
 Els, Cecelia Naomi
 Govender, Kalnisha
 Greyling, Nastasja
 Harper, Megan
 Hoffman, Mignon
 Jochheim, Katja Trude
 Jooste, Francois Aluke
 Meyer, Wanda Nadine
 Sibuta, Sinesipo
 Smith, Jeanne
 Steele, Keagan Michael
 Struwig, Roland Albertus
 Thantsha, Moses Sylvester
 Titus, Kimberley
 Van Aardt, René Joan
 Visser, Karen

Nagraadse Diploma in Bemarking Cum Laude Postgraduate Diploma in Marketing Cum Laude

Moodie, Nicola Jane
 Reinmuth, Nadja Alexa

Nagraadse Diploma in Aktuariële Wetenskap Postgraduate Diploma in Actuarial Science

Maré, Liezel

Baccalaureus in die Handelswetenskappe Bachelor of Commerce

Abraham, Caleb Manuel
 Adonis, Chandré Natasha
 Ahmed, Ishmat
 Alberts, Tobias Vivian
 Alexander, Audree Wynona
 Allers, Diana Emma
 Anwary, Yusuf
 Argirakis, Akexander
 Ascough, Dylan James
 Aylett, Kimon Sarandos
 Badenhorst, Esmeralda
 Bamard, Dick Andre
 Bamard, Quindan
 Bartlett, Jacques Hilton
 Basson, Ellene
 Basson, Margot Joy
 Beamish, Nicholas Garnet
 Beek, Kathryn Ashley
 Bernhardt, Karl
 Bester, Adrienne
 Bettings, Mignon
 Bisset, Simon Jarvis
 Bolele, Motheo Kebonyetsala
 Boltman, Lindi
 Bolus, Claire Catharina
 Booyesen, Nicole
 Boraïne, Carlynnne Jean
 Bosch, Anchen
 Bosch, Willem Petrus
 Boshoff, Dylan Durr
 Bosman, Henry Tyson
 Botha, Brandon
 Botha, Jana-Mari
 Botha, Joshua Alexander
 Botha, Nicole
 Bouwer, Jancke
 Bradford, Benjamin
 Brogden, Frans Albert
 Broughton, David William
 Brown, Chloé Jeanne
 Brown, Hayley Clare
 Bruwer, Tarine
 Bryant, Nicholas Anthony John
 Burdhu, Salona
 Buys, Maitemogelo Herman Mamadi
 Caldeira, Raquel Gomes
 Campbell, Kayleigh

Capes, Matthew Jarred
 Carelse, Lee-James
 Carollo, Simonette
 Chadford, Seve Jorge
 Challis, Emily Kate
 Chitiyo, Zvikomborero
 Chiwayu, Betty
 Christophers, Michaela Lyn
 Cilliers, Heinrich
 Coetsee, Francois Gerhardus
 Coetsee, Jaco
 Coetsee, Ingrid
 Cook, Amy Jean
 Corbett, Murray John
 Correia, Tabitha
 Cranswick, Calo Ann
 Cunningham, Amy Michelle
 Cunningham, Danielle Louise
 Daniel, Ryan Donald
 Davem-Caffery, Liam Michael
 Davids, Shanice
 Davies, Gareth
 De Abreu, Adrian Darren
 De Beer, Déhan Martin
 De Castro, Michelle Jessica
 De Faria, Marc Josie
 De Jager, Andrew Bruyn
 De Jager, Demi
 De Klerk, Mariaan
 De Klerk-De Klerk, Nicola Helga
 De Kock, Daniel Hercules
 De Kock, Minette
 De Koker, Zandr e
 De Lange, Heinrich Hugo
 De Lange, Ron e
 De Villiers, Stephanie Claire
 De Vlam, Lucinda Violene
 De Waal, Adam
 De Waal, Marche Ambur
 De Waal, Pieter Heinrich
 Deere, John
 Den Bakker, Bobbi
 Dhanjee, Mishka
 Doherty Bigara, Michelle
 Dorland, Ifke
 Dougall, Caitlin
 Dowsley, Caitlin Diane
 Dreyer, Gerrit Jan
 Dreyer, Mia
 Du Plessis, Dina Anje
 Du Plessis, Mignon
 Duckitt, Simon Ferdinand
 Eggert, Mark-Peter
 Ehlers, Chante
 Ehlers, Jan Gerhardus
 Ellis, Est e
 Elmes, Ashleigh Anne
 Els, Christiaan Stephanus Stephan

Els, Petrus
 Engelbrecht, Davinia Angelique
 Engelbrecht, Johannes Albertus
 Erasmus, Carl
 Erlank, Jan Stefaans
 Fayd'herbe, Leanne Susan
 Ferreira, Bernard Espie
 Floris, Taryn Lee
 Foster, Cameron Leith James
 Fourie, Monique
 Freeman, Jordan-Leigh
 Freemantle, James Roberts
 Frew, Thomas Kevin
 Frick, Rudolf Charl
 Friday, Megan
 Frielingsdorf, Kara Terien
 Gallie, Ibraaheem
 Gardener, Lloyd Frank
 Gasnola, Dayna
 Geldenhuys, Rynhardt
 Georgoulakis, Nicholas Michael
 Gibson, Ronald William
 Gildenhuys, Sean Sven
 Giliomee, Hendrika Albertina
 Gioia, Alexa Ettore
 Goodson, Daryn Peter
 Gordon, Tamsyn
 Goussard, Janh e
 Gouws, Dani lle
 Gouws, Yani
 Grebe, Philicia
 Griessel, Carl
 Grobler, Liebet
 Gutter, Jan-Hendrik
 Haarhoff, Zandi
 Hakutangwi, Panashe Marcus
 Hamse, Conrad Stefan
 Harper, Daniel Simon
 Harraway, Thomas Colin Jude
 Hawthorn, Abigail
 Hayward, Clinton Todd
 Heads, Jenna Lesley
 Herselman, Lara Megan
 Heyneke, Anton Lafrass
 Heywood, Olivia Georgina
 Hill, Matthew Timothy
 Hlaahla, Mookho Josephine
 Hodgson, Malcolm Boyd
 Hoffmann, Ilse
 Hudson, Jenna Leigh
 Hugo, Gideon - Hendrik
 Hugo, Paul Abraham
 Hunt, Dustin Joel
 Hunter, Willem Pieter Louw
 Hyams, Joshua David Philip
 Hyman, Louis George Renolds
 Jacobs, Danelle
 Jacobs, Etienne Frederik

Janeke, Rayner
 Jansen van Rensburg, Celine
 Joao Luiz, Nicole
 Johannes, Stefan
 Johnson, Robyn Andrea
 Jokomo, Nyasha Thabo
 Jones, Tristan Dylan
 Jordaan, Anja
 Joseph, Rolithea Lizelle
 Joubert, Gillian
 Joubert, Jeandr e
 Kapenda, Deborah
 Kasper, Andrew Leonard Fred Herman Moses
 Kearley, David Kyle
 Kennedy, Shannon Aline
 Khumalo, Yolanda
 Kirsten, Andre Josua
 Kirsten, Lisa
 Koen, Mieke
 Koen, Sunika
 Koen, Tineke
 Kotze, Juan-Pierre
 Kotze, Ulrich
 Kriedemann, Daniel Owen
 Kriegisch, Dyllan Andreas
 Kriel, Rudi Deon
 Krige, Paul Sauer
 Kumpers, Bjorn Aaron Liam
 La Grange, Migael Wilhelm
 Laas, Michelle
 Lambertson, Lance
 Lane-Mitchell, Christopher Gary
 Langenhoven, Philip Barry
 Laubscher, Jancke
 Laubscher, Karla
 Laurie, Stuart Walter
 Lawrance, Nadia
 Le Roux, Pieter Jozua
 Le Roux, Sim one
 Lemer, Bar
 Liedeman, Nicole
 Lingenfelder, Magdalena Johanna
 Links, Elke
 Lite, Christos Nicholai
 Lombaard, Lizet
 Lombard, Lodewyk Theodorus
 Lotter, Armand
 Lotter, Theophilus Casper
 Loubser, Louisa Christina
 Loubser, Stefan Dani l
 Lourens, Deon Johannes
 Louvet, Denise Abigail
 Louw, Derick
 Luehl, Kai Richard
 Luiters, Arline
 Luiz, Natalia Nancy
 Maarman, Jenilee Ashlene Lesley-Ann
 Maas, Chanel

Mackie, Christopher Jonathan
 Maclachlan, Kelly-Anne
 Malan, Jana Maureen
 Malherbe, Francois Johann
 Mandy, Bevan Geoffrey
 Maneveld, Jason Brian
 Marais, Paul Viljoen
 Marcolefes, Gabriella
 Maritz, Andr e-Willem
 Martin, Cameron
 Mashitisho, Matlhogonolo Timothy
 Mathia, Hassan
 Mathia, Hussain Samir
 Matthee, Robert Armand
 Matthysen, Milan
 Matulich, Nadia Antonette
 Mc Gregor, Justine
 Mc Whirter, Karim Billal
 McCaul, Liane Megan
 McKinley, Amy
 Meyer, Janelle
 Mgolodela, Siviwe
 Missio, Luca Andrea
 Mohr, Christopher James
 Moldenhauer, Sara
 M ller, Letitia
 Momberg, Marichen
 Momsen, Johannes Albertus
 Morse, Joshua
 Mostert, Cathleen Henriette
 Moxham, Hannah Louise
 Mudau, Khathutshelo
 Mulder, Amy Louise Vuren
 Muller, Reza
 Muller, Stephen James Henry
 Muller, Wessel Hendrik
 Muzanenhamo, Jennipha Rutendo
 Myburgh, Cama
 Myburgh, Philip
 Naidoo, Nadia
 Naude, Aletta Catherina
 Naude, Marguerite Francoise
 Ndjoze, Ngajozikue Donaltia
 Nel, Konrad Nicholas
 Nel, William Louis
 Nel, Wilmi
 Nelissen, Monica
 Nieman, Jannu
 Nieuwoudt, Inneke Susan
 Norman, Tristan
 Nyagano, Chido
 O'Flaherty, Christopher James
 Oosthuizen, Boyd Gert
 Overton, Christian Henry
 Palmer, Brandon Byron
 Pauw, Christoffel Petrus
 Pearce, Shaun Duncan
 Pentz, Alexander Donald

Pepler, Larissa
Phatudi, Lerato
Pheiffer, André Van Wyk
Phillips, Kyle Clive
Pienaar, Kyle Richard
Plaatjies, Juandré Marcelo
Polson, Lisa
Potgieter, Jani
Potgieter, Nathan
Powell, Shaun James
Preen, Taryn Ann Lisa
Pretorius, Annika
Prins, Nina Maria
Raasch, Cade
Rabie, Christian Andries
Radebe, Philisiwe
Rautenbach, Carmen
Reich, Savannah Paige
Rodgers, Richard Jason
Rogotta, Mieke
Röscher, Nerine Selma
Rothman, Meredith Emily
Rothmann, Sebastiaan Archibald
Rouillard, Bruce James
Roux, Maria Dorothea
Sass, Melanie
Schnider, Diyan John
Schoeman, Andries
Schoeman, Heinrich Nicolaus
Schoeman, Werner
Scholtz, Danielle
Scholtz, Jo-Anelda
Schulze, Megan
Seabi, Masego
Semenya, Ireen Matshidiso Fati
Senekal, Kumien
September, Claudio Franco
Serafino, Robin Michael
Sharp, Kim
Sinclair, Alana
Singh, Tashin
Skinner, Dean Michael
Smit, Douw Gerbrandt
Smit, Petrus Johannes
Smith, Justin
Soon, Yehjin
Sorour, Nicole Anne
Spammer, Marisu
Stander, Julia Yvette
Starke, Nicola
Steenhuisen, Dewald Marais
Steere, Emma Helene
Stephan, Rae-Ann
Stevens, Dylan Nicholas
Stone, Jenna Anne
Storm, Burger
Street, Kent
Styger, Douw Gerbrand

Süllwald, Jeanré
Sutton, Samantha
Swanepoel, Comelia
Swart, Lana
Sweatman, Elizabeth Gemma
Swingler, James Stewart
Taylor, Nicola Mary
Thackwray, Christopher Charles
Theron, Murette
Theron, Pieter Paul Adriaan
Tomicic, Marica
Toua, Margaretha Martha
Trinder-Smith, Kirsten Ashley
Truter, Anelmar
Truter, Jacqueline
Ungersböck, Marcus Oskar
Van Breda, Sarah Leigh
Van den Berg, Tristan
Van der Merwe, Burgitte-Mae
Van der Merwe, Justine Katherine
Van der Merwe, Lilani
Van der Walt, Gabrielle
Van der Westhuizen, Dewald Corneluis
Van der Westhuizen, Pieter
Van Dyk, Adriana Jacoba
Van Eeden, Carel Frederick
Van Heusden, Matthew Shane
Van leperen, Frederick William
Van Niekerk, Barend Christoffel
Van Rensburg, Sean
Van Rooyen, Klara
Van Rooyen, Tiaan
Van Staden, Kurt Martin
Van Straaten, Gertruida Anné
Van Vuuren, Luke Stuart
Van Zyl, Anais
Van Zyl, Anja
Van Zyl, Daniel Christian
Van Zyl, Dirk Cornelius
Van Zyl, Louis Johannes
Van Zyl, Marlon
Van Zyl, Willem Petrus
Veenstra, Lie-Anne Elizabeth
Velleman, Bradley Kyle
Veness, Keagan Mark
Venter, Edrich Stephan
Venter, Jacobus Willem
Venter, Mark Philip
Viljoen, Julian
Viljoen, Luré
Viljoen, Paul Johannes
Visagie, Viljoen
Visser, Wilmarie
Vogel, Steyn Lodewyk
Vollgraaff, Kristi
Von Gossler, Ingo
Weilbach, George David
Wenhold, Wian Albert

Whitehead, Timothy Ramsay
Whitfield, Kate Nichola
Whitfield, Liam Duncan
Wilken, Anna Elizabeth
Williamson, Ashley Michael
Wilson, James Michael
Wing, Adrienne Jade
Winterbach, Karla
Witthuhn, Keiran Ferdinand
Wood, Oliver Derek
Zeeman, Roelof David
Zulu, Mpumelelo Zoe

Baccalaureus in die Handelswetenskappe *Cum Laude*
Bachelor of Commerce *Cum Laude*

Allen, Jenna-Leigh
Basson, Marinah
Bester, Anja
Bourdin, Morgane Jeanne
Coetzer, Brandon Alexander
Du Plessis, Elana
Hattingh, Chane
Hendriks, Cameron Luke
Heyns, Grethe

Leimer, Lucy Elizabeth
Loock, Lara-Mari
Luyt, Bridgette
Maxwell, Dylan
McCarthy, Michael David
Melvill, Zach Harry
Nel, Luke
Peebles, Joshua George
Pretorius, Juan-Jacques
Ramokadi, Maserati Matshidiso
Roberts, Tonique
Schoonwinkel, Louis
Shiel, Tyler Jane
Stipp, Maxine
Swanepoel, Lara
Terblanche, Hendrik Daniel
Van Dyk, Anerike
Vellema, Danielle
Werth, Eugenie
Zoghby, Chérie

KANSELIERSTOEKENNING | CHANCELLOR'S AWARD

*Registrateursafdeling, Regsdienste
Registrar's Division, Legal Services*

GERHARD LIPP

Mnr Gerhard Lipp is in 2011 aangestel as Direkteur: Regsdienste en in 2017 bevorder tot senior direkteur. Gedurende die afgelope dekade het die hoërondewyssektor beduidende uitdagings beleef, wat ook 'n impak op die Universiteit Stellenbosch gehad het. Onder Gerhard se leierskap het Regsdienste 'n sleutelrol gespeel om hierdie uitdagings aan te pak. Hoogtepunte sluit in die ontwikkeling van 'n litigasie-risikobestuursproses, die implementering van die Studentetugkode en die vestiging van 'n wetlike nakomingsfunksie. Gerhard dien in die bestuurskomitee van die Regspraktisynsforum, die USAf-regsadviseurskomitee en die USAf-taakgroep vir die opstel van die POPIA-kode vir die hoërondewyssektor. Met hierdie toekenning erken ons Gerhard se rol in die ontwikkeling van die regsfunksie aan die Universiteit Stellenbosch en sy bydrae tot die Universiteit en die sektor.

Mr Gerhard Lipp was appointed as Director: Legal Services in 2011 and was promoted to senior director in 2017. In the last decade, the higher education sector has experienced significant challenges that also impacted Stellenbosch University. Under Gerhard's leadership, Legal Services played a key role in helping to address these challenges. Highlights include the development of a litigation risk management process, the implementation of the Student Disciplinary Code and the establishment of a compliance function. Gerhard serves in the Legal Practitioners Forum management committee, the USAf Legal Advisory Committee and the USAf task team drafting the POPIA code for the higher education sector. With this award we acknowledge Gerhard's role in the development of the legal function at Stellenbosch University and his contribution to the University and the sector.

Fakulteit*Geneeskunde en Gesondheidswetenskappe***Faculty***Medicine and Health Sciences*

PROGRAM

- Staan asseblief* 1. Akademiese prosesie kom die saal binne.
- Staan asseblief* 2. Sing van die Nasionale Lied (kyk aan die binnekant van die agterblad).
- Sit asseblief* 3. Konstituering deur die Visekanselier.
4. Verwelkoming deur die Visekanselier en dr Ntozakhe Cezula.
5. Voorstelling van kandidate wat kwalifikasies ontvang deur die dekaan van die fakulteit en toekenning van kwalifikasies deur die Visekanselier.
6. Voorstelling van kandidaat vir die Kanselierstoekenning en oorhandiging van die toekenning deur die Visekanselier.
7. Sluiting deur die Visekanselier.
- Staan asseblief* 8. Akademiese prosesie verlaat die verhoog.

PROGRAMME

- Stand please* 1. Entrance of academic procession into the hall.
- Stand please* 2. Singing of the National Anthem (see inside back cover).
- Sit please* 3. Congregation formally constituted by the Vice-Chancellor.
4. Welcome by the Vice-Chancellor and Dr Ntozakhe Cezula.
5. Presentation of candidates receiving qualifications by the dean of the faculty and conferment of qualifications by the Vice-Chancellor.
6. Introduction of the candidate for the Chancellor's Award and presentation of the award by the Vice-Chancellor.
7. Closing by the Vice-Chancellor.
- Stand please* 8. The academic procession leaves the stage.

Fakulteit Geneeskunde en Gesondheidswetenskappe Faculty of Medicine and Health Sciences

Doktor in die Wysbegeerte Doctor of Philosophy

AREVALO, Jose Fernando (Ophthalmology)

Intravitreal bevacizumab as anti-vascular endothelial growth factor in the management of complications of diabetic retinopathy

Blindness due to the complications of diabetes is becoming an ever-growing global health challenge. Intra-vitreous injections of a vascular endothelial growth factor inhibitor (anti-VEGF) have become state-of-the-art therapy for these complications. Approved anti-VEGF drugs are however prohibitively expensive. Bevacizumab is an affordable anti-VEGF drug used in oncology and is widely available in low- to medium-income countries. In several multicentre studies, this study investigated the use of bevacizumab in the major complications of diabetic retinopathy and convincingly demonstrated that bevacizumab, when used intra-vitreally, is valuable in the management of complications of diabetic retinopathy to prevent blindness.

Supervisor: Prof D Meyer

BAATJES, Karin Jeanne (Surgery)

Bone health in post-menopausal patients with breast cancer treated with aromatase inhibitors: Factors predicting the risk for osteoporosis

The study led to a pharmacogenetics algorithm for risk assessment of treatment-induced osteoporosis in postmenopausal breast cancer patients at initiation of aromatase inhibitor therapy. Detection of a statistically significant *CYP19A1* gene effect on bone loss after a 12-month follow-up period confirmed the context-dependency of enzyme activity underpinned by genomic variation. Integrating clinical, biochemical and genetic risk factors associated with bone loss in South African patients may enhance individualised risk stratification at the gene-environment level. In parallel, this research contributes to the development of an adaptable report template by utilising a genomic database resource, which enables research translation into clinical practice.

Supervisor: Prof MJ Kotze

Co-supervisors: Prof JP Apffelstaedt and Dr M Conradie

BLITZ, Julia (Health Professions Education)

Clinical teaching on an expanding training platform: Designing a fit-for-purpose faculty development framework for emerging clinical teachers in a resource-constrained environment

Clinicians play an integral role in the clinical training of medical students. As medical schools expand clinical training platforms to provide for greater numbers of students and ensure exposure to the full spectrum of healthcare, they have a responsibility to facilitate faculty development that will strengthen clinical teaching. How best to support such initiatives was the focus of this study, which was conducted within a qualitative, interpretivist paradigm. Based on Kern's six-step approach to curriculum development, the needs of emerging clinical teachers in a resource-constrained environment were identified. The findings informed the design of a fit-for-purpose faculty development framework.

Supervisor: Prof SC van Schalkwyk

Co-supervisor: Prof MR de Villiers

CHOTUN, Bibi Nafiisah (Medical Virology)

Hepatitis B virus-related hepatocellular carcinoma in South Africa: Investigations into the risk profile of a previously unscreened population from the Western Cape

The study investigated two important yet understudied health issues, namely hepatitis B virus (HBV) infection and HBV-related liver cancer, from an African perspective. Screening found a prevalence of active HBV infection of 2.2% in the general Western Cape population. Potential biomarkers were subsequently identified, paving the way for future studies to develop risk scores for early detection of liver cancer. Finally, whole-exome sequencing detected novel germline variants possibly contributing to early-onset HBV-related liver cancer. Overall, this study provides evidence that early diagnosis of HBV-related liver cancer in an African setting should be possible, especially if a multi-targeted approach is taken.

Supervisor: Prof M Andersson

Co-supervisors: Dr P Fernandez and Prof W Preiser

DU TOIT, George Cambell (Obstetrics and Gynaecology)

The contextual quality of life of women with cervical cancer in the Western Cape, South Africa

The quality of life of South African women with cervical cancer is the result of the disease, its treatment and the women's personal circumstances. The study translated and validated English quality-of-life questionnaires into Afrikaans and isiXhosa, and used these to quantify the influence of the contextual factors of race, age, employment, education, cancer stage, treatment and HIV status on various quality-of-life domains. A further qualitative analysis of women with cervical cancer and their experience of coping is reported. The study clarifies the appropriateness of treatment balanced with the individual woman's quality of life.

Supervisor: Prof TF Krüger

GARCIA-PRATS, Anthony Joseph (Paediatrics)

Addressing critical knowledge gaps to improve and shorten multidrug-resistant tuberculosis treatment regimens in children

Multidrug-resistant (MDR) tuberculosis (TB), caused by *M.tb* resistant to at least both isoniazid and rifampicin, threatens global TB control. Traditionally, treatment regimens for adults and children were long and toxic. The development and increasing use of novel TB drugs are radically altering the MDR-TB treatment landscape, but children have lagged behind in accessing these developments. The purpose of this study was to address critical knowledge gaps in paediatric MDR-TB treatment, including the pharmacokinetics, formulation effects, optimal dosing, safety and tolerability of key second-line and novel drugs in children. Seminal studies were completed on ofloxacin, levofloxacin, moxifloxacin, linezolid, amikacin and bedaquiline. These studies informed effective, safer and more child-friendly MDR-TB paediatric treatment strategies. This research has already impacted on local and global policy and practice.

Supervisor: Prof AC Hesselting

Co-supervisor: Prof HS Schaaf

JACOBS-NZUZI KHUABI, Lee-Ann Juliana (Occupational Therapy)

Occupational resilience: An occupational therapy practice model facilitating high school participation post traumatic brain injury

School participation may be disrupted by an adverse event such as traumatic brain injury (TBI). The aim of study was to 1) explore perspectives of high school participation post TBI using a multi-case study design and 2) develop a practice model to facilitate high school participation using a theory generative design. The findings revealed that learners undergo a process of adaptation in which they draw upon both personal and environmental resources. The adaptation is also facilitated through preparing for and engaging in occupation. The construct of occupational resilience is proposed as a mechanism to increase learners' capacity to adapt and participate in school.

Supervisor: Prof E Swart

KARACHI, Farhana (Physiotherapy)

Implementation and evaluation of a validated evidence-based physiotherapy protocol in a surgical ICU: A controlled before- and after-study

It is estimated to take up to 18 years for new effective medical/rehabilitative interventions to be incorporated into the usual care management of patients. This South African implementation study identified, contextualised and evaluated a multi-disciplinary implementation process for a public sector surgical intensive care unit, based on the best available evidence. The study confirmed the need to incorporate behaviour change strategies for healthcare providers and highlighted the importance of the organisational structure to bridge the gap between evidence and clinical practice within a resource-constrained environment.

Supervisor: Prof SD Hanekom

External co-supervisor: Prof R Gosselink

KUMAR, Saneesh (Pharmacology)

Pharmacokinetic herb-drug interactions involving African traditional medicines: Fingerprint analysis and in vitro metabolism studies

The study showed that five South African herbal remedies, namely winter cherry, liquorice milkvetch root, scabwort, marshmallow and sweet basil, contain active constituents known to alter the elimination of medicines. Their specific effects on drug metabolism were confirmed by using cytochrome P450 2B6 and esterases involved in the degradation of efavirenz or rifampicin – drugs for treatment of HIV or TB. These investigations confirmed that all five herbs can cause inhibition or induction of drug-metabolising enzymes and therefore may pose a risk for patients treated with such remedies together with conventional medicines.

Supervisor: Prof B Rosenkranz

External co-supervisor: Prof PJD Bouic

MADHOMBIRO, Munyaradzi (Psychiatry)

An adapted intervention for alcohol use disorders in people living with HIV/AIDS and its impact on alcohol use, general functional ability, quality of life and adherence to HAART: A cluster randomised control trial at opportunistic infections clinics in Zimbabwe

This project, which included a feasibility trial, formative qualitative research and a cluster randomised trial, investigated the comparative effectiveness of a blended motivational interviewing and cognitive behavioural therapy intervention (MI/CBT) and the World Health Organization Mental Health Gap Intervention Guide in terms of problematic alcohol use and HIV disease parameters in people living with HIV with alcohol use disorders (AUDs) in Zimbabwe. The interventions were delivered by nurses using a task-sharing model. MI/CBT was more effective in reducing alcohol use and improving viral load, with a sustained effect at six months post-treatment. Both treatments improved functionality and quality of life. This study provides evidence for the feasibility of task-sharing effective interventions for AUDs in HIV-care settings.

Supervisor: Prof S Seedat

External co-supervisor: Prof S Rusakaniko

OGLE, Zimbini (Psychiatry)

The development and validation of the Visual Screening Tool for Anxiety Disorders and Depression in people living with hypertension and/or diabetes

The study focused on developing and validating a visual screening tool for anxiety disorders and depression (VISTAD) for use in primary care hypertension and/or diabetes populations. The VISTAD is the first tool using only drawings to screen for both depression and anxiety disorders, allowing for application in culturally and educationally diverse groups. The findings demonstrated it to be accurate in detecting both depression and anxiety disorders. The availability of simple-to-use and culturally appropriate tools such as the VISTAD brings the goal of true mental healthcare integration at primary health level much closer to becoming a reality.

Supervisor: Prof L Koen

Co-supervisor: Prof DJH Niehaus

ROOS, Eduard (Molecular Biology)

Detection and characterisation of mycobacterial infections occurring in Phacochoerus africanus (Gmelin, 1788) (common warthog)

Mycobacterium bovis infection can cause tuberculosis in warthogs, but little is known about this disease. This study assessed various commercial tests of *M. bovis* infection and developed highly novel diagnostic assays of humoral immunity, cytokine release and gene expression. These were used to show an infection prevalence of up to 38% in warthogs in the Kruger National Park and to describe the phylogenetic relationship of *M. bovis* strains isolated from these animals.

Supervisor: Prof MA Miller

STASSEN, Willem (Emergency Medicine)

Prehospital coronary care networks in the resource-limited setting: The effect of prehospital 12-lead electrocardiographic telemetry and prehospital cardiac troponin T testing on reperfusion times in the Gauteng and Western Cape provinces of South Africa

The incidence of myocardial infarction, a time-sensitive emergency, is on the increase in South Africa. The development and implementation of coronary care networks have been found to systematically improve mortality. By employing geospatial analysis, this study examined the current state of networks locally and highlighted the inaccessibility of care for many due to socio-demographic factors. It evaluated the barriers to care for patients qualitatively and utilised mathematical optimisation to propose a model for care specific to the South African context. These models are scalable and customisable, and can be implemented in other low-resource settings. Finally, the study proposes developmental priorities.

Supervisor: Prof L Wallis

VAN DER HEEVER, Mariana Magdalene (Nursing)

A framework to facilitate the appointment of women nurses of colour into leadership positions in hospitals

A concurrent mixed-methods design was used to study the influence of the Employment Equity Act and practices imbedded in the selection and appointment of nurses on leadership positions in the private and public health sectors in the Western Cape and Gauteng. The findings confirmed the intersecting influence of race, class and gender, inclusive of nepotism and the marginalisation of women of colour. Women as nurses distrust the promotion system, reporting stereotyping of the abilities of women of colour and the subtle influences of language and eloquence. A sensitive framework to support nurses in their preparation for leadership positions firmly resting on the meta-inferences and inferences deduced was developed.

Supervisor: Prof AS van der Merwe

VERHEY, Ruth (Psychiatry)

Integrating a trauma-informed psychological intervention for posttraumatic stress disorder among PLWH on the Friendship Bench in Zimbabwe: A mixed-methods formative study

Posttraumatic stress disorder (PTSD) and other common mental disorders are highly prevalent in people living with HIV in Zimbabwe. The goal of this study was to develop a strategy to integrate trauma-informed care into an existing task-shifted psychological intervention, the Friendship Bench (FB). PTSD, locally called *kufungisisa kwenjodzi* (excessive thinking due to trauma), was highly prevalent (40.7%) in primary healthcare clients. In contrast, the prevalence of PTSD among the FB counsellors was low (6%). A trauma-informed approach, including basic screening for trauma exposure, questions about the main symptom clusters and incorporation of emotional regulation skills, is recommended.

Supervisor: Prof S Seedat

External co-supervisor: Prof J Brakarsh

WALTERS, Elisabetta (Paediatrics)

Innovative strategies to improve the diagnosis of intrathoracic tuberculosis in children

The diagnosis of childhood tuberculosis (TB) is imprecise, as bacteriological confirmation, the gold standard, is seldom achieved. Present tests have low sensitivities, a long turnaround time and require invasive and resource-intensive procedures. This study prospectively enrolled a representative cohort of 620 children with suspected pulmonary TB and investigated them using standardised approaches; all were followed up in the long term. Stool, a child-friendly specimen, was assessed using liquid culture and the GeneXpert MTB/RIF assay. Pooling of respiratory specimens as a potentially cost-effective strategy and the clinical follow-up as a diagnostic tool were investigated. A well-characterised bio-repository for future evaluation of novel biomarkers was established. The study proposes a rigorous framework for the evaluation of future TB diagnostic studies.

Supervisor: Prof AC Hesseling

Co-supervisor: Prof RP Gie

XULU, Khethelo Richman (Psychiatry)

Understanding and treating trauma and violence-related pathologies in South African townships: Emergence and modifiability of epigenetic and neural memories of traumatic stressors and appetitive offending

Exposure to stressors results in the activation of biological and psychological responses that are necessary for adaptation to the environment. Repeated and prolonged exposure to violence and stressful events can, however, result in sustained activation of biologically mediated responses, with the result that the individual becomes susceptible to psychological complications, including posttraumatic stress disorder (PTSD) and aggressive behaviour. The aim of this study was to identify biomarkers of PTSD and aggression in a sample of young South African men who are exposed to continuous traumatic stress. The results indicated that DNA methylation, telomere length and genetic variation are associated with aggression in the context of PTSD symptomatology, and that they may also predict symptom improvement after psychotherapeutic intervention.

Supervisor: Prof SMJ Hemmings

Co-supervisors: Dr S Malan-Muller and Prof S Seedat

*Fakulteit Geneeskunde en Gesondheidswetenskappe
Faculty of Medicine and Health Sciences*

**Magister in die Natuurwetenskappe
Master of Science**

Esterhuizen, Annali (Clinical Epidemiology)
Koen, Johannes Gerhardus (Clinical Epidemiology)
Layman, Jodie Irene (Morphological Science)
Mady-Goma, Chancy Rosine (Anatomy)
Mahlobo, Zama (Molecular Biology)
Manngo, Makhadzi (Molecular Biology)
Nguweneza, Arthemon (Clinical Epidemiology)
Okyere, Dora (Medical Microbiology)
Pistorius, Charlotte (Medical Virology)
Sieberhagen, Jeanie (Molecular Biology)
Swart, Oostewalt (Clinical Epidemiology)
Van Zyl, Adri (Cytopathology)

**Magister in die Natuurwetenskappe Cum Laude
Master of Science Cum Laude**

Burger, Joleen (Medical Physiology)
Manyelo, Masilo Charles (Molecular Biology)
Nagel, Simoné (Molecular Biology)
Tamuhla, Tsaone (Molecular Biology)
Van Schalkwyk, Talani (Human Genetics)
Witbooi, Lee-Roy Cecil (Anatomy)

**Magister in die Geneeskunde
Master of Medicine**

Abdelsalem, Ahmad (Internal Medicine)
Abohajir, Ali Ahmed (Internal Medicine)
Abraham, Kevin Thomas (Obstetrics and Gynaecology)
Abrahams, Ilhaam (Paediatrics)
Abumhara, Salah Alsharief Ghiet (Paediatrics)
Adeniyi, Folasadebunmi (Paediatrics)
Alenyo Ngabirano, Annet Alenyo Ngabirano (Emergency Medicine)
Beshah, Pawelos Seyaum (Family Medicine)
Botha, Pieter (Anatomical Pathology)
Breedt, Anneme (Anaesthesiology)
Coetzee, Dirk-Francois (Anaesthesiology)
Crowley, Lawton Edmund (Family Medicine)
Davids, Ryan Alroy (Anaesthesiology)
De Swardt, Magdaleen (Family Medicine)
Dippenaar, Andries Petrus (Internal Medicine)
Eloff, Elsamaria (Anatomical Pathology)
Els, Marthinus Johannes (Urology)
Erasmus, Elaine (Emergency Medicine)
Fourie, Ilze (Radiation Therapy)
Fry, Samantha (Paediatrics)
Gilbert, Shaun Mark Ricardo (Surgery)
Gombanila, Benard (Nuclear Medicine)
Greyling, Abraham Gerhard Wilhelmus (Radiological Diagnosis)
Jones, Roxane (Psychiatry)
Joubert, Francois-Pierre (Psychiatry)

Kabongo, Diulu (Emergency Medicine)
Kawadza, Jane (Ophthalmology)
Leitch, Ailsa Marjorie (Surgery)
Lintott, Nicola Claire (Anaesthesiology)
Mahlangeni, Gcina Magdalene (Dermatology)
Malan, Tina-Marie (Psychiatry)
Mallum, Abba Aji (Radiation Therapy)
Maritz, Jan Paul Barnard (Surgery)
Marshall, Vaughan (Obstetrics and Gynaecology)
Mbungu, Nomaphelo (Obstetrics and Gynaecology)
Meintjes, Catharina Margaretha (Urology)
Mfingwana, Lunga (Paediatrics)
Mgxeke, Siphon George (Internal Medicine)
Molaodi, Mothusi (Anaesthesiology)
Murray, Cecily (Psychiatry)
Nel, Pieter (Microbiological Pathology)
O'Hagan, Anelma Suzanne (Radiological Diagnosis)
Oppel, Kim Bianca (Paediatrics)
Oyewumi, Akinkunmi Ayobami (Family Medicine)
Pillay, Renilda Catherine (Anaesthesiology)
Pretorius, Vicki (Anatomical Pathology)
Ramsunder, Nikash (Internal Medicine)
Richardson, Chantel Jane (Paediatrics)
Scheepers, Lynn Olivia (Paediatrics)
Schietekat, Denzil Deon (Internal Medicine)
Schoeman, Stephanus Daniel (Internal Medicine)
Schoonraad, Leilah (Paediatrics)
Shah, Sumaya (Obstetrics and Gynaecology)
Smit, Ida (Clinical Pathology)
Smits, Cornelis Adrianus Gerardus (Surgery)
Solomons, Zaraina (Internal Medicine)
Spies, Petrus Venter (Urology)
Steyn, Dirk Cornelis (Orthopaedic Surgery)
Stilwaney, Warren Graham (Internal Medicine)
Swigelaar, Björn Andrew (Forensic Pathology)
Van der Merwe, Ernst Baard (Ophthalmology)
Van der Merwe, Schalk Wiehan (Psychiatry)
Van Heerden, Linda (Paediatrics)
Van Straten, Adele (Anaesthesiology)
Van Wyk, Burgert Jacques (Dermatology)
Van Zyl, Stephanus Francois (Anaesthesiology)
Venter, Rudolph Grobler (Orthopaedic Surgery)
Wagner, Leigh (Family Medicine)

**Magister in die Geneeskunde Cum Laude
Master of Medicine Cum Laude**

Britz, Elsabe (Orthopaedic Surgery)
John, Thadathilankal Jess (Internal Medicine)
Potgieter, Maarten Schalk Willem (Orthopaedic Surgery)

Magister in Patologie
Master in Pathology

Motshwari, Dipuo Dephney (Chemical Pathology)

**Magister in die Wysbegeerte in Gesondheidswetenskappe-
onderwys**
Master of Philosophy in Health Sciences Education

Ulzen-Chela, Angelina Akyempoma

Magister in die Wysbegeerte
Master of Philosophy

Barbera, Michelle (Health Systems and Services Research)
Bosire, Kefa Ogonyo (Health Professions Education)
Carpenter, Hayley May (Health Professions Education)
Du Plessis, Theonie (Child and Adolescent Psychiatry)
Gaqavu, Mthetheleli Mbongeni (Family Medicine)
Mohamed, Nadia (Health Professions Education)
Peck, Craig William (Health Professions Education)
Retief, Mari (Neuropsychiatry: Clinical Neuropsychiatry)
Shaw, Jane Alexandra (Pulmonology)
Theron, FC Rust (Health Professions Education)

Magister in die Wysbegeerte Cum Laude
Master of Philosophy Cum Laude

Cowley, Brenda Barbara (Infant Mental Health)

Magister in Arbeidsterapie
Master of Occupational Therapy

Bates, Desre
Farao, Zylia Saretta
Joubert, Marleen Andrée

Magister in Arbeidsterapie Cum Laude
Master of Occupational Therapy Cum Laude

Buttle, Amy Lynn
Stone, Aletta Regina

Magister in die Verpleegkunde Cum Laude
Master of Nursing Cum Laude

Fitchat, Sonet
Van As, Saria

Magister in Voeding
Master of Nutrition

Amoussou Lokossou, Yrence Urielle Houefa (Nutritional Sciences)
Clarke, Megan Janet (Nutritional Sciences)
Eley, Nicola Mary (Nutritional Sciences)
Kimani, Irene Wairimu (Nutritional Sciences)
Marutla, Koena Beauty (Nutritional Sciences)
Van de Venter, Anzélle (Nutritional Sciences)

Magister in Fisioterapie Cum Laude
Master of Physiotherapy Cum Laude

Steyn, Hesti

Magister in Spraak-Taalterapie
Master in Speech-language Therapy

Robbertse, Andrea

Honneurs-baccalaureus in die Natuurwetenskappe
Bachelor of Science Honours

Azzopardi, Charles Paul (Hyperbaric Medicine)
Bigeni, Sarah (Underwater Medicine)
Cousins, Megan Lynn (Pathology)
Davids, Ladonna Rae (Underwater Medicine)
Dikhoba, Lesedi Bright (Medical Virology)
Ehlers, Ashley (Molecular Biology)
Engelbrecht, Marius Adriaan (Human Genetics)
Evert, Christine Margaret (Medical Virology)
Isaacs, Shareefa (Pathology)
Legodi, Reneilwe Petronella (Physiology (Medical))
Leonard, Bryan Mark (Molecular Biology)
Louw, Meagan (Pathology)
Maartens, Michelle (Physiology (Medical))
Mbabala, Lutho (Molecular Biology)
Mkhonza, Mbali Nondumiso (Molecular Biology)
Nethengwe, Murendeni (Physiology (Medical))
Nigrini, Zenita Mary (Medical Virology)
Otum, Christian Chukwuezugui (Molecular Biology)
Swartz, Aidan (Molecular Biology)
Van Wyk, Heinrich (Physiology (Medical))

Honneurs-baccalaureus in die Natuurwetenskappe Cum Laude
Bachelor of Science Honours Cum Laude

Aylward, Mikal (Anatomy)
Bekker, Minke (Human Genetics)
Beselaar, Leandrie Corné (Anatomy)
Botha, Danelle (Physiology (Medical))
Bredenkamp, Meghan Jo-Ann (Anatomy)
Coetzee, Justin Carl (Anatomy)
De Agrela, Damian Benedict (Physiology (Medical))
De Long, Chantal Kaylinn (Pathology)
Du Plessis, Mome (Human Genetics)
Kritzinger, Nadia (Physiology (Medical))
Lathe, Stephanie Justine (Human Anatomy)
Lubbe, Michaela (Anatomy)
Magri, Kurt (Underwater Medicine)
Middleton, Michaela Lee-Andre (Anatomy)
Ndou, Sedzani (Molecular Biology)
Nel, Monique Susan Patricia (Anatomy)
Nicolai, Mischke Nina (Molecular Biology)
Paarwater, Brandon Anthony (Molecular Biology)
Scott, Leeré Ann (Molecular Biology)
Steinhobel, Amy Debra (Molecular Biology)
Venter, Amanda-Jo (Medical Microbiology)

Honneurs-baccalaureus in Verpleegkunde
Bachelor of Nursing Honours

Cloete, Farida
Jacobs, Nicole Maree
Menzi, Khayakazi

Honneurs-baccalaureus in Verpleegkunde Cum Laude
Bachelor of Nursing Honours Cum Laude

Knott, Robyn

Nagraadse Diploma in Verslawingsorg
Postgraduate Diploma in Addiction Care

Baloyi, Dzunisani Euginea
Davids, Jacqueline Reni
Idas, Come
Johnstone, Muriel Elaine
Ravhura, Grace Tshilidzi
Rix, Tegan
Roelofse, Maryce Cynthia
Sampson, Cassandre Monique
Spies, Comelia Susanna
Toebe, Jolandi
Tromp, Jodi Bronwyn

Nagraadse Diploma in Verslawingsorg Cum Laude
Postgraduate Diploma in Addiction Care Cum Laude

Giannini, Janine Kara
Oakes, Antoinette Joan

Nagraadse Diploma in Verpleegkunde
Postgraduate Diploma in Nursing

Alla, Asemahle (Primary Health Care)
Bailey, Rochelle Naomi (Nursing Management)
Bamardo, Geraldine Maureen (Primary Health Care)
Dayeni, Siphokazi (Primary Health Care)
Dyanti, Nosiphiwo (Primary Health Care)
Frankland, Ilse (Primary Health Care)
Golela, Andisiwe (Primary Health Care)
Heneke, Patricia-Ann (Primary Health Care)
Hondo, Zimkhitha (Primary Health Care)
Kalipa, Noxolo (Primary Health Care)
Louw, Shireen Carol (Primary Health Care)
Lumko, Thembis (Primary Health Care)
Makade, Nomzekelo (Primary Health Care)
Masala, Thabile (Primary Health Care)
Maseti, Patricia Zameka (Nursing Management)
Maxakana, Yandiswa Alicia (Primary Health Care)
Meiring, Lorinda Jaqueline (Primary Health Care)
Mouton, Alfreda (Primary Health Care)
Mvumvu, Akhona (Primary Health Care)
Ngqamakwe, Phezisa (Primary Health Care)
Qwabe, Madre Bulelwa (Primary Health Care)
Roman, Margaret Marinda (Primary Health Care)
Sahula, Nomvuselelo (Primary Health Care)
Shiyamba, Catherine Sybil (Nursing Management)
Smith, Kaylin Randy (Primary Health Care)
Solani, Nandipha Lorettea (Primary Health Care)
Van der Westhuizen, Subeida Sylvonia (Primary Health Care)
Willemse, Phiona Frandolene (Nursing Management)
Zulu, Nomboniso (Primary Health Care)

Nagraadse Diploma in Verpleegkunde Cum Laude
Postgraduate Diploma in Nursing Cum Laude

Amies, Ivanette Veriska (Primary Health Care)
Crafford, Mamel (Primary Health Care)
Fourie, Paul (Primary Health Care)
Goliath, Charmelle Florence (Primary Health Care)
Hammers, Evette Queen (Primary Health Care)
Jacobs, Ilse Nicole (Primary Health Care)

Jass, Ferdinand Werno (Primary Health Care)
Malgas, Elisia (Primary Health Care)
Marx, Yolandi (Primary Health Care)
Mkwambi, Thabisa Primrose (Primary Health Care)
Nantselo, Yandiswa (Primary Health Care)
Ndlovu, Nombuso Jacqueline (Primary Health Care)
Olivier, Riaan (Primary Health Care)
Perin, Nazreen (Primary Health Care)
Rittels, Muriel Muldrid (Primary Health Care)
Rula, Ramona Carmen (Primary Health Care)
Spele, Ntombodumo (Primary Health Care)
Stemmet, Charlotte Louise (Primary Health Care)
Vilander, Anneline Margot (Primary Health Care)
Witbooi, Cecilia (Primary Health Care)

Nagraadse Diploma in Huisartskunde
Postgraduate Diploma in Family Medicine

Chipata, Esther
Gounder, Nishendhren
Kujinga, Sarathiel
Mimpongo-Moolman, Bijoux
Mohammed, Faatimah
Ndlovu, Norman
Siteketa, Beata Nalokoshe Vanerago

Nagraadse Diploma in Huisartskunde Cum Laude
Postgraduate Diploma in Family Medicine Cum Laude

Kellermann, Tracey
Marais, Francois Christiaan
White, Kenneth Barry

Nagraadse Diploma in Volwasse-kritiekiesorg-verpleegkunde
Postgraduate Diploma in Adult Critical Care Nursing

Mkhabela, Maqhawe Excellent
Petersen, Shamoodah
Sikwatsha, Bukeka Grace
Simelane, Spanela Kenneth
Smit, Monique
Valentine, Mia

Nagraadse Diploma in Volwasse-kritiekiesorg-verpleegkunde
Cum Laude
Postgraduate Diploma in Adult Critical Care Nursing Cum
Laude

Du Plessis, Mandy
Hoon, Jani
Kattunkal George, Jimmy
Kruger, Chenel

Nagraadse Diploma in Gevorderde Verloskunde en Neonatale
Verpleegkunde
Postgraduate Diploma in Advanced Midwifery and Neonatal
Nursing

Abrahams, Shareefa
Adams, Dorianne Catherine
Adonis, Monica
Gxagxisa, Nobulali Mavis
Hoza, Faith Funelwa
Kwezi, Nokuzola

Möller, Sonja
Petersen, Karin Melissa
Thomas, Charlene

Nagraadse Diploma in Gevorderde Verloskunde en Neonatale Verpleegkunde *Cum Laude*
Postgraduate Diploma in Advanced Midwifery and Neonatal Nursing *Cum Laude*

Holland, Melanie
Matiwane, Nokonwaba
Segone, Lettie Mmabaeti
Wilken, Danette

Nagraadse Diploma in Operasiesaal-verpleegkunde
Postgraduate Diploma in Operating Theatre Nursing

Andrews, Chamone Whitney
Nyanyirayi, Tafadzwa Mirabel
Sabbat, Shanawaaz
Swart, Karien
Tizwi, Jean
Tshemese, Nontembeko

Nagraadse Diploma in Gevorderde Psigiatrise Verpleegkunde
Postgraduate Diploma in Advanced Psychiatric Nursing

Bramo, Mongi Christian
Dayse, Tony
Galane, Raisbe Junior
Gwanya, Siyamthanda
Jacobs, Bonita
Johannes, Ashley Tomfred
Katane, Tiny Elizabeth Marina
Mahlangu, Lesley Springbok
Makhubela, Shanisani
Mati, Thandeka Patricia
Matsekoleng, Lehong Reuben
Mncina, Amanda Babhekile
Mngomezulu, Marvelous
Morake, Priscilla
Mosheu, Edwin Steve
Ngwendu, Joshua
Njikelana, Mnikeli
Nkosi, Nontokozo Julieth
Nomangola, Wandile
Pama-Nelana, Nomthuzelo Priscilla
Pukwana, Sicele
Rolinyati, Linda Judith
Selowa, Moyahabo Florah
Shongwe, Thuli Cylist
Solange, Lunga

Nagraadse Diploma in Gevorderde Psigiatrise Verpleegkunde *Cum Laude*
Postgraduate Diploma in Advanced Psychiatric Nursing *Cum Laude*

Duba, Sipiwe Rose
Gaanakgomo, Flora Palesa
Matsie, Dalton
Mballo, Nombulelo
Mphahlele, Mmaphefo Elizabeth

Nagraadse Diploma in Verpleegonderwys
Postgraduate Diploma in Nursing Education

Akhosi, Alice Makhotso
Arries, Anthea Carleen
Botha, Thelmarie Chamalay
Castle, Tracy-Ann Barbara
Cornett, Claudia Voudine
Elimu, Avian Crescentia
Gama, Memory
Geldenhuis, Gütte
Hlophe, Siphesihle Delani
Jonas, Lindill
Koopman, Leonie Elsie
Koopman, Pauline
Kwani, Silindokuhle
Lockett, Bridgette
Maaka, Seshwatlha Salome
Maree, Michelé
Martin Standhardt, Marielle
Mutati, Christine Mpundu
Nikodemus, Nesi Shipombo Tuyakula
O'Connor, Cindy
Ohajunwa, Thuliswa Veronica
Petersen, Meghann Grace Gladys
Petrus, Hambeleleni
Pretorius, Deborah
Prince, Charlene Anika
Shao, Mpeo Shoeshoe Rose-Evelyn
Tilolo, Lwazi Romeo
Tladi, Lerato
Tshawe, Noxolo Rachel
Young, Susan Norma
Zhangazha, Angelina

Nagraadse Diploma in Verpleegonderwys *Cum Laude*
Postgraduate Diploma in Nursing Education *Cum Laude*

Adams, Rukshana
Carter-Smith, Tamsin
De Jager, Tanja
Hoffman, Catherine
Holtman, Natheerah
Julies, Mercia
Kamohelo, Tholoana Joyce
Kroukam, Isak Jacobus
Malan, Mizan
Nagiah, Sharday Melissa
Price, Amanda
Sagwa, Clemence Munezero
Stecher, Nicole Elizabeth
Stellenboom, Nawal
Valentine, Lydia Roxanne
Van Rooyen, Meretha

Nagraadse Diploma in Verplegings- en Gesondheidsdiensbestuur
Postgraduate Diploma in Nursing and Health Service Management

Abrahams, Davidene Marion
Arendse, Shireen
Amison, Shantel

Bains, Sylvia Drusilla Priscilla
Blom, Shaun Patrick
Brenton, Hannelie Elaine
Brown-Edwards, Cathy Jerry-Ann Rochelle
Curran, Maria Susanna
Demingo, Camen
Dlamini, Sondezwa
Ekole Chabanga, Hamite Achu
Fillis, Jason Marco
Fodo, Phumza Venocia
Fortuin, Ursula
Fouldien, Julia
Frans, Jolene
Grobler, Erhard Pieter
Hartley, Jodi Joan
Huchu, Grace
January, Christina Josefina
Jimmy, Nondumiso Nobubele
Kotze, Johanna Sophia
M'Rithaa, Doreen Kainyu Mugendi
Manning, La-Toya Edwina
Mapolisa, Busisiwe
Mbube, Weziwe
Mokhethi, Thato Shadrack
Moos, Fatoma
Mthethwa, Bongive Sunshine
Nondlwana, Thabisa
Nqinana, Nzinyelwa Cynthia
Ntlabathi, Nokuthula
Nywagi, Eric
Papers, Neréne Atheley Charléne
Plaatjies, Andries
Ramalisa, Remember
Sam, Noluthando
Setshedi, Keboetswe Kagiso Mercy
Smith, Jacques Lawrence
Soni, Khayaletu
Torweni, Thembinkosi
Van Zyl, Davianne De Maine
Wilson, Stacey-Leigh
Zekani, Masiyibonge
Zimri-Swartbooi, Shamal Janine

Nagraadse Diploma in Verplegings- en Gesondheidsdiensbestuur *Cum Laude*
Postgraduate Diploma in Nursing and Health Service Management *Cum Laude*

Arendse, Kelly Anne
Njajula, Nosipiwo
Slabbert, Franzelna Stephanie
Venter, Marlise

Nagraadse Diploma in Gestremdheid- en Rehabilitasiestudies
Postgraduate Diploma in Disability and Rehabilitation Studies

Bosch, Kelly
Letsoalo, Thomas Mohale
Mangqalaza, Dumisani
Mazoko, Andiswa
Shoko, Sifiso Vonai

Nagraadse Diploma in Gestremdheid- en Rehabilitasiestudies
Cum Laude
Postgraduate Diploma in Disability and Rehabilitation Studies
Cum Laude

Schultz, Danika

Nagraadse Diploma in Geneesmiddelontwikkeling
Postgraduate Diploma in Medicines Development

Dipela, Mmabatho Laurette
Eboma, Prisca Lokombe
Mabusela, Tozama
Mahgoub, Alia
Muonde, Muridzo
Ncube, Janet
Nemuhuyuni, Nditsheni
Nkomo, Lucky
Peter, Mpho
Podgorski, Sonia Catherine
Radipere, Kgabo
Singh, Yolisha
Sithole, Nomhle Samantha
Smith, Dhiveja

Nagraadse Diploma in Geneesmiddelontwikkeling *Cum Laude*
Postgraduate Diploma in Medicines Development *Cum Laude*

Chawana, Richard

Baccalaureus in die Geneeskunde en Baccalaureus in die Snykunde
Bachelor of Medicine and Bachelor of Surgery

Adams, Neil
Africa, Lisa Joy
Africa, Robyn
Agostinelli, Gabriella
Aldrich, Edward Martin
Andrews, Kayla
Andrews, Zaida
Archer, Leandri
Arries, Jolene Pearl
Ashtiker, Masooda
Aucamp, Marlé
Baatjes, Lee Ryan
Banderker, Muazzam
Banderker, Zeenat
Bartleman, Johann Welman
Basson, Lauren Andrea
Baty, Wendy Nwabisa Vivienne
Belot, Zankenluleko
Benjamin, Yael Chaya
Beyer, Chad
Bhyat, Naseeha
Blecha, Claudia Alexandra Sophia
Blomerus, Samari
Bodiat, Abubakr
Bongco, Chulumanco Somila
Booley, Hanaan
Booyesen, Jana
Bradlow, Ayesha
Bray, Mohamed

Brown, Annuscha Donetia
Brown, Roxanne Louise
Buckle, Megan Ruth
Carelse, Amber
Cassiem, Muneerah
Ceylon, Justin Matthew
Chanel, Charlotte Barabara Clémentine
Chellan, Ethan Lee
Chikte, Naziah
Classen, Chanell Lyncher
Coetsee, Benjamin Paul
Crombie, Kathleen Eva
De Blocq Van Scheltinga, Christopher Daniel
De Wee, Georgin Marchell
Desai, Rashieda Begum
Dias, Dylan Christopher
Dibotelo, Tshepo Itumeleng
Dlamini, Bulela Siphumelele
Dollie, Nuhaa
Dramat, Aqeelah
Du Plessis, Kurtley
Dudukay, Kajol Sabha
Eksteen, John Loxton
Ellis, Kirsten Alexandra
Emeran, Ibraheem
Faro, Jaylin Emmanuel
Faulding, Chame Raydene
Fayker, Laylah
February, Diego Gino
Fortuin, Devon Juane
Fourie, Anri
Fredericks, Wilton Jason
Gaffoor, Abdul Mutaalib
Gallant, El-Maree Kaye
Gamielien, Firdows
Geddie, Duval Gray
Geldenhuis, Paul Jacques
Geldenhuis, Tazwin John
Gemishuis, Louis Gouws
Gertse, Isha
Gierdien, Nafees
Goosen, Petrus Johannes
Gouws, Cornelius Christiaan
Grey, Bongisa
Griffin, Gabriella
Gyan, Millicent Akua Agyapomah
Hadebe, Xolani Lucas
Hector, Melissa Kelly
Hendricks, Alexandra Lee
Hendricks, Danielle Charlotte
Hoole, Jana Leonie
Hoosain, Muhammad Irfaan
Hoosen, Shabnam
Hoskins, Liam Christopher
Hurling, Magan Margaret
Jackson, Ciara Juanise
Jacobs, Kathryn Athena Tesla Helene
Johnson, Tracy Eden
Jordaan, Bianca

Joseph, Letohre Nirvana
Kaba, Eileen Katiga
Kajee, Shaahid
Kennedy, Carmen Hayley
Khan, Fatimah Zahrah
Khan, Yusra
Khosa, Khanyisile Vuya
Khoza, Khensani Marilyn
Kimani, Diana Wangari
Kiza, Mzomhle
Kossmann, Laila Marianne
Kotze, Emma Saskia
Kraukamp, Amber Jo-Anne
Kritzinger, Chame Charmian
Kubheka, Noxololondiwe
Lalla, Nuha
Landore, Keanan Andrew
Lary, Lindsay
Lediga, Boitumelo
Lee, Adelaide
Leonards, Brent Dennis
Lethwane, Thabiso Blessing Johannes
Li Green, Natasha
Lochner, Keenen James
Lubisi, Lindokuhle Immaculate
Mabunda, Ponani Phumla
Magangana, Siyanda
Magula, Anelisiwe
Mahagane, Nhlakanipho Advocate
Mahlangu, Musawenkosi Kagiso
Mahlangu, Nompumelelo Precious
Malapermala, Kiveshan Aroonsclim
Malotsha, Rebone Mmathabo
Maphanga, Busisiwe Dorcas
Marais, Kesia Chandré
Marais, Kirsten Cielynne
Maralack, Amy Jesse
Martin, Mogammad Ebrahim
Mashishi, Naledi Kamogelo Motlase
Masilo, Mookho Rose-Mary
Masina, Sthembiso Cyril
Masithembi, Vhutshilo Evidence
Mayisela, Nkosinotando Sinoxolo
Mbokazi, Nomthandazo Nothando
Mentoor, Clayton Jacques
Meylahn, Mirjam Clara
Miller, Shannen Constance
Mkhize, Mvelo Zifikile Sinthemba
Mlaba, Sphelele Phumelele
Mlambo, Lungelo Clifford
Mnqandi, Anelisa
Mofokeng, Boitumelo Lerato Hope
Mohlala, Thakgalo Prudence
Mokoena, Lehlohonolo Deborah
Molefe, Rethabile
Moodley, Adriel Cyrus
Morodi, Kholofelo Karabo
Morrison, Romano Richeleigh
Mosololi, Dineo Reabetsoe

Mostert, Elisca
Mouton, Noelle
Mowlana, Amina
Mowzer, Mohamed Rameez
Mowzer, Raisa
Msane, Sidelisiwe Bongisisa
Mukuddem, Mohammed Arief
Muller, Courtney Carmen
Mutanda-Musoke, Richard Nicholas Tendo
Myburgh, Sharon Vivienne
Nadvi, Syed Faizan
Navsaria, Terusha Pradeep
Ndabeni, Leletu Nolubabalo Nokuzola
Nelleman, Adrienne Shay
Nkosi, Siphokazi Nomahlubi
Ntsewa, Ofentse Malesela Mahlaku
October, Hayley Anne
October, Tia Tracey
Odendaal, Unine
Omar, Mubeenah-Tayyibah
Oosthuizen, Jennifer Tara
Opperman, Lindsey Andrés
Panjri, Mazhar
Parker, Aakifah
Parker, Ilyaas Ahmed
Parker, Masood Ahmed
Parker, Mohammed Yusuf
Parker, Nadira
Parker, Tasneem
Parker, Zeyad
Peters, Michaela Lee
Phasha, Dolamo
Pohplonker, Khalid Mohamed
Pore, Mu-Een
Potgieter, Daniel Roscher
Pretorius, Jakobus
Qaba, Babalwa Fikiswa
Rex, Robin Waynalda
Rinkwest, Clayrin Chesray Aaron
Robinson, Elzanne
Roman, Rozleigh Rene
Rootman, Jolandi
Rösener, Channing
Rutherford, Dean
Ryklief, Faika
Sablay, Mohamed Shakeel
Salie, Salwah
Sauls, Kenitia Kirsten
Schafer, Cameron Wade
Scholtz, Aimee
Schultz, Tiana
Scoble, Kirsten Ashleigh
Seafield, Kelly Joy
Selana, Baxolise
Shaboodien, Nabeelah
Sheik, Muhammed
Sheik, Tabassum Nisaa
Sijula, Flourish Eviwe
Siyo, Nanzi Sureya

Skibbe, Madelie
Slabbert, Shaun Nico
Smal, Majorie
Smit, Adriaan Johannes
Smit, Deon Glen
Smith, Nicole Christine
Spence, Nicole
Steneveld, Lané Sigourmey
Sundani, Mukoni
Swartz, Andrea Carla
Sylvester, Joseline Shannon
Tait, Sorika
Taliep, Abdurahmaan
Temmingh, Elize
Theepe, Boitumelo Jeanette
Theron, Eileen
Theys, Chame
Thompson, Ruary John
Tom, Zinzo
Tromp, Janine Lee
Vallie, Adnaan
Vallie, Nabeelah
Van Aswegen, Kim
Van Bart, Emma
Van den Aardweg, Kate Olivia
Van der Merwe, Simoné
Van der Vyver, Jacobus Stefanus
Van der Westhuyzen, Jeremias Arndt
Van Jaarsveld, Navan Dylan
Van Loggerenberg, Janneke
Van Schalkwyk, Donrich
Van Wyk, Janneke
Van Wyk, Lizelle
Vanzaghi, Michele Umberto
Wait, Ann Rosser
Wayne, Nicholas David Yeats
Wessels, Christa
Wilson, Zoë
Wood, Candice Beverley
Wood, Michael Themba
Wyma, Nanine
Yao, Lesley
Zalgaonkir, Shagufta
Zwingert, Sara

Baccalaureus in die Geneeskunde en Baccalaureus in die Snykunde Cum Laude Bachelor of Medicine and Bachelor of Surgery Cum Laude

Anderson, Sean Glen
Beselaar, Zelmarië Riana
Breytenbach, Hendrik Frederik
Burger, Gideon Thomas
Dekker, Leendert
Engelbrecht, Anton Eduard
Green, Launa
Koffeman, Cara
Kotzé, Christiaan
Krynauw, Daniel David
Laubscher, Annamart Maria

Loftus, Izak Adriaan Johannes
Meyer, Melissa Delia
Mitchell, Dean Christopher
Nieuwoudt, Sarel Tielman
Quirke, Sinead
Robinson, Jordan David
Smit, Maxine
Steyn, Minette
Strydom, Amy Olivia
Van der Spuy, Heleen
Whitmore, Richard Brownlow
Wiegman, Nita Marlene

**Baccalaureus in Arbeidsterapie
Bachelor of Occupational Therapy**

Asvat, Aaminah
Baardman, Aloise Dorrell
Ballantyne, Tamsin Jean
Bayat, Shahnaaz Yunus Amod
Blomerus, Marié
Boon, Andrea Faye
Breytenbach, Marianne
Burger, Isolde
Carelse, Megan Robin
Crous, Bianca
Crous, Kayla
Crowther, Mickela Debra
De Villiers, Kay
Dollie, Ayesha
Eloff, Lize
Fortuin, Lorelei
Grobler, Nika
Hayward, Emma Susan
Hickson, Courtney
Klaasen, Athalie Suzanné
Kruger, Zani
Kumalo, Sibongile Khanyile Nomadlozi
Lombard, Mareli
Lynch, Kelly
Mohanoé, Sebolelo Moipone
Moneron, Chandini Elane
Mouton, Mareli
Myers, Chenell Jade
Olivier, Lidia-Marie
Parker, Azraa
Petersen, Ruth Michele
Pillay, Kinisha
Potgieter, René
Prince, Janice Barbara
Rens, Mia
Samuels, Kyla
Sehlapelo, Charlotte Paulina
Sephton, Samantha Holly
Smith, Retha-Marí
Stapelberg, Talita
Stewart, Michaela Nicole
Thoolsiram, Kiara
Tsotsa, Asisipho Innocentia
Van Aardt, Iloné

Van Coller, Eliné
Venter, Bema Ermen
Vermaak, Nina
Wilson, Chandré Mikayla
Zaidi, Syeda Minal Mehdi

**Baccalaureus in Arbeidsterapie Cum Laude
Bachelor of Occupational Therapy Cum Laude**

Lovemore, Charlotte Ann
Naudé, Zani

**Baccalaureus in die Natuurwetenskappe in Fisioterapie
Bachelor of Science in Physiotherapy**

Abrahams, Lisa Lauren
Adams, Christine Helen
Andrianatos, Mark John
Burger, Adri-Marié
Coetzee, Wilna
Comley, Deidre Ruth
Dampier, Ashley
Du Plessis, Lenka Zané
Du Preez, Jennifer Christina
Esterhuyzen, Wilmien Louise
Fielies, Misha Ronique
Fredericks, Natasha Olivia
Frost, Georgina Lynette
Geldenhuis, Larissa
Johannes, Lizaan
Khan, Thakeerah
Kitshoff, Tiné
Kritzinger, Chantél
Kutumela, Boitumelo
Lamprecht, Eugenie
Le Roux, Stephani
Loubser, Anneke
Maritz, Carla
McLoughlin, Dayle Jayne
Myburgh, Elzanne
Mzizi, Zethu
Nel, Courtney-Jade
Nel, Ernest Johan
Nell, Jade Andrea Eileen
Obermeyer, Natasha Maria
Partridge, Alexis Nicole
Patel, Jatan
Pazda, Daniella
Petersen, Cody
Rossouw, Petro
Struwig, Silke
Sundstrom, Janik
Vally, Tasneem Muhammed
Van der Watt, Carina
Van Straaten, Chané Nerí
Van Tonder, Mia Heleen
Van Wyk, Nikki
Vermeulen, Nicolaas Johan
Zaayman, Jessica

**Baccalaureus in die Natuurwetenskappe in Fisioterapie Cum Laude
Bachelor of Science in Physiotherapy Cum Laude**

Van Rooyen, Chanté

**Baccalaureus in die Natuurwetenskappe in Dieetkunde
Bachelor of Science in Dietetics**

Aziz, Ghumayra
Breedt, Willem Thomas
Bright, Kay-Lee
Chen, Yue
Coetzee, Gareth Tristan
Donald, Megan Rachel
Du Toit, Marizaan
Gierdien, Iman
Grant, Jenna-Lee
Greeff, Dominique Maria Danuta
Kayser, Darian Clair
Lingenfelder, Madelein
Malan, Devine Chané
Mohlala, Lebogang Nthabiseng
Petersen, Sheldon Thomas
Reid, Lindsay Anne
Schreuder, Hanneke
Smith, Danielle
Visser, Janie
Wessels, Marilize
Yates, Megan Fiona

**Baccalaureus in die Natuurwetenskappe in Dieetkunde Cum Laude
Bachelor of Science in Dietetics Cum Laude**

Blaauw, Liezel
Engelbrecht, Liezel Maryke
Leng, Tessa Nicole
Lutzeler, Karla
Saaiman, Tayla

**Baccalaureus in Spraak-Taal- en Gehoorterapie
Bachelor of Speech-language and Hearing Therapy**

Brummer, Stacey Monique
Christians, Chamé Taryn
Dalvie, Nooreen
Du Toit, Carli
Erasmus, Sonri
Gay, Samantha Mary
Jajbhay, Tasmiya
Johnson, Suné Comé
Kannemeyer, Prelene
Le Roux, Adriaan Carel
Matthee, Elani
Miller, Julia Shaun
Naidoo, Dharshini
Netsianda, Phumudzo
Petersen, Jillian Amber
Pienaar, Johanné Risa-Maré
Senekal, Anna Magalena
Smith, Anmari
Stewart, Chanelle Shanene
Vermeulen, Lerise
Visser, Andrea

**Baccalaureus in Spraak-Taal- en Gehoorterapie Cum Laude
Bachelor of Speech-language and Hearing Therapy Cum Laude**

Van Schalkwyk, Elanie Antoinette

KANSELIERSTOEKENNING | CHANCELLOR'S AWARD

*Fakulteit Geneeskunde en Gesondheidswetenskappe
Faculty of Medicine and Health Sciences*

ROBIN WARREN

Uitgelese prof Robin Warren is die direkteur van die SAMNR Sentrum vir Tuberkulosenavorsing in die Afdeling Molekulêre Biologie en Mensgenetika aan die Universiteit Stellenbosch. Hy is 'n internasionaal erkende navorser wat reeds meer as 290 wetenskaplike artikels oor tuberkulose gepubliseer het. Sy navorsing fokus op molekulêre epidemiologie en het reeds tot verskeie mylpaalpublikasies gelei wat dogma uitgedaag het en wat belangrike implikasies vir tuberkulosedagnose en -behandeling op nasionale vlak gehad het. In 2015 is sy beduidende bydraes tot die gebied van die molekulêre epidemiologie van tuberkulose deur die Suid-Afrikaanse Mediese Navorsingsraad erken deur die toekenning van 'n goue medalje vir wetenskaplike uitnemendheid.

Distinguished Prof Robin Warren is the director of the SAMRC Centre for Tuberculosis Research in the Division of Molecular Biology and Human Genetics of Stellenbosch University. He is an internationally recognised researcher who has published more than 290 scientific papers on tuberculosis. His research focuses on molecular epidemiology and has led to numerous landmark publications that have challenged dogma and have had important implications for tuberculosis diagnosis and treatment nationally. In 2015 he was awarded a gold medal for scientific excellence by the South African Medical Research Council in recognition for his significant contributions to the field of the molecular epidemiology of tuberculosis.

3

11 Desember | 11 December

17:30

Fakulteit

Natuurwetenskappe

Faculty

Science

PROGRAM

- Staan asseblief* 1. Akademiese prosesie kom die saal binne.
- Staan asseblief* 2. Sing van die Nasionale Lied (kyk aan die binnekant van die agterblad).
- Sit asseblief* 3. Konstituering deur die Visekanselier.
4. Verwelkoming deur die Visekanselier en prof Mawande Dlali.
5. Voorstelling van kandidate wat kwalifikasies ontvang deur die dekaan van die fakulteit en toekenning van kwalifikasies deur die Visekanselier.
6. Voorstelling van kandidate vir die Kanselierstoekennings en oorhandiging van die toekennings deur die Visekanselier.
7. Sluiting deur die Visekanselier.
- Staan asseblief* 8. Akademiese prosesie verlaat die verhoog.

PROGRAMME

- Stand please* 1. Entrance of academic procession into the hall.
- Stand please* 2. Singing of the National Anthem (see inside back cover).
- Sit please* 3. Congregation formally constituted by the Vice-Chancellor.
4. Welcome by the Vice-Chancellor and Prof Mawande Dlali.
5. Presentation of candidates receiving qualifications by the dean of the faculty and conferment of qualifications by the Vice-Chancellor.
6. Introduction of the candidates for the Chancellor's Awards and presentation of the awards by the Vice-Chancellor.
7. Closing by the Vice-Chancellor.
- Stand please* 8. The academic procession leaves the stage.

Doktor in die Wysbegeerte Doctor of Philosophy

ALIMI, Lukman (Chemistry)

Thermal and mechanical responsiveness of some 4-substituted benzonitriles

The thermal and mechanical responsiveness of three different small organic molecules with similar structural architectures (4-substituted benzonitriles) were studied. A detailed and comprehensive structural and theoretical investigation was successfully carried out to explain and understand the structure-property relationships to enable future design of similar materials for potential applications as, inter alia, muscle mimetic biomaterials, artificial mechanosensors, molecular machinery, optical devices, organic electronics and smart nanomaterials. These materials exhibit very interesting thermal and mechanical properties that have not been discovered before even though the compounds have previously been reported in the literature.

Supervisor: Prof LJ Babour
Co-supervisor: Dr VJ Smith

AZOTE, Somiéalo (Physics)

Mechanical properties of cells and modelling of structural instabilities in tissues

The cytoskeleton of a cell is responsible for many of the cell's mechanical and transport properties. A theory was developed for linear and branching networks of cytoskeletal filaments that are confined within the finite volume of a cell. This is based on the grand ensemble and led to numerically tractable results. This enabled the prediction of how filaments are aligned and on their density within the cell. A measure of the orientational order was computed and allowed a classification of different forms of the network. The stability of cytoskeleton under deformations and shear of the confining region was confirmed.

Supervisor: Prof KK Müller-Nedebock
Co-supervisor: Dr JN Kriel

BREDELL, Helba (Mikrobiologie)

Investigation of metylotrophic yeasts expression systems for the production of self-assembling proteins with biological applications

Servikale kanker veroorsaak deur die menslike papilloomvirus (MPV) is die vierde-algemeenste kanker by vroue wêreldwyd en gastro-enteritis (veroorzaak deur die rotavirus) een van die grootste oorsake van sterftes by jong kinders, veral in Afrika. Huidig beskikbare entstowwe is vir die meeste mense in ontwikkelende lande onbekostigbaar. 'n Unieke MPV- en RV-proteïen is rekombinant in *Pichia pastoris*- en *Hansenula polymorpha*-giste geproduseer. *H. polymorpha* het die hoogste vlakke van albei proteïene gelewer. Elektronmikroskopiese studies het bevestig dat MPV-proteïene in virusagtige partikels self-monteer. Hierdie studie bewys dat *H. polymorpha* belofte inhou vir die vervaardiging van meer bekostigbare entstowwe in ontwikkelende lande.

Promotor: Prof WH van Zyl
Medepromotor: Prof JF Görgens

CANAVAN, Susan (Botany)

Assessing the interaction between history of usage and plant invasions: Bamboo as a case study

There has been a non-random transfer of bamboos around the world by humans, which has been influenced by historical usage in the native range and preferences for certain traits. Specifically bamboos have had a long history in South Africa where there have been multiple phases of introduction. Each phase has been closely aligned with socio-historical events in the region. However, there is an emergence of polarised attitudes towards bamboos, as certain species have spread and become weedy over time. Studying bamboos has provided further insights into the way in which social and economic imperatives are shaping a new biota at a global level.

Supervisor: Prof JR Wilson

Co-supervisors: Profs DM Richardson and J le Roux

DADEDZI, Kenneth (Mathematics)

Analysis of tree spectra

Matrices associated with a graph or network and their eigenvalues link to a variety of structural properties. An in-depth study of the distribution of eigenvalues in random tree-shaped networks was conducted, considering different models of randomness. This included the classical model of random simply generated trees and varieties of increasing trees. It was shown how the limiting proportion of single eigenvalues as part of the entire spectrum can be determined, with particularly precise results for the proportion of 0 in the spectrum. Moreover, the combinatorial properties of a novel type of matrix associated with rooted trees were investigated.

Supervisor: Prof S Wagner

DE WITT, Riaan (Microbiology)

Proteogenomic analysis of the inhibitor tolerance phenotype in natural Saccharomyces cerevisiae isolates

Yeast strains able to ferment in toxic environments such as plant hydrolysates are of utmost importance for the cost-competitive production of value-added chemicals and fuels. The mechanisms behind tolerance to these plant-derived inhibitors are complex and only partially understood. Natural strains of *Saccharomyces cerevisiae*, known for their genetic diversity and innate tolerance, are a valuable resource to explore the genetic underpinning of inhibitor tolerance. This study elucidates the mechanisms of lignocellulosic inhibitor tolerance in natural *S. cerevisiae* isolates using bulk segregant analysis, QTL mapping and discovery-based proteomics, and identifies several novel engineering targets for industrial yeast strains.

Supervisor: Dr H Volschenk

Co-supervisor: Prof WH van Zyl

DOSSOU-OLORY, Audace Amen Vioutou (Mathematics)

On the inducibility of rooted trees

The inducibility was introduced recently as a measure to quantify how often a fixed tree can occur as part of a larger tree structure, for example a phylogenetic tree. Early results in the literature were limited to binary trees. These results were significantly extended and generalised to arbitrary d-ary trees and topological trees. It was found that two potentially different notions of d-ary inducibility coincide, and a connection to the inducibility in topological trees was proven. Exact values or estimates for the d-ary and general inducibility were derived in various special cases, and the asymptotic behaviour was quantified precisely.

Supervisor: Prof S Wagner

DU TOIT, Therina (Biochemistry)

The metabolism of 11 β -hydroxyandrostenedione by steroidogenic enzymes yields metabolites contributing to the androgen pool in prostate cancer

Adrenal precursor steroids contribute to the production of potent androgens in the prostate, with dire downstream consequences in castration-resistant prostate cancer. This study provided a new perspective on adrenal precursor steroids, showing the metabolism, including the production and impeded inactivation, of steroid hormones in prostate cell models, contributing to *in vitro* evidence of the potency of these steroids in the context of prostate cancer. Novel steroid hormones were quantified, for the first time, in the plasma and tissue of prostate cancer patients, highlighting the importance of accurate quantification in both research and clinical settings.

Supervisor: Prof AC Swart

ESELEM BUNGU, Paul Severin (Polymer Science)

Development of a multiple fractionation protocol for the comprehensive analysis of low-density polyethylene

Polyethylene is an important thermoplastic polymer that is used in applications such as packaging, insulation for ultrahigh voltage cables, solar panel encapsulation and medical devices. Designing such specific materials requires complex reaction engineering. To relate the microstructural properties of the materials to their end use properties, multidimensional analytical approaches must be used. This study developed such approaches and analytical protocols for low-density polyethylene. Multiple fractionation methodologies were combined to yield structural information on the composition, molecular size and architecture of complex polyethylenes, enabling the development of new materials with improved properties.

Supervisor: Prof H Pasch

HEYNS, Ingrid (Polymer Science)

3M2P-based polymers and their properties

3-Methylene-2-pyrrolidone (3M2P) was synthesised as a monomer for radical polymerisation techniques. Poly(3M2P) is very soluble in water, and hardly soluble in organic solvents. These solubility characteristics were taken as a starting point for the development of statistical copolymers and block copolymers with applications in the gas and oil industry and the biomedical field. Three different methods were employed to decrease the hydrophilicity of poly(3M2P), which resulted in a copolymer that performs well as a kinetic hydrate inhibitor. Amphiphilic block copolymers containing 3M2P were synthesised, which were shown to form vesicles around biological templates such as exosomes.

Supervisor: Prof L Klumperman

Co-supervisor: Dr R Pfukwa

HOEFNAGEL, Michael (Mathematics)

A categorical approach to lattice-like structures

A category-theoretic analysis of lattices and related mathematical structures was developed in this study through a notion of majority category. First discovered by Richard Dedekind more than 100 years ago in his work on number theory, lattices are today among the most fundamental mathematical structures that play a central role in several areas of mathematics, including algebraic logic and universal algebra. In the context of universal algebra, majority categories coincide with previously studied varieties admitting a majority term. A number of results on such varieties was generalised to majority categories and links with the existing closely related notions in category theory were successfully explored.

Supervisor: Prof Z Janelidze

Co-supervisor: Dr JRA Gray

ISAACS, Ashwin (Physiological Science)

Effect of melatonin treatment on doxorubicin-induced skeletal muscle atrophy within a cancer model

Skeletal muscle atrophy is a major concern in cancer patients. Chemotherapeutic agents, such as doxorubicin (DOX), further exacerbate skeletal muscle loss; however, no routinely used therapies alleviate this condition. The aim of the study was to investigate whether melatonin (MLT) could attenuate DOX-induced skeletal muscle atrophy in models of breast cancer and to determine the molecular mechanisms involved. MLT treatment significantly increased intramuscular antioxidant capacity, mitochondrial biogenesis and satellite cell numbers, while it attenuated markers of DOX-induced atrophy. The results indicate that pre-treatment with MLT protects against skeletal muscle atrophy induced by DOX in a tumour-bearing rat model.

Supervisor: Prof A-M Engelbrecht

Co-supervisors: Profs B Loos and KH Myburgh

JOUBERT, Cornelia Maria (Chemistry)

Hydroformylation of alkenes using heterogenised complexes of rhodium

Novel protocols for the 'heterogenisation' of several rhodium complexes based on bidentate ligands containing N,N, N,P and N,O donor atoms were developed. These immobilised complexes were successfully applied in the catalytic hydroformylation of 1-octene to produce linear and branched C9 aldehydes, which are important feedstocks for the production of surfactants and other speciality chemicals. Investigations into the effect of several parameters on the reactions provided some useful insight into the behaviour of these catalyst systems on a molecular level. This will enhance our ability to developed highly effective catalysts for the aforementioned process.

Supervisor: Prof L Klumperman

KEMP, Jurene (Botany)

The influence of pollinators and herbivores on daisy flower colour community assembly patterns, plant species distributions and flower colour evolution in Namaqualand, South Africa

The mechanisms governing the assembly and diversification of functional floral traits in generalist pollinated plants are relatively unknown. This study showed that flower colour of mass flowering daisies in Namaqualand is influenced by both insect pollinators and floral herbivores. Evolutionary divergence of flower colour occurs across strong spatial gradients in available dominant fly pollinators that have divergent colour preferences. Spatial dominance by particular pollinators also results in the convergence of flower colour within communities and the evolution of surprisingly narrow pollination niches in Namaqua daisies, challenging the widely held assumption of generalist pollination in the hyperdiverse *Asteraceae*.

Supervisor: Prof AG Ellis

KHUTLANE, Joyce Tsepiso (Chemistry)

Novel applications of superparamagnetic nanoparticles inter alia for the separation and recovery of platinum group PG metals from acidic waste solutions

Naked magnetic iron oxide nanoparticles (MIONs) are promising materials for adsorption studies of metal ions/complexes from wastewater due to their versatile magnetic properties, allowing for facile separation and analyte recovery. This process of platinum group metals (PGM) recovery is less expensive compared to currently used adsorbents. Despite promising results, the naked MIONs were found to be unstable at low pH, the conditions used for extraction in the mining industry. The surface of the MIONs was functionalised and these modified MIONs exhibited high stability at low pH as well as excellent extraction potential. Hence novel, efficient and stable adsorbants have been produced.

Supervisor: Dr R Malgas-Enus
Co-supervisor: Prof KR Koch

MACFADYEN, Sandra (Botany)

Linking long-term patterns of landscape heterogeneity to changing ecosystem processes in the Kruger National Park, South Africa

Environmental heterogeneity is a recognised driver of biodiversity under niche-based theories. At a landscape scale, this heterogeneity is defined as the degree of difference between landscape elements and is often described as landscape heterogeneity. An increase in landscape heterogeneity is expected to promote species' coexistence, persistence and diversification. Accordingly, observable variations in landscape patterns are conjectured to signify divergence in landscape function. This relationship was explored within the Kruger National Park. Landscape heterogeneity was described in terms of the abiotic and biotic components (environmental drivers) that generate and maintain landscape patterns in the Kruger National Park to inform strategic biodiversity planning.

Supervisor: Prof CHui

Co-supervisors: Prof PH Verburg and Dr AJA van Teeffelen

MAGADZIRE, Nyasha (Geography and Environmental Studies)

Using remotely sensed measures of ecological regime as predictors of the distribution of vegetation types, communities and species across the Cape Floristic Region

Understanding and predicting vegetation distributional responses to changes in ecological regime are critical for the management and conservation of biodiversity. A combination of geographical information systems, remote sensing and species distribution modelling was used to investigate the potential impacts of changes in climate and fire regime on vegetation in the Fynbos Biome. The role of fire was highlighted. The study identified potential shifts in the composition and distribution of vegetation and species due to climate change and changes in fire regime, which could lead to disruptions in the functioning of such fire-prone ecosystems in the future.

Supervisor: Dr H de Klerk

Co-supervisors: Prof KJ Esler and Dr J Slingsby

MALAZA, Vusi David (Physics)

Experimental study of cluster effects in binary and ternary decays of low-excited actinides

This study experimentally investigated a new mode of ternary decay of low-excited heavy nuclei, referred to as collinear cluster tri-partition (CCT) breakup. This included the successful design and performance of an experiment that used the neutron beam facility at the Frank Laboratory of Neutron Physics at the Joint Institute for Nuclear Research. In the experimental analysis, the CCT was revealed as a bump in the mass-mass distribution spectrum, which is linked to the magic nickel cluster nucleon number configuration. Furthermore, the experimental work included pulse-height correction as well as plasma delay for the first time in this field of study. These additional corrections provide stronger experimental evidence of the CCT decay mode.

Supervisor: Prof NM Mkaza

Co-supervisor: Prof SM Wyngaardt

MARAIS, Laurette (Computer Science)

Generalised acceptance conditions for symmetric difference nondeterministic finite automata

Finite automata are formal models of computation and the choice of final states in the model may influence both the languages that may be accepted by a given model and the size of the model. The issue of the choice of final states for symmetric difference nondeterministic finite state automata (XNFA) was investigated. Choosing two sets of final states (accepting and rejecting) led to the definition of self-verifying XNFA, and bounds on the state complexity were established. A further generalisation to multiple sets of final states showed that these *-XNFA lead to more succinct instances for various language operations.

Supervisor: Prof L van Zijl

MBIZANA, Siyasanga (Polymer Science)

Poly(N-vinylpyrrolidone)-polypeptide-based antitumor nanocarrier and cell viable L-arginine L-aspartic acid and glycine terpolymer

N-carboxyanhydride ring-opening polymerisation was used in the preparation of two materials with potential application in the biomedical field. A block copolymer of poly(N-vinylpyrrolidone) and a copolypeptide containing cysteine and glycine were synthesised as a drug-delivery system for hydroxychloroquine. Drug release under slightly acidic conditions as encountered in malaria-infected red blood cells and in tumour tissue was proven. A statistical terpolymer containing L-arginine, glycine and L-aspartic acid was synthesised with a maximised content of the RGD peptide sequence. The terpolymer showed very comparable cell adhesion and cell proliferation relative to natural proteins containing the RGD sequence.

Supervisor: Prof L Klumperman

Co-supervisors: Drs R Pfukwa and L Hlalele

MINNAAR, Corneile (Botany)

Novel insights into pollen movement and floral evolution revealed by quantum dots

As plants are hermaphrodites, fitness comprises both male and female components. Aspects of the male component have seldom been quantified, because tracking the fates of individual pollen grains is difficult. By attaching fluorescent, semi-conductor nanocrystals (quantum dots) to pollen grains, a new method of tracking pollen fate was discovered. Using this method, it was determined that small differences in floral morphology can translate into strong gene flow barriers between members within a population. This has important implications for speciation, the evolution of mating systems and floral diversity.

Supervisor: Prof BC Anderson

MINNAAR, Ingrid (Zoology)

Species traits as determinants of insect invasiveness: Combining statistical and experimental approaches

Despite the worldwide impacts of biological invasions, there is limited knowledge of whether traits that characterise invasive alien species differ from that of native species. A meta-analysis showed that invasive alien insects consistently outperformed native counterparts in the introduced range, particularly in physiological, ecological and fitness traits. Using ladybird beetles, experimental data indicated that interactive effects of propagule size, temperature, seasonality and stress resistance are essential for predicting invasion success. Moreover, examining the costs of plasticity, maternal effects and genetic constraints of thermal traits are essential when determining the potential evolutionary capacity of invasive insects facing climate changes.

Supervisor: Prof S Clusella-Trullas

Co-supervisor: Prof C Hui

MOKHATLA, Mohlamatsane (Zoology)

Evaluating the effects of changing global climate on amphibian functional groups of southern Africa

Climate has a fundamental role in determining the distribution of many species, but especially amphibians. This study evaluated methods for predicting the future distribution of South African frogs, comparing models built from distribution data to those constructed from physiology and performance experiments. While simple correlation techniques provide good models, hybrid-mechanistic models, populated with physiological and performance data, deliver superior estimates of those same species. The model predicts that the African clawed frog and common river frog will increase their distribution under global change scenarios, while raucous toads will decline; all with greater displacement rates than these species have previously experienced.

Supervisor: Dr J Measey

NARDUZZI, Francesco (Geology)

Genesis and evolution of a neoproterozoic magmatic arc: The Cordilleran-type granitoids of the Araçuaí Belt, Brazil

This study investigated the conditions under which the very large granitic to tonalitic Galiléia batholith was formed during the Araçuaí orogen in south-east Brazil. It was demonstrated that the batholith contains magmatic garnet, epidote and phengite within rocks that are compositionally identical to common I-type granites within which the assemblage is extremely uncommon. This study has demonstrated that this assemblage is the consequence of crystallisation at high pressure and relatively low temperature, close to the water-saturated solidus. In addition, U:Pb dating of zircon has revealed that the crystallisation of the batholith was a protracted event, possibly spanning > 80 Ma.

Supervisor: Prof G Stevens

Co-supervisor: Prof C Lana

NDIRIPO, Anthony (Polymer Science)

High-temperature multidimensional chromatography of complex and functionalised polyolefins

Polyolefins are synthetic semicrystalline polymers with multiple microstructural distributions that must be understood to develop structure-property correlations. Catalyst technologies, reactor blends and post-polymerisation processes contribute to the molecular complexity. This study developed fractionation technologies for low molar mass oxidised polyethylenes. Separation according to oligomer size irrespective of oxidation level was achieved. Complementary high-temperature interaction chromatography was used for the separation according to the degree of oxidation. In the second part of the study, complex multimodal polyethylenes with very low comonomer contents were characterised using a combination of different fractionation methods with advanced spectroscopic detection techniques.

Supervisor: Prof H Pasch

NEVELING, Deon (Microbiology)

Safety assessment of antibiotic and probiotic feed additives for Gallus Gallus domesticus

Bacteria isolated from the gastro-intestinal tract of healthy broilers were screened for probiotic properties and developed into a multi-strain product. The strains adhered to epithelial cells in the gastro-intestinal tract of broilers and repressed the growth of listeria monocytogenes in the gut. Proteins in epithelial cells involved in cell growth and migration, and regulation of the cytoskeleton, were upregulated. Fatty acid transport and nucleotide metabolism were downregulated. The probiotic decreased the tight junctions between epithelial cells, but did not disrupt the monolayer. No abnormalities were reported in any of the organs. The probiotic was found to be a safe alternative to antibiotics.

Supervisor: Prof LMT Dicks

Co-supervisors: Prof C Smith and Dr E Pieterse

NSIKANI, Mungele (Botany)

Barriers to ecosystem restoration after clearing invasive Acacia species in the South African fynbos: Soil legacy effects, secondary invaders and weedy native species

Invasive acacias exert negative impacts on ecosystems and these can persist for years after clearing. Soil analyses, greenhouse experiments and vegetation sampling were used to explore persistent soil legacy effects, secondary invasion and weedy native species dominance after clearing invasive Acacia saligna in the fynbos. Soil legacy effects persisted up to ten years after clearing. Secondary invasion and weedy native species dominance were facilitated by increases in soil nitrate levels. This calls for the management of soil legacy effects, secondary invaders and weedy native species to improve restoration outcomes.

Supervisor: Prof K Esler

Co-supervisor: Dr M Gaertner

NTSAPI, Claudia (Physiological Sciences)

The effects of nutrient deprivation on macroautophagic flux and chaperone-mediated autophagy in a model of Alzheimer's disease

Alzheimer's disease is a devastating neurodegenerative disease characterised by progressive cognitive impairment, particularly in brain regions crucial for learning and memory. Autophagy, a critical protein degradative pathway, has been implicated in Alzheimer's disease pathology; however, limited evidence exists whether autophagy remains functional in this process. A unique amyloid precursor protein overexpression model was used with the aim to characterise the role of autophagy in proteotoxicity. It was revealed that autophagy remained functional and was upregulated, even late in disease progression. Moreover, autophagy induction through caloric restriction preserved neuronal viability both in vitro and in a paraquat-induced brain injury model.

Supervisor: Prof B Loos

OGUTU, Heztron (Chemistry)

Synthesis of 5- and 6-donor Schiff base ligands for the selective extraction and transport of selected base metal ions

Twenty-five different robust, stable ligands (molecules) were synthesised to selectively separate copper(II) from other base metal ions, viz. cobalt(II), nickel(II), zinc(II), cadmium(II) and lead(II). The initial ligands showed very low separation of copper(II) with levels of approximately 10 to 20%, but rational ligand design was used to design improved ligands producing at best 95% separation of copper(II) from the other base metal ions. Some ligands showed close to 100% transport of copper(II) across a bulk liquid membrane. Several crystal structures showed coordination geometries of ligands to metal ions, while others confirmed the synthesis of the ligands. These ligands could possibly replace industrial ligands.

Supervisor: Dr RC Luckay

Co-supervisor: Dr R Malgas-Enus

PHAIR, Nikki (Botany)

Vulnerability, resilience and adaptation: The future of the seagrass, Zostera capensis

The seagrass Zostera capensis is an important ecosystem engineer in South and Eastern Africa, yet it is highly vulnerable to anthropogenic change. Genomic analyses throughout the distribution range provide evidence of low levels of population variation and high levels of inbreeding. Analyses revealed two distinct clusters that correspond to environmental variation for temperature and precipitation. Genomic diversity is already impacted by habitat loss due to fishing and mining. Conservation planning highlights the importance of including genomic data to safeguard the resilience of seagrasses in an uncertain future.

Supervisor: Prof S von der Heyden

PRIBUT, Nicole (Chemistry)

Design and synthesis of potent benzimidazolone HIV-nucleoside reverse transcriptase inhibitors

Given the high mutation rate of HIV, there is a constant need for novel therapeutics to combat the disease. A novel series of benzimidazolone containing HIV non-nucleoside reverse transcriptase inhibitors was designed using molecular modelling and synthesised. This approach proved to be highly successful and several compounds turned out to be potent inhibitors of HIV reverse transcriptase, which translated into efficacious anti-HIV agents. Importantly, these compounds maintained efficacy in the presence of a number of clinically prevalent resistant strains. In addition, a novel benzoxazinone derivative was designed and synthesised and this compound was also found to be highly effective as an anti-HIV agent.

Supervisor: Dr S Pelly

Co-supervisor: Prof W van Otterlo

TAIT, T (Biochemistry)

Molecular interactions with recombinant human oestrogen receptor ligand binding domains: Applications towards the development of novel biologically based biosensors

Various synthetic compounds, found in surface and drinking water, can mimic the actions of hormones and pose long-term health risks to both humans and wildlife. Identifying the presence of these endocrine-disrupting agents (EDCs) in drinking and surface water is a challenge due to the structural heterogeneity of these compounds. A novel membrane-based biological device, based on the oestrogen receptor, for the rapid identification of oestrogenic endocrine disrupting compounds in surface and drinking waters in remote geographical locations was developed. The ligand binding domain of the human oestrogen receptor was expressed, immobilized on a newly developed membrane and shown to specifically bind oestrogenic compounds.

Supervisor: Prof P Swart

Co-supervisor: Prof AC Swart

VAN ZYL, Winschau (Microbiology)

Gastrointestinal persistence of the probiotic bacteria Lactobacillus plantarum 423 and Enterococcus mundtii ST45A, and their anti-listerial activity

The survival and metabolic activity of *Lactobacillus plantarum* and *Enterococcus mundtii* in the gastrointestinal tract (GIT) were studied using mice as a model. Migration of the strains through the GIT was monitored by cloning the firefly luciferase gene (*fluc*) into the two species. A rapid and efficient double-crossover integration system was developed that allowed for the creation of markerless chromosomal gene integrations and deletions in lactic acid bacteria. The genetically modified probiotic strains successfully ameliorated infections by a pathogenic bacterial strain, of *Listeria monocytogenes*.

Supervisor: Prof LMT Dicks

Co-supervisor: Dr SM Deane

WATSON, Andrew (Geology)

Using distributive surface water and groundwater modelling techniques to quantify groundwater recharge and baseflow for the Verlorenvlei estuarine system, west coast, South Africa

Understanding wetland ecosystem thresholds to drought is an important conservation priority. A combined surface water and groundwater modelling approach was developed to quantify the role of groundwater resources in sustaining the Verlorenvlei lake on the west coast of South Africa. The lake is threatened by climate change and agricultural expansion. The results indicate that average river inflows are not sufficient to maintain lake regeneration and supplementation by groundwater is required. As the length of dry cycles is predicted to occur more frequently, over-allocation of groundwater resources during wet cycles may further hinder ecosystem regeneration.

Supervisor: Dr JA Miller

Co-supervisor: Dr WP de Clerq

Fakulteit Natuurwetenskappe | Faculty of Science

**Magister in die Natuurwetenskappe
Master of Science**

Abrahams, Dale (Zoology)
Appaw, Raima (Mathematics)
Babedi, Lebogang (Geology)
Boqwana, Mhlanguleli (Mathematical Science)
Djenabou, Karimatou (Mathematics)
Jacobs, Ingrid (Plant Biotechnology)
Kotze, Gerbrandt (*postuum/posthumous*) (Chemistry)
Kushata, Judith (Zoology)
Lazarus, Louis Reuben (Geology)
Martin, Javonne Jason (Computer Science)
Mtshali, Sinenhlanhla (Mathematical Science)
Matthews, Megan Esme (Polymer Science)
Nkuna, Khensani Vulani (Botany)
Pieters, Janto (Plant Biotechnology)
Rademan, Zandri (Geology)
Rakotoarisoa, Avotra Elie (Applied Mathematics)
Ramlall, Ylaney (Mathematical Science)
Ramuada, Vhahangwele Cedrick (Mathematics)
Seabe, Phumudzo Lloyd (Mathematical Science)
Senoamadi, Philemon Ntona (Mathematical Science)
Van Beek, Coenraad Roelof (Plant Biotechnology)
Visser, Natasha Helene (Chemistry)

**Magister in die Natuurwetenskappe Cum Laude
Master of Science Cum Laude**

Bouwer, Wilmarie (Biochemistry)
Carstens, Alno (Microbiology)
Dominic, Emanuel Muema (Mathematics)
Gloyn-Jones, Jonathan Nicholas (Geology)
Hugo, Melt (Plant Biotechnology)
Hull, Kelvin Lloyd (Genetics)
Jacklin, Dylan (Geography and Environmental Studies B)
Jonk, Louis Willem (Geology)
Kirsten, Gerhardus Petrus (Applied Mathematics)
Lawson, Kayla (Microbiology)
Loggenberg, Kyle (Geo-Informatics)
Louw, Marike (Zoology)
Luck, Wolfgang (GIS: Environmental Geography)
Makinde, Funmilayo Lydia (Mathematics)
Nanyanzi, Alice (Mathematics)
Ofosu Mensah, Samuel (Mathematics)
Olaleye, Kayode Kolawole (Mathematics)
Pillay, Nathan Lingamurthi (Mathematics)
Schreiber, Shaun (Computer Science)
Swiegers, Hendrik Willem (Genetics)
Van Dyk, Lorinda (Biochemistry)
Van Staden, Michaela (Genetics)
Vermeulen, Divan (Geo-Informatics)
Viljoen, Johannes Jacobus (Geology)
Webster, Jason Robert (Physics)
Weir, Ian JD (Geology)

**Honneurs-baccalaureus in die Natuurwetenskappe
Bachelor of Science Honours**

Abrahams, Sharfa (Physiological Sciences)
Aubin, Alexandre Eric Jean (Earth Sciences)
Badrodien, Imraan (Physics)
Bamard, Johannes Jacobus (Geo-Informatics)
Bames, Aaron (Biodiversity and Ecology)
Becker, Adolf Burger (Computer Science)
Becker, Frederik Willem (Biodiversity and Ecology)
Benjamin, Aqilah (Biochemistry)
Bhana, Zoë Tyler (Microbiology)
Blomerus, Wessel (Applied Mathematics)
Borrageiro, Christopher Matthew (Biochemistry)
Bothma, Karli (Biochemistry)
Brodie, Lara Paige (Biodiversity and Ecology)
Burger, Albert Stephan (Earth Sciences)
Clothier, Nicole Alexandra (Geo-Informatics)
Cooper, Anneke (Physiological Sciences)
Crous, Willem Hendrik (Applied Mathematics)
Daumas, Tshenolo Thato (Applied Mathematics)
De Jager, Nicholas Stratos (Genetics)
De Jongh, Tara (Earth Sciences)
Dijkeman, Alexander Koeloe (Genetics)
Dominick, Leanne Lynn (Physiological Sciences)
Du Plessis, Claire Cecilia (Biochemistry)
Du Toit, Amé (Physics)
Du Toit, Chris Rossouw (Biodiversity and Ecology)
Dutton, Jonathan Matthew (Earth Sciences)
Enslin, Nicholas George (Plant Biotechnology)
Fontini, Di-Andi (Chemistry)
Fouad, Aya (Plant Biotechnology)
Fraser, Simon Andrew (Plant Biotechnology)
Gabriel, Casey Ashley (Plant Biotechnology)
Garbonova, Gabriela Ventsislavova (Polymer Science)
Gibson, Hylton (Biochemistry)
Glover, Scott (Geo-Informatics)
Gouws, Christo (Physics)
Griebenow, Stian (Biodiversity and Ecology)
Grimbeek, Jonathan James (Plant Biotechnology)
Grobler, Nicolaas Jacobus (Biochemistry)
Groenewald, Willem Jakobus (Computer Science)
Hamdulay, Yaasmeen (Genetics)
Hamilton, Megan April (Genetics)
Hards, Ashleigh Kerry (Genetics)
Hare, Amy Alice (Biochemistry)
Heywood, Cristina Angela (Genetics)
Hoffman, Lukas Petrus Johannes (Genetics)
Hotarek, Simone (Genetics)
Househam, Sean Erich Stuart (Earth Sciences)
Hunter, Ethan Wade (Plant Biotechnology)
Husselmann, Deone Ashante (Earth Sciences)
Jacobs, Desren Brando (Plant Biotechnology)
Janse van Vuuren, Handre (Mathematics)
Jansen, Henno Cronje (Geo-Informatics)

Joseph, Cameron (Earth Sciences)
Kamati, Klaudia Ndapandula (Geo-Informatics)
Karaan, Maryam (Genetics)
Keams, Reesher Hope (Biodiversity and Ecology)
Korsten, Riaan Louw (Physics)
Kouter, Hendri Jordrick (Chemistry)
Kritzinger, Johan Christiaan (Genetics)
Lagerwall, Jessica Amy (Genetics)
Laker, Heinrich (Chemistry)
Lamprecht, Dylan Benjamin (Computer Science)
Le Roux, Gerhardus Boonzaaier (Microbiology)
Le Roux, Jancke (Plant Biotechnology)
Lesch, Desmarie (Applied Mathematics)
Lines, Harry Alexander Paulson (Earth Sciences)
Lord, Michael George (Earth Sciences)
Louis, Michael (Computer Science)
Luyt, Stephan (Computer Science)
Macdonald, Fiona Joy (Earth Sciences)
Madzivire, Panashe Kundai (Plant Biotechnology)
Makhathini, Nomathamsanqa Lindokuhle (Earth Sciences)
Malan, Amoré (Biodiversity and Ecology)
Marara, Phophi Mafhungomadifha (Earth Sciences)
Mashaba, Mohau (Physics)
Matyesini, Sandisiwe (Biochemistry)
Mc Callum, Liniq Katelynn (Biochemistry)
Mc Ewan, Dylan (Earth Sciences)
Mc Shane, Jennifer (Biodiversity and Ecology)
McLeod, Dylan James (Earth Sciences)
Midgley, Natasha Edith Katherine (Physiological Sciences)
Monteverdi, René Guillaume Claudio (Geo-Informatics)
Mulder, Leandre (Biodiversity and Ecology)
Nel, Natalie (Genetics)
Nel, Tyron Ian (Biochemistry)
Nell, Eugene Hermanus Jacobus (Chemistry)
Ngcobo, Anelisiwe Pretty (Biochemistry)
Nicholas, Dominic Nathaniel (Plant Biotechnology)
Nickerson, Dylan (Geo-Informatics)
October, Craig Amos (Biochemistry)
Olivier, Jana (Physiological Sciences)
Orolowitz, Matthew Adam (Biodiversity and Ecology)
Otto, Stephanie Alison Ysa (Physiological Sciences)
Parkies, Naledi Thunthung (Earth Sciences)
Peter, Molatelo Zandile Annet (Biochemistry)
Pittaway, Ian Bennet (Physics)
Prinsloo, Jared Reece (Plant Biotechnology)
Rademeyer, Anina Zenda (Biochemistry)
Raven, Cameron John Andrew (Computer Science)
Relling, Elanda (Biochemistry)
Robertson, Gaele Marie (Genetics)
Rodgers, Shaqir (Applied Mathematics)
Roelf, Timothy Brian (Physics)
Roman, Stacey Kelly (Polymer Science)
Rust, Catharina Magdalena (Plant Biotechnology)
Scheepers, Paul Andre V (Biodiversity and Ecology)
Schultz, Tanisha Grace (Earth Sciences)

Sedeman, Megan Madeleine (Physiological Sciences)
Shergold-Smith, Tayla (Physiological Sciences)
Sibiya, Ayanda Sikhona (Earth Sciences)
Sirkisson, Suhina (Physiological Sciences)
Sitzer, Warrick (Microbiology)
Spies, Lee-Maine Lorin (Biochemistry)
Sprake, Devon Warren (Physiological Sciences)
Stander, Saskia (Chemistry)
Stavreva, Raya (Earth Sciences)
Strydom, Marisa (Chemistry)
Swart, Lisa-Mari (Physiological Sciences)
Taylor, Gregory James (Plant Biotechnology)
Terblanche, Curt Keanu Godfrey (Applied Mathematics)
Theron, Christiaan Ludolf (Geo-Informatics)
Thompson, Biosha (Biodiversity and Ecology)
Trew, Kelly Anne (Biodiversity and Ecology)
Turnley, Timo Elliot (Microbiology)
Tyolo, Mbali Onicah (Applied Mathematics)
Ubsdell, Stephanie Leigh (Plant Biotechnology)
Van Aswegen, Damian Bryan (Biodiversity and Ecology)
Van Beulen, Laura Malany (Microbiology)
Van der Berg, Anden (Biochemistry)
Van Rijckevorsel, Calantha Ghislaine (Microbiology)
Van Wyk, Jani (Chemistry)
Vanmali, Namita Madhu (Biodiversity and Ecology)
Visser, Joseph Douglas William (Computer Science)
Wagener, Catherine Hellembrecht (Biodiversity and Ecology)
Waso, Kyra (Physiological Sciences)
Wessels, Arina (Polymer Science)
Williams, Chelsea Danielle (Polymer Science)
Xonti, Alukhanyo (Plant Biotechnology)

**Honneurs-baccalaureus in die Natuurwetenskappe Cum Laude
Bachelor of Science Honours Cum Laude**

Annandale, Jenna Fay (Physiological Sciences)
Ball, Lauren Elaine (Polymer Science)
Baros, Seanantha Sean (Genetics)
Boshoff, Jeandré (Applied Mathematics)
Dale, Lieke (Biochemistry)
De Beer, Jan Anthonie (Physics)
De Villiers, Carmen (Biochemistry)
Du Plessis, Manisha (Physiological Sciences)
Foster, Jarryd Daniel (Biodiversity and Ecology)
Fouche, Helene (Genetics)
Gafieldien, Thoreefa (Microbiology)
Greenwood, Matthew Peter (Genetics)
Harris, Ivan Jérard (Microbiology)
Havenga, Benjamin (Microbiology)
Hermanus, Demi (Microbiology)
Heymann, Murray (Mathematics)
Janse van Rensburg, Deon Anton (Physics)
Kellow-Webb, Sarah Maggie (Biochemistry)
Kotze, Anke Nanette (Microbiology)
Levin, Jordan Connor (Mathematics)
Louw, David Andries (Mathematics)

Mare, Esmari (Applied Mathematics)
 Mohamed, Zhunaid (Computer Science)
 Murray, Reece (Computer Science)
 Nilsen, Bianca Inger Monique (Biochemistry)
 Nunes, Jean Massimo (Physiological Sciences)
 Pool, Eulane (Microbiology)
 Pretorius, Leshia (Physiological Sciences)
 Raselimo, Moeketsi Isaac (Computer Science)
 Reid, Jessica Laura (Biochemistry)
 Selkirk, Sarah Jane (Mathematics)
 Smith, Katrin Mary Geneve (Microbiology)
 Spoerer, René (Mathematics)
 Swart, Robin Grant (Microbiology)
 Thibaud, Jessica Leigh (Chemistry)
 Tolmay, Janke (Microbiology)
 Truter, Nina (Physiological Sciences)
 Turner, Kari Britt (Earth Sciences)
 Van den Berg, Gideon Leon (Biodiversity and Ecology)
 Van der Berg, Ineke (Computer Science)
 Van Heerden, Phillip (Computer Science)
 Van Litsenborgh, Pieter Steyn (Computer Science)
 Van Niekerk, Lodevicus (Computer Science)
 Van Staden, Lisa (Computer Science)
 Venter, Matthew (Computer Science)
 Visser, Ankia (Biochemistry)
 Visser, Maria Johanna Elizabeth (Physiological Sciences)
 Visser, Robin (Mathematics)
 Willmot, Joshua (Computer Science)
 Wurdeman, Shaun (Computer Science)

**Baccalaureus in die Natuurwetenskappe
 Bachelor of Science**

Abrahams, Joel Austin
 Adams, Gradwell Durlin
 Adams, Graham Thomas
 Alexander, Matthew Anthony
 Allie, Faeeda
 Ambrose, Wade Daniel McCallum
 Ament, Karly
 Andrew, Kayleigh Heather
 Arendse, Nicole
 Armstrong, Craig James
 Augustyn, Hanneke
 Baker Effendi, Sedick David
 Bamard, Brendon
 Bamard, Marizelle
 Barraball, Chelsea
 Bashala, Musedi Jonathan Isaac
 Basson, Kriston Uschke
 Bates, Darren Matthew
 Baumgarten, Wernich
 Bayer, Roxane Therese
 Bayley, Samantha Lee
 Bezuidenhout, Danielle
 Black, Cara Megan
 Black, Mia
 Blakeway, Nicole Jessie
 Bloem, Stephanie Roxanne
 Boden, Bryn

Boock, Herman John
 Bosman, Llewellyn Jonathan
 Bosman, Robin Nicole
 Boura, Iliaana
 Bowman, Tylon Cecil
 Brederode, Matthew Tom
 Brill, Nicola Mary
 Broekman, Isabella
 Brown, Rebecca Charlotte
 Bryce-Rogers, Hogan Peter
 Buckton, Calib
 Bufe, Marcel Luc
 Burbidge, Robyn
 Burger, Carel Johannes
 Cairns, Megan Louise
 Carolus, Dee-Lynn Chantell
 Carstens, Chanel Charlotte
 Christoffels, Jayd Zemone
 Coetzee, Danielle
 Coldrey, Lara
 Cook, Michael
 Copeman, Daniella Jade
 Costaras, Heléna Christiana
 Cox, Courtney
 Craig, Mark Johan
 Crous, Marc Andrew
 Crowder, James
 Cupido, Ivana
 Daly, Lucia
 Daniels, Luke-John
 Davey, Kyle
 Davison, Kerryn Tanner
 De Beer, Karin
 De Beer, Tanya
 De Bruyn, Clarice
 De Bruyn, Rudolph Renier
 De Kock, Denver Andrew
 De Lange, Stephanus Jacobus
 De Villiers, Rūben Daniel
 De Vries, Adrian Matthew
 De Waal, Jana
 Degenaar, Nadia
 Dennis, Simon John
 Dintwe, Kim Kamogelo
 Dippenaar, Daniëll
 Dirksen, Danielle Kristen
 Dold, Samantha
 Doubell, Narusa Suria
 Du Plessis, Jean-Mari
 Du Plessis, Juan
 Du Plessis, Mikkel
 Du Preez, Rike-Mari
 Du Toit, Nicole Cathryn
 Du Toit, Stéan
 Dukes, Marc Daniel
 Edmunds, David Andrew
 Ehrenreich, Craig
 Elliott, Maxine Brittany
 Elliott, Rosie Grace

Engelbrecht, Chimonet
 Engelen, Arjan
 Essey, Montana Maria
 Esterhuisen, Esmari
 Evans, David Robert
 Faasen, Stephan
 Fagg, Courtney Pierrette
 Farringer, Michael Lee
 Fenner, Charles Frederick Lewis
 Fillis, Tristan Jack
 Fischer, Riëtte Louwrene
 Fletcher, Conor Ryan
 Foster, Marlon Lester
 Fourie, Heike
 Fourie, Samantha-Kerry
 Frantz, Tagwin Claire
 Freeman, Bishneen
 Freeman, Marli
 Galant, Michaela
 Geddie, Hannah Valerie
 Geldenhuys, Dylan Shane
 Gentleman, Sarah Leigh
 Gericke, Carien
 Govender, Sage Grushenka
 Graham, Dylan
 Grobbelaar, Nuan Adriaan
 Gustavo, Nhadia Maria
 Haddad, Lillian Isabel Norton
 Harries, Sarah Kate
 Hartmann, Laura Anne
 Hartzer, Alanah Meghan
 Haycock, Caitlin Andrea
 Heathcote, Nicola
 Heidmann, Emma
 Henle, Fabienne
 Henning, Jemima Maria
 Heynes, Jodie Anne
 Higgs, Caley Jade
 Holster, Keshia
 Horn, Inca Juliet
 Howard, Emily Ann
 Howard, Joshua David
 Hubble, Emma Rebecca
 Hulley, Jonathan
 Hurry, Caitlin Rebeccah
 Jackson, Jason
 Jacobs, Porcia
 Jacobs, Vernon Guy
 Jan, Lerato Victoria
 Janse van Rensburg, Jenise
 Janse van Vuuren, Chantell
 Jansen van Rensburg, Adrian Erasmus
 Jansen van Rensburg, Rebecca
 Jansen van Rensburg, Riza
 Jansen van Rensburg, Thomas William
 Jeyie, Refilwe
 Jooste, Marlise
 Jordaan, Stephen Christian
 Kagee, Abdul Karriem

Kapp, James
 Kearly, Colm George
 Keirsgietter, Wim
 Kgokane, Boipelo
 Khosa, Maambele Reginah
 Kitching, Austin Gray
 Kitshoff, Ruan
 Kitshoff, Thana
 Klopper, Tamaryn
 Knight, Evan Eric
 Kock, Houston Christopher
 Kooverjee, Priyanka
 Kopp, Michael Benjamin
 Krijt, Hendrik Carel
 Kruger, Bianca Ursula
 Kruger, Caylee-May
 Kruger, Milan
 Kruger, Sergio Lawrence
 Kubheka, S'nentokozo Felicia
 Labuschagne, Sarah Jahna
 Lang, Chante
 Langley, Jethro Rowan
 Latilla-Campbell, Callum Michael
 Le Roux, Alain
 Ledingwane, Maphiri Khahliso
 Lee, Megan May
 Lefakane, Kgomotso
 Leyland, Terri-Jo
 Litch, Conrad Frederik
 Lombard, Alet
 Lombard, Mame Irene
 Lombard, Paul Hendrik
 Louw, Albertus Stephanus
 Louw, Christiaan Johan
 Luiz, Ricardo Romeo
 Luizinho, Alexia Mari
 Maass, Dirk Kotze
 Maberly, Michelle Astley
 Maboeei, Palisa Mbali
 Mac Dermott, Kerryn-Anne Dermot
 MacBeth, Gareth Robb
 Machabela, Palesa Rossen
 Makowem, Sarah Ann
 Malan, Kristin
 Malan, Ockert Gerbrand
 Manyinyi, Yolisa
 Marais, Darran Jorge Pires
 Marais, Nohann Petro
 Matthee, Joshua James
 McCarthy, Lauren Kyna
 McIntyre, Alan
 McKay, Sarah Jaemie
 Meerburg, Erin
 Meli, Christina
 Melville, Alexander Jarryd
 Melvin, John Ronald
 Merrick, Clarize
 Metz, Johannes Hendrik
 Minnie, Savannah Loren

Mitchell, Michelle Allison
Moldenhauer, Jena
Molosi, Mokgabo
Moodie, Bronwen Moira
Moolman, Milano
Mostert, Kay-Leigh
Mostert, Suné
Msibi, Nontobeko Faith
Mthembu, Makhosazana Nonhlanhla
Murray, Shona Megan
Murray, Thomas Everitt Rautenbach
Nam, Jieun
Ncaphayi, Abenathi
Nel, Annika
Nevha, Thulani
Nkuna, Nathaniel
Nortje, Welri
Nxumalo, Samukelo Sibongokuhle
Olivier, Karla Amor
Passerini, Alyssa
Patel, Vishaal Bandishkumar
Paterson, Jessica Hazel
Paterson, Margo Nadia
Paulse, Astrid Gail
Petersen, Ashlin
Peterson, Jance
Petzsch, Irmela
Pienaar, Rozelle
Pillai, Santhuri
Pintos Cerda, Lucas Roman
Pretorius, Christina Louise
Price, Micah Jos
Prinsloo, Mia Christine
Prinsloo, Simone
Rabbaney, Kirsten Carmen
Rafique, Mohhadiah Aneela Cynthia
Ramanyimi, Tshinakaho Zwanga
Rambo, Jeremy Michael
Ranchhod, Shama
Ras, Martin Eduard
Raspel, Sune
Rawoot, Rabia
Reid, Alexandra Kari
Retief, Bianca
Rockman, Luke
Roomaney, Aqeedah Abbas
Rosenfels, Ryan Carl
Ross, Channing Gregory
Rossouw, Derek Jandré
Rozani, Akhona Somila
Samuels, Kezia
Schick, Ashley
Schlünz, Anke Estelle
Scholtz, Denise
Schuin, Janine
Shepherd, Michael John
Simons, Mishkah
Singh, Gabriela
Skerritt, Liam Martin

Slabbert, Benilo
Smit, Abraham Jozua
Smith, Aaron David
Smith, Marike
Smuts, Matilda Jacoba Martha
Snyders, Julian Jade
Snyman, Zachary-Paul
Solomons, Aatiekah
Spencer, Katarina Paula
Stapelberg, Norma Christine
Starke, James Edward
Steenkamp, Ferdinand
Steffen, Heidi Christa
Stigling, Justin
Strydom, Simone
Sungay, Suleiman
Swanepoel, Jacobus Daniel
Swanepoel, Mia
Swart, Shannon
Swarts, Jacques Philip
Tambala, Sawbirah
Tshirangwana, Mishumo Rhoda
Twomey, Nicole Paige
Usher, Katherine Alice
Uys, leuan
Van den Heever, Nicole
Van der Merwe, Anandi
Van der Merwe, Jana Christina
Van der Merwe, Jesse
Van der Merwe, Keenan Dale
Van der Merwe, Michelle
Van der Westhuizen, Nicola
Van der Westhuyzen, Julia Giovanna
Van Dyk, Anine
Van Eeden, Dona Adine
Van Niekerk, Ellen
Van Niekerk, Ina-Mari
Van Niekerk, Ryno
Van Rensburg, Anieka
Van Rooyen, Karmine Marie
Van Ster, Jodie Tamsyn
Van Straten, Danelle Susan
Van Wyk, Chad
Van Wyk, Mincke
Van Zyl, Christopher Jon
Van Zyl, Claire Victoria
Van Zyl, Jané
Visagie, Michelle
Visser, Anya
Visser, Johanna Jacoba Adriana
Von Fintel, Martin William
Wassenaar, Veronique
Weeks, Adam
West, Emma Lorraine
White, Hannah Rose
Wiesner, Bernard
Williams, Allen Rhys
Williams, André Craig
Williams, Ricquelle Daphne

Wilson-Browne, Karen Elizabeth
Wolhuter, Shelley
Ye, Jijia
Yeo, Emily Nadine
Yuill, Jessie Joanne Margaret

**Baccalaureus in die Natuurwetenskappe *Cum Laude*
Bachelor of Science *Cum Laude***

Bester, Siann
Bosworth Smith, Antonia Emma
Botha, Gabriella Hurwitz
Carlton, Luke Roos
Christians, Nashlie Andrid
Coetzee, Johannes
Craven, Jessica Rachel
De Gois, Sabrina
De Villiers, Abigail Kate
De Villiers, Freddie Ryk
Devenish, Rene
Donnelly, Caitlin Mary
Erasmus, Dean
Fennell, Andrea Joy
Fisher, Joel Chanse
Florence, Gabriella Erin
Fuller, Aimee Isobel
Grosel, Eden Leigh
Gultig, Kayleigh

Harrison-Migochi, Andrew Mphatso
Hattingh, Marmelle
Hugo, Elrike
Jansen van Vuuren, Nicola
Jones, Caitlin
Kader, Zubayr
King, Emma Catherine
Kuijers, Ben
Ladu, Riccardo
Lourens, Darrian Brett
Lugard, Emily Elizabeth
Matter, Dean
Mey, William Ferdinand
Michie, Leah Louise
Rabie, Jacques
Rocher, Dominique Francoise
Rossouw, Chantelle
Rossouw, Michelle
Saffer, Zoë Olivia
Schepers, Ashleigh Claire
Schloms, Tanya
Skosana, Unathi Koketso
Swart, Jacques
Watt-Pringle, Caroline Marie

JANNIE HOFMEYR

Prof Jannie Hofmeyr word beskou as 'n wêreldleier op die gebied van stelselbiologie en biokompleksiteit en het internasionale erkenning ontvang vir sy bydraes tot dié gebiede. Hy doen navorsing oor die regulatoriese ontwerp van metabolisme en het verskeie wesenlike bydraes tot rekenaarmatige stelselbiologie gemaak. Sy navorsingbelangstellings het meer onlangs na die gebied van komplekse stelsels verskuif, met 'n fokus op biokompleksiteit. Hy is die ontvanger van die Harry Oppenheimer-genootskap en die Beckman-Coulter Goue Medalje van die Suid-Afrikaanse Vereniging van Biochemie en Molekulêre Biologie, en was 'n genoot van die *Wissenschaftskolleg zu Berlin*. Hy is lid van die Wetenskapakademie van Suid-Afrika en 'n genoot en president van die Royal Society of South Africa.

Prof Jannie Hofmeyr is regarded as a world leader in the field of systems biology and biocomplexity and has received international recognition for his contributions to these fields. He studies the regulatory design of metabolism and made many fundamental contributions to computational systems biology. More recently his research interests have ventured into the field of complex systems, focusing on biocomplexity. He is the recipient of the Harry Oppenheimer Fellowship and the Beckman-Coulter Gold Medal from the South African Society of Biochemistry and Molecular Biology, and was a fellow of the *Wissenschaftskolleg zu Berlin*. He is member of the Academy of Science of South Africa and a fellow and president of the Royal Society of South Africa.

INGRID REWITZKY

As Visedekaan: Onderrig en Leer, toon prof Ingrid Rewitzky uitmuntende leierskap in die fasilitering en ondersteuning van 'n akademiese benadering tot onderrig en leer in die Fakulteit Natuurwetenskappe. Dit sluit onder meer in die daarstelling van 'n aktiewe Hub vir Onderrig en Leer en 'n gedifferensieerde ondersteuningsprogram vir voorgraadse studente. Die impak van hierdie inisiatiewe kan gesien word in die verhoogde slaagsyfer van voorgraadse studente en die toename in deelname van akademiese personeel aan alle aspekte van onderrig en leer. Op haar eie vakgebied, wiskunde, het sy die ontwikkeling van aanlyn interaktiewe inhoud geïnspireer om die gaping tussen skool en universiteit te oorbrug, sowel as voortdurende henuwing van programme en modules.

As Vice-Dean: Teaching and Learning, Prof Ingrid Rewitzky has shown exceptional educational leadership in facilitating and supporting a scholarly approach to teaching and learning in the Faculty of Science. This includes the establishment of an active Teaching and Learning Hub and a differentiated tutorial support programme for undergraduate students. The impact of these initiatives can be seen in the higher success rate of undergraduate students and the increased engagement of academic staff in all aspects of teaching and learning. In her own discipline of mathematics, she inspired the development of online interactive content for bridging the articulation gap between school and university as well as ongoing programme and module renewal.

EMILE VAN ZYL

Prof Emile van Zyl is 'n kundige in gis-biotegnologie en sy navorsing oor omgewingsvriendelike alternatiewe vir fossielbrandstowwe, deur van rekombinante tegnologie gebruik te maak, het tot internasionale erkenning gelei. Hy bestudeer die mikrobiële degradering van plantmateriaal met die doel om die afbrekingsprodukte as grondstowwe vir die produksie van biobrandstof te gebruik. In 2007 is die SARChI-leerstool vir biobrandstof en ander alternatiewe skoon brandstowwe aan hom toegeken en die toekenning is drie keer henu. Sy navorsingsgroep het 22 patente geregistreer en hy het meer as 140 navorsingsartikels gepubliseer. Hy is die ontvanger van 'n silwer medalje van die Suid-Afrikaanse Vereniging vir Mikrobiologie en die Havenga-toekenning vir Lewenswetenskappe.

Prof Emile van Zyl is an expert in yeast biotechnology whose research on environmentally friendly alternatives to fossil fuels using recombinant technology has led to international recognition. He studies the microbial degradation of plant material, with the purpose of using the degradation products as raw material in biofuel production. In 2007 he was awarded the SARChI chair in biofuels and other clean alternative fuels, a position that has been renewed three times. His research group has registered 22 patents and he has published more than 140 research articles. He is a recipient of a silver medal from the South African Society for Microbiology and the Havenga Award for Life Sciences.

Afdeling Navorsingsontwikkeling | Division for Research Development

CORNELIA MALHERBE

Ms Cornelia Malherbe, Direkteur: Navorsingskontrakte in die Afdeling Navorsingsontwikkeling ontvang die Kansellierstoekenning in 2018 vir haar uitsonderlike bydrae tot navorsing aan die Universiteit Stellenbosch. Cornelia speel oor 'n 15 jaar-tydperk 'n sleutelrol in die vestiging van 'n vooraanstaande navorsingskontrak-bestuursfunksie aan die Universiteit. Sy speel 'n kritieke rol in die verantwoordelike bestuur van navorsingsooreenkomste, -uitsette en -befondsing, wat die beskerming van die Universiteit se navorsingsreputasie en -belange verseker. Cornelia neem leiding in die implementering van verskeie navorsingsverwante stelsels en beleide aan die Universiteit Stellenbosch. Sy lewer 'n wesenlike bydrae tot die ondersteuning, bevordering en ontwikkeling van die Universiteit se navorsing.

Ms Cornelia Malherbe, Director: Research Contracts in the Division for Research Development receives the Chancellor's Award in 2018 for her exceptional contribution to research at Stellenbosch University. Cornelia has played a pivotal role over a 15-year period in establishing a leading research contracts management function at the University. She plays a critical role in the responsible management of research agreements, outputs and funding, ensuring the protection of the University's research reputation and interests. Cornelia has provided leadership in implementing a number of research-related systems and policies at Stellenbosch University. She makes a significant contribution to the support, advancement and development of the University's research.

Fakulteite

Opvoedkunde

Krygskunde

Faculties

Education

Military Science

PROGRAM

- Staan asseblief* 1. Akademiese prosesie kom die saal binne.
- Staan asseblief* 2. Sing van die Nasionale Lied (kyk aan die binnekant van die agterblad).
- Sit asseblief* 3. Konstituering deur die Visekanselier.
4. Verwelkoming deur die Visekanselier en prof Ntozakhe Cezula.
5. Voorstelling van kandidate wat kwalifikasies ontvang deur die dekaan van die fakulteit en toekenning van kwalifikasies deur die Visekanselier.
6. Voorstelling van kandidate vir die Kanselierstoekennings en oorhandiging van die toekennings deur die Visekanselier.
7. Sluiting deur die Visekanselier.
- Staan asseblief* 8. Akademiese prosesie verlaat die verhoog.

PROGRAMME

- Stand please* 1. Entrance of academic procession into the hall.
- Stand please* 2. Singing of the National Anthem (see inside back cover).
- Sit please* 3. Congregation formally constituted by the Vice-Chancellor.
4. Welcome by the Vice-Chancellor and Prof Ntozakhe Cezula.
5. Presentation of candidates receiving qualifications by the dean of the faculty and conferment of qualifications by the Vice-Chancellor.
6. Introduction of the candidates for the Chancellor's Awards and presentation of the awards by the Vice-Chancellor.
7. Closing by the Vice-Chancellor.
- Stand please* 8. The academic procession leaves the stage.

Doktor in die Wysbegeerte Doctor of Philosophy

ALOOVI, Onesmus Aloovi (Curriculum Studies)

Life Science teachers' views and lived experiences of the Namibian Junior Secondary Certificate (JSC) curriculum

This study evaluated the implementation of the Junior Secondary Certificate (JSC) Life Science curriculum in the Khomas region, Namibia. It focused on teachers' views and lived experiences of the curriculum and how they implemented the curriculum as participants in an intervention programme. The mixed-methods evaluation research design used was based on the work of the Japanese-Canadian curriculum scholar Ted Aoki. The findings revealed that teachers experienced several implementation challenges of a social and contextual nature. However, participation in collaborative professional development workshops reduced teachers' isolation and resulted in the enhancement of learners' confidence, classroom participation and learning.

Supervisor: Prof LLL le Grange

BOSAN, Patrick (Curriculum Studies)

The effect of high-stakes assessment on mathematics instructional practices of selected teachers in Nigerian secondary schools

This interpretative study investigated the effects of high-stakes mathematics assessments on ten Kaduna State (Nigeria) senior secondary school teachers' instructional and assessment practices and their beliefs about effective mathematics teaching. It also interrogated opportunities and challenges faced in their continuous assessment practices. The findings revealed that the teachers preferred strategies and practices that spoon-feed learners and encouraged memorisation of solution procedures. Mathematics teachers are urged to engage in teaching for understanding and equitable access to legitimate mathematical knowledge for all learners. Professional development may influence a shift towards learner-centred pedagogies that embrace the notion that all learners can learn mathematics.

Supervisor: Prof M Ndlovu
Co-supervisor: Dr MF Gierdien

DE VILLIERS, Lidamarie (Curriculum Studies)

The concurrent development of mathematical modelling and engineering technician competencies of first-year engineering technician students

Competency gaps have been a contentious issue in education for many years. This study explores the concurrent development of mathematical modelling and engineering technician competencies over six modelling tasks. Particular mathematical modelling and engineering technician competencies that can enrich mathematical reasoning and understanding, were identified to be investigated and assessed. Twelve first-year civil engineering technician students studying at a South African University of Technology volunteered to partake in a design-based research study, that lasted one semester. The final results of the six modelling tasks showed slow but consistent progress in both engineering technician and mathematical modelling competence development.

Supervisor: Prof DCJ Wessels

GRIESEL, Gerhardus Jakobus Christiaan (Curriculum Studies)

A framework for enhancing the design skill sets of foundation programme landscape architecture students

With multiple intelligence theory as basis, this design-based research study developed a design skill set enhancement framework to improve access and success in landscape architecture studies. Exposing students to different modalities in an authentic, domain-specific environment, through teaching to, for and through their preferred skill sets, supported them to experience learning in ways with which they are most comfortable, but also challenged them to learn in other ways. Multiple modal entry points shifted the attention away from underdeveloped skills as barriers to learning, engaged the interest of students and facilitated the development of design skills and cognition of domain-specific knowledge.

Supervisor: Prof M Fourie-Malherbe
Co-supervisor: Prof BL Frick

JAIYESIMI, Boluwaji Gbenga (Sport Sciences)

Effects of a barefoot intervention programme on the landing kinetics and kinematics of netball players

The rationale of biomechanical studies on landing in netball is to possibly contribute to lowering the risk of lower-extremity injuries and to enhance performance. The aims of the study were to determine, firstly, acute differences in landing kinematics and kinetics between barefoot and shod conditions in netball players and secondly, to determine the effect of a six-week barefoot training intervention on landing biomechanics in netball players. Mediolateral ground reaction force was significantly lower in the barefoot condition for some of the jump tasks. Barefoot training could form part of training modalities implemented to enhance safe and effective landings.

Supervisor: Prof RE Venter

JERAM, Ramesh (Philosophy of Education)

On bridging the gap between theory and practice: A conceptual analysis of practice in relation to a teacher professional learning programme at Stellenbosch University

Currently, research indicates that teacher education programmes in South Africa are impeded by abstract, theory-laden and decontextualised modes of teacher professional development. Based on the findings of this research, an effective alternative is suggested based on practice theory, called the practice-based teacher professional learning approach. By utilising this approach, the recommendations for teacher professional learning policies, within the South African context, are that teacher education programmes should include pedagogies for learning that are socially mediated, supportive and embodied and relate to the contextual needs of the teacher, thereby developing the skills to convert theoretical ideas into practice.

Supervisor: Prof N Davids

KABENDE, Matildah Mwangelwa (Philosophy of Education)

A hermeneutic inquiry of culture as development at two higher education institutions

This hermeneutic inquiry provides a conceptual and documentary analysis of relevant institutional policies to understand how the University of Namibia (UNAM) and Stellenbosch University (SU) articulate culture as development. The policies address the theoretical framework (knowledge, history and tradition, human development, and social and economic transformation) to some extent, and culture as development is an under-researched concept. UNAM has a developmental culture and refers to human resource development instead of human development. SU is silent on its history in its Institutional Intent and Strategy policy. UNAM views itself as a beacon of hope, while SU adopted a pedagogy of hope.

Supervisor: Prof B van Wyk

MANTHALU, Chikumbutso Herbert (Philosophy of Education)

Re-thinking the role of nationality in Malawian primary school education for cosmopolitan citizenship

Human equality and indispensability of global interconnectedness necessitate the development of cosmopolitan citizenship through education for citizenship. The study evaluated the role of locality, as embedded in nationality, in the conceptualisation of education for cosmopolitan citizenship in Malawian primary education. The study established that by systematically marginalising locality as an ostensible condition for achieving cosmopolitanism, Malawian education for citizenship in principle undermines the core cosmopolitan ideal of human equality. By demanding the centring of difference among global communities, especially in economically less powerful nations, as a cardinal requirement for cosmopolitanism, this study contributes to the re-imagining of ideal cosmopolitan citizenship education.

Supervisor: Prof Y Waghid

MASHEBE, Percy Mashebe (Curriculum Studies)

Improving teaching and learning in the Zambezi region, Namibia: The perceived competencies and needs of secondary school Agricultural Science teachers

The study assessed Agricultural Science teachers' competencies and needs with the view of making recommendations to improve Agricultural Science teacher education in the Zambezi region of Namibia. It specifically aimed to determine what the perceived competencies of male and female as well as experienced and less experienced teachers were. Although there were no statistically significant differences in the frequency distributions on each of the perceived competencies and needs measured, nuanced differences were observed, suggesting that continuing professional development programmes for Agricultural Science teachers in the Zimbabwe region of Namibia should be directed to accommodate the professional needs of all teachers.

Supervisor: Prof LLL le Grange

NEGUMBO, Theopolina Anna Ndahekeleleka (Curriculum Studies)

An investigation of teachers' experiences of the implementation of the Junior Secondary School (JSS) sSocial Science curriculum in the //Kharas region, Namibia

This phenomenological study explored Social Science teachers' experiences of the implementation of the Junior Secondary School (JSS) curriculum in the //Kharas region of Namibia. Data were produced using Seidman's three-series interview process: focused life history, the details of experience and reflection on the meaning. The study highlights the successes and challenges experienced by Social Science teachers during the implementation of the new curriculum. The findings of the study have implications for teachers, education officials, policy makers and in-service education providers in the sense that they emphasise the importance of legitimating the curriculum-as-lived by teachers alongside the curriculum-as-plan.

Supervisor: Prof LLL le Grange

PHILANDER, Christa (Curriculum Studies)

The professional development of Natural Science teachers: Possibilities of a community of practice

Global research in education highlights the relationship between continuing professional development of teachers and their competence to teach effectively. This study successfully utilised a community of practice approach to identify and address gaps in the competence of a diverse group of Natural Science teachers representing the rural school district of Vredendal in the Western Cape. The results indicate that participating teachers benefit most from mutually developed pedagogical interventions through collaboration, although there is a remaining need to further improve their subject content knowledge. Practical learnings from this study are considered applicable to the South African context of both urban and rural education.

Supervisor: Dr ML Botha

SIMUKUNGWE, Mudenda (Education Policy Studies)

An interpretive study of quality assurance in Zambian higher education: Implications for teaching and learning

Zambian higher education did not escape changes proposed by a liberal globalised higher education system. The National Policy on Education in Zambia does not explicitly state how quality for the university system is to be assured. The question addressed relates to the implementation of quality assurance strategies that enable the Zambian Higher Education Authority to ensure quality educational offerings in both public and private universities. It was found that quality assurance in Zambian higher education exclusively revolves around the achievement of procedural change and that substantive change, especially in relation to teaching and learning at Zambian universities, remains elusive.

Supervisor: Prof Y Waghid

STRYDOM, Sonja Catherine (Curriculum Studies)

Institutional and agentic interplay in technology-enhanced higher education curriculum development: A critical realist perspective

This study makes an original contribution to the previously under-researched interrelated fields of curriculum development, educational technology and academic development. Adopting a critical realist perspective and a comprehensive conceptual framework, methodological and analytical pluralism for data collection and analysis was adopted. The study highlights the various unobserved, multifaceted structural and agentic factors impacting technology-enhanced curriculum development. Such factors pertain to academics and include psycho-institutional factors and academics' knowledge structures. In addition, factors related to academic developers include the notion of care, and knowledge and knower practices emphasised by academic developers engaged with technology-enhanced curriculum development.

Supervisor: Prof AE Carl

Co-supervisor: Prof M Fourie-Malherbe

SWART, Mariëtta (Curriculum Studies)

A workplace literacy perspective on unlocking employability of Technical and Vocational Education and Training College graduates

Becoming workplace literate means recognising the value and purpose of literacy practices in different workplace-related contexts. Workplace literacy includes capability with other coding systems and the functional application of literacy practices in technology-rich work environments. The research contributes to the conceptualisation of workplace literacy in a TVET College context by tracing the affordances for workplace literacy development in the intended curriculum of the Engineering and Related Design programme. Using content analysis, the affordances were identified by using a conceptual framework to identify the aspects and elements of developmental layers of workplace literacy.

Supervisor: Prof C van der Walt

Co-supervisor: Prof BL Frick

Fakulteit Krygskunde | Faculty of Military Science

Doktor in die Wysbegeerte Doctor of Philosophy

KLEYNHANS, Evert Philippus (Military History)

The Axis and Allied maritime operations around southern Africa, 1939–1945

This study entailed an in-depth exploration of the Axis and Allied maritime operations off the southern African coast during the Second World War. Rich layers of archival material, much of it marshalled for the first time, revealed the complicated nature and extent of these operations on what was a periphery of a larger naval war. Within this context, the opposing strategies in the Southern Ocean, the associated maritime intelligence networks and the wartime quandaries faced by Allied merchant captains and German U-boat commanders as well as their civil and military principles in London, Pretoria and Berlin were investigated. Simultaneously, the contradictions between the objectives of the Smuts government and the imperial power in London exposed a struggle of a different kind.

Supervisor: Lt Col (Prof) IJ van der Waag

Co-supervisor: Dr EK Fedorowich

ZASTRON, Tania (Sport Sciences)

The effect of sensory-motor training on brain activation and functional recovery in chronic stroke survivors

Stroke is the second-biggest cause of death worldwide and survivors are affected by the long-term consequences. To date, most rehabilitation research does not include chronic stroke survivors. Functional loss is greatly determined by postural control impairment in survivors, causing reduced ability to execute daily activities. These reasons have led to this study exploring the effect of an eight-week sensory-motor training programme on structural connectivity in chronic-related improvements, which may be associated with structural connectivity changes. Therefore, these preliminary results support the notion that chronic stroke survivors could undergo activity-dependent neuroplasticity.

Supervisors: Dr K Welman and Prof R Reer

Co-supervisor: Dr K Hollander

PUTTER, Andries Petrus (Military Science)

Knowledge management for the South African Department of Defence

The study responds to the limited military knowledge management stock of knowledge in a world saturated by ubiquitous knowledge continuum artefacts, change and complexity. A coherent and integrated South African Department of Defence knowledge management capability, a knowledge management leadership philosophy, definitions for knowledge and knowledge management and a knowledge management model are recommended as fundamental enablers of advantage in the national interest. The qualitative research further suggests the establishment of coherency within and alignment of current legislation, the Defence Review 2015, policy, doctrine, existing military capability expressions and knowledge security with knowledge era paradigms and for knowledge continuum management.

Supervisor: Dr KI Theletsane

Co-supervisor: Prof JL Jansen van Rensburg

Fakulteit Opvoedkunde | Faculty of Education

Magister in die Wysbegeerte Master of Philosophy

Mabunda, Nduvazi Obert (Education and Training for Lifelong Learning)

Magister in die Natuurwetenskappe in Sportwetenskap Master of Science in Sport Science

Arnold, Sarah Leigh

Lombaard, Jean-Pierre

Neely, Carena Weaver

Nolte, Heike

Magister in die Opvoedkunde in Opvoedkundige Sielkunde Master of Education in Educational Psychology

Jackson, Gikmah

Magister in die Opvoedkunde in Opvoedkundige Sielkunde Cum Laude Master of Education in Educational Psychology Cum Laude

Colarossi, Claudia Rita

Punt, Yvette

Magister in die Opvoedkunde Master of Education

Asheeke, Josefina (Curriculum Studies)

Bailey, Lorraine Vida (Curriculum Studies)

Geland, Jon (Education Policy Studies)

Goliath, Shannon Lee (Educational Support)

King, Carly (Educational Support)

Louw, Jacques (Education Policy Studies)

Nakambale, Evelina Nailoke (Education Policy Studies)

Nel, Jana (Curriculum Studies)

Rademeyer, Marlize (Curriculum Studies)

Schultz, Annine (Curriculum Studies)

Slinger-Steenberg, Leah Elizabeth (Educational Support)

Magister in die Opvoedkunde Cum Laude Master of Education Cum Laude

Baker, Ilse Pauline (Education Policy Studies)

Basson, Earl-Ray (Curriculum Studies)

Kotele, Mannini Rose (Education Policy Studies)

Schoeman, Rentia (Education Policy Studies)

Honneurs-baccalaureus in die Opvoedkunde Bachelor of Education Honours

Anthony, Deidre Githa (Curriculum Studies)

Carolus, Walter (Educational Support)

Jansen, Magnieta Magdalene (Curriculum Studies)

Magerman, Chrystal Charm Patches (Curriculum Studies)

Njenge, Lilian (Educational Support)

Pongwana, Zoliswa Yvonne (Education Management)

Honneurs-baccalaureus in die Opvoedkunde in Onderwysontwikkeling en Demokrasie Bachelor of Education Honours in Education Development and Democracy

Aries, Martin Wilfred (Educational Development and Democracy)

Brand, Monice (Educational Development and Democracy)

Brinkhuis, Zakiya (Educational Development and Democracy)

Cloete, Jared Lee (Educational Development and Democracy)

David, Isai Natangwe (Educational Development and Democracy)

Jamba, Mawande (Educational Development and Democracy)

Lindewal, Amrin Lourette (Educational Development and Democracy)

Loizides, Yolandi (Educational Development and Democracy)

Mentoor, Lauren-Lee (Educational Development and Democracy)

Mingo, Georgia Elaine (Educational Development and Democracy)

Olivier, Abeline (Educational Development and Democracy)

Pereira, Jesaya (Educational Development and Democracy)

Petersen, Linzi Jade (Educational Development and Democracy)

Pool, Gradwill Graig (Educational Development and Democracy)

September, Carine Ellen (Educational Development and Democracy)

Stuurman, Constance Lorraine Penelope (Educational Development and Democracy)

Honneurs-baccalaureus in die Opvoedkunde in Onderwysontwikkeling en Demokrasie Cum Laude Bachelor of Education Honours in Education Development and Democracy Cum Laude

Daids, Delecia Allison (Educational Development and Democracy)

Roodt, Kate (Educational Development and Democracy)

Son, Daeun (Educational Development and Democracy)

Visser, Helena Susan (Educational Development and Democracy)

Honneurs-baccalaureus in die Opvoedkunde in Opvoedkundige Ondersteuning Bachelor of Education Honours in Educational Support

Arendse, Kelly Dominique

Behardien, Ruqaya

Berkovitz, Audrey

Botha, Amy Leah

Botha, Johanné

Botha, Marianca

Breitenbach, Marischka

Crawley, Monique

Crous, Lucinda

De Beer, Marthinus Johannes

Grobler, Liza-Marie

Hendricks, Garrith Avron

Hindle, Wendy

Jones, Kaydene Allorene

Kastoor, Wilbur Adrian

Knoetze, Magdalena Catharina

Louw, Annari

Manuel, Odette Rochelle

McArthur, Lauren Otelia

McEvoy, Jessica Jane

Peche, Caitlin
Prinsloo, Liezl Danielle
Tolken, Tanya
Van der Merwe, Jade Michelle
Van der Westhuizen, Natasja
Van Strijp, Katelin Alex
Van Tonder, Renate Aletta
Windvoel, Simphiwe

Honneurs-baccalaureus in die Opvoedkunde in Opvoedkundige Ondersteuning Cum Laude Bachelor of Education Honours in Educational Support Cum Laude

Benecke, Elsje Elizabeth
Clusker, Elmarie
Deacon, Janie
Duminy, Meika Marie
Van Rensburg, Mama
Watson, Lauren Lacey

Honneurs-baccalaureus in die Opvoedkunde in Grondslagfase-onderrig Bachelor of Education Honours in Foundation Phase Teaching

Du Plessis, Michelle (Foundation Phase Education)
Van Reenen, Aimee (Foundation Phase Education)

Honneurs-baccalaureus in die Opvoedkunde in Grondslagfase-onderrig Cum Laude Bachelor of Education Honours in Foundation Phase Teaching Cum Laude

Campbell, Dorianne Joy (Foundation Phase Education)
Fourie, Liza-Mari Maria Elizabeth (Foundation Phase Education)
Küsel, Saskia (Foundation Phase Education)
Lourens, Ilze (Foundation Phase Education)
Peart, Kathryn Anne (Foundation Phase Education)
Robertson, Laura Ann (Foundation Phase Education)

Honneurs-baccalaureus in die Natuurwetenskappe in Sportwetenskap Bachelor of Science Honours in Sport Science

Annandale, Daniella Kimberly (Kinder Kinetics)
Bam, Jenna Leigh (Performance Sport)
Bartlett, Matthew David Frederick (Performance Sport)
Bergh, Oloff Charles Wessel (Performance Sport)
Bosch, Christine Suzaan (Performance Sport)
Boshoff, Joubert Seymore (Performance Sport)
Brandt, Rieta-Marie (Performance Sport)
Brynard, Narisscia (Kinder Kinetics)
Coetzer, Anette (Kinder Kinetics)
De Kock, Christiaan (Performance Sport)
Els, Somari (Kinder Kinetics)
Henderson, Stephanie Jane (Performance Sport)
Jordaan, Jean-Pierre (Performance Sport)
Krause, Rozane (Performance Sport)
Kruger, Stephanie Helen (Performance Sport)
Lighthart, Mari-Louise (Performance Sport)
Loock, Melissa (Kinder Kinetics)
Mostert, Janke (Kinder Kinetics)
Mostert, Jaryd (Performance Sport)
Muller, Amo (Performance Sport)

Oosthuizen, Christine Mama (Kinder Kinetics)
Otto, Johan Frederik (Performance Sport)
Price, Nicholas (Performance Sport)
Rabie, Karla (Kinder Kinetics)
Robertson, Emily Jeanne (Performance Sport)
Smith, Lizandi (Kinder Kinetics)
Stapelberg, Suné (Performance Sport)
Stemmet, Sonnika (Performance Sport)
Swart, Matthew (Performance Sport)
Truter, Tarinka (Performance Sport)
Van Aarde, Keagan Gilbert (Performance Sport)
Waso, Rozanne (Kinder Kinetics)
Watson, Anél (Performance Sport)
Williams, Brad (Performance Sport)
Wohlfarth, Nico Harley (Performance Sport)
Zaayman, Frances (Performance Sport)

Honneurs-baccalaureus in die Natuurwetenskappe in Biokinetika Bachelor of Science Honours in Biokinetics

Charron, Tara Tineka (Biokinetics)
Coetzee, Lize (Biokinetics)
De Lange, Menanto Theodor (Biokinetics)
Gustafsson, Jannik Heiko (Biokinetics)
Horn, Carsten Michael (Biokinetics)
Josias, Ugan Nathan (Biokinetics)
Koch, Andrea (Biokinetics)
Kruger, Anika Katerina (Biokinetics)
Laten, Melt Christie (Biokinetics)
Palframan, Justine (Biokinetics)
Potgieter, Mieke (Biokinetics)
Radebe, Vuyelwa Siphokazi (Biokinetics)
Radford, Paige Catherine (Biokinetics)
Roentgen, Yvonne (Biokinetics)
Roseveare, Erin Faye (Biokinetics)
Schmidt, Monique (Biokinetics)
Schoeman, Susanna Fransina (Biokinetics)
Smith, Garren Richard (Biokinetics)
Stewart, Reeco Paul (Biokinetics)
Thiart, Comé Carla (Biokinetics)

Honneurs-baccalaureus in die Natuurwetenskappe in Biokinetika Cum Laude Bachelor of Science Honours in Biokinetics Cum Laude

Esterhuizen, Chantelle (Biokinetics)
Janse van Rensburg, Charl Francois (Biokinetics)

Honneurs-baccalaureus in die Opvoedkunde in Taalonderwys Bachelor of Education Honours in Language Education

Mentz, Herman André

Nagraadse Onderwysertifikaat Postgraduate Certificate in Education

Baron, Kaylene Caroline

Nagraadse Onderwysertifikaat in Verdere Onderwys- en Onderrigopleiding Postgraduate Certificate in Education in Further Education and Training Teaching

Abdol, Tiffany Kelsey
Adams, Amy
Allie, Ishmael
Anguelov, Kalina
Barends, Jeandray Marchelle
Bateman, Pia Jade
Bauermeister, Juané Mia
Benn, Justin
Bernardo, Bjorn Andre
Bezuidenhoudt, Jan Andries
Boshoff, Kristy
Brink, Saskia
Brits, Chantel
Bruwer, Gert Johannes Jacobus
Burger, Anandie
Buys, Amber
Calitz, Janke
Carstens, Catharina Johanna
Chinnah, Lee-Jean
Cloete, Gavian Crause
Coetzee, Pelonomi
Como, Pauline
Comelius, Calvin Junior Fabian
Damane, Aviwe
Dase, Sinako Mankosana
De Bruyn, Jacqueline Merryan
De Kock, Mari
De Pinto, Daniella Lynette
De Wee, Amy Marche
Dibden, Maxine
Draper, Blaise
Du Plessis, Rachele Mari
Du Plooy, Thea Ronel
Dyonasi, Khayakazi
Ellis, Garth Cleavon
Erasmus, Suzanne
Fakier, Yusrah
Fanie, Muhammad Yusuf
Finch, Nina
Footman, Lauren Heidi
Forssman, Gabrielle
Frantz, Lauren Kay
French, Tayla Storm
Frieslaar, Nicole Beth
Gannon, Jessica-Leigh
Gawie, Micheila
George, Kezia Jemima
Gerber, Stephen
Goliath, Nikkita Yentl
Gow, Megan
Greeff, Portia Petulla
Groenewald, Genevié
Groenewald, Tiffany Heather
Gwatyuza, Siziwe Cynthia
Gwebula, Viwe

Gxavu, Bonginkosi Gift
Hamersma, Gerianne
Harty, Emily Jane
Hendricks, Marvin Brendan
Hopkins, Ria
Jacobs, Eloise
Joao Luiz, Chandré
Johaadien, Sufiyyah
Jordaan, Beate
Joubert, Nichole Monique
Julies, Beronice Joyce
Julies, Tashlin Shameeka Sharon
Khanya, Mbali
Khumalo, Clearance Themba
Kirby, Timothy John
Kirtley, Kendall
Klopper, Helene Femandine
Koegelenberg, Daniëlle
Koelman, Angelique
Kokaan, Leonie
Kotzé, Jana
Kotze, Shanje
Lakey, Aimee Chante
Lamohr, Adeline
Laubscher, Matthys Michiel
Le Roux, Micaela
Leibrandt, Fazlynn
Levendal, Joanne Coreen
Louw, Luita Antoinette
Louw, Nadia
Louw, Tanya
Makhafola, Joseph
Malan, Annereen
Mallon, Philip Michael
Marais, Alison
Marais, Jacobus Johannes
Marcus, Zannelee Kim
Marthinus, Jacquin Adrain
Martins, Jody
Marx, James William
Matthew, Stephanie Jordan
Mbomvu, Khuliswa
McDonald, Sheena Lize
Meyer, Stanley Bairon
Meyer, Veronique Jane
Michaels, Shamiela
Michaels, Xadine
Moerat, Aisha
Moleta, Promise
Nandoo, Johan Christopher
Nel, Soria
Nell, Caleb Elijah
Neuhoff, Janet
Nkowane, Sisanda
Nolte, Karla
Oberholster, Petrus Fredrik
Passenz, Marisa Chame
Perrett, Jack Harold
Petersen, Aatiqah

Petersen, Lisa
 Petersen, Sasha-Lee Michelle
 Philander, Micaela
 Phillips, Paula-Jane
 Piek, Yana
 Pieterse, Jodi Alice
 Pieterse, Michelle
 Potgieter, Ciaran Kristi
 Prinsloo, Johanna Catharina
 Rall, Adriaan Matthys Johannes
 Ramuhashi, Mboneni Cecilia
 Ramutangwa, Vuledzani Irah
 Rinquist, Zuleiga
 Rodi, Tamzyn Claudia
 Rohwer, Karen Monika
 Russell, Tatum Zoe
 Sandt, Lauren Whitney
 Sauer, Anthea Nazeem
 Sauls, Nina Nicole
 Schoonees, Anri
 Scott, Ann Kathleen
 Sharratt, Morag Elizabeth Jessie
 Sheard, Jessica Janet
 Sieberhagen, Corlia
 Smit, Ancois-Mari
 Smith, Keegan John
 Smith, Kelly Jade
 Smith, Taetse Hamersma
 Smith, Veronique
 Solomon, Bramwell Kevin
 Steyn, Christi Mari
 Terblanche, Lukas Marthinus Dorfling
 Terry, Lara
 Thompson, Jennifer Johanna Catherine
 Uys, Anna Sophia Stephanie
 Van der Breggen, Rebecca
 Van der Ross, Mccayly
 Van Kasterop, Nicola
 Van Niekerk, Anri
 Van Reenen, Jacob Johannes
 Van Rensburg, Anieka
 Van Wyk, Gillian Elretha
 Vermaak, Robin Tammy
 Viljoen, Lize-Marie
 Visser, Laika
 Vosloo, Catharina Elizabeth
 Wendt, Chanté
 Wessels, Stacey Leigh
 Wharren, Margot
 Wynand, Danelle Makèda

**Nagraadse Onderwysertifikaat in Verdere Onderwys- en Onderrigopleiding Cum Laude
 Postgraduate Certificate in Education in Further Education and Training Teaching Cum Laude**

Allers, Sarah-Lee Maria
 Andrews, Clay Chester Wade
 Badenhorst, Heleen
 Badenhorst, Michaela Anastasia

Bailey, Jessica Sarah
 Bal, Mieke
 Barendse, Jaimee Mishca
 Barry, Lara Dominique
 Benjamin, Fay-Yaadh
 Bevan, Olivia Shahla
 Carter, Lauren Leigh
 Croza, Imelda Esmerelda
 Davis, Asheeqah
 De Waldon-Holmes, Kayleigh Skye
 Drury, Jeanné Tracy
 Du Toit, Maria Catharina
 Dunsby, Adrian Bruce
 Ferreira, Andrea
 Goliath, Le-Anne Lezhaan
 Gordon, Micaela
 Hart, Michaela Helen
 Hatjigiannakis, Alexia Suzanna
 Hofmeyr, Jeanette
 Hugo, Lizanne
 Jaftha, Megan Donnae
 Jordaan, Nicola
 Khule, Koketso Peter Tanki
 Kritzinger, Christine
 Laubscher, Leila
 Le Roux, Bianca
 Louw, Anine
 Malan, Suzaan
 Malherbe, Lida
 Maree, Katherine Jane
 Meyer, Alan Aldrin
 Niehaus, Jacques
 Oosthuizen, Christie Leandri
 Oosthuizen, Jeanetta Sophia
 Pistorius, Cailee Gwyneth
 Potgieter, Carla
 Purchase, Sarah Jane
 Rabie, Amy
 Reddy, Nolene
 Roos, Jana
 Rooy, Janine Virginia
 Scott, Bianca Lee Velloza
 Smit, Chané Du Pannie
 Smit, Tanya
 Steenkamp, Marcelle
 Strydom, Driaan
 Sutherland, Maria Elizabeth
 Swart, Chaela-Ann Lesley
 Swart, Liebe
 Theron, Marguerite
 Van der Merwe, Anrika
 Van der Merwe, Sarah Jane
 Van Ryneveld, Chanelle
 Van Tonder, Kristin
 Van Zyl, Madre Greisch
 Wells, Devin Hunt
 Wentzel, Rossouw
 Wheeler, Nicola Louise

**Baccalaureus in die Opvoedkunde (Algemene Onderwys)
 Bachelor of Education in General Education**

Balie, Dwighmegan Jildreth Louise (Foundation Phase)
 Basson, Talita (Foundation Phase)
 Bezuidenhout, Tanya (Intermediary and Senior Phases)
 Bird, Tayla (Foundation Phase)
 Blatt, Zelda (Foundation Phase)
 Botha, Bardine Jeanne-Mari (Intermediary and Senior Phases)
 Botha, Michelle Sandra (Intermediary and Senior Phases)
 Bredenkamp, Marisa (Intermediary and Senior Phases)
 Brink, Anja (Intermediary and Senior Phases)
 Britz, Stephanie (Foundation Phase)
 Cabano, Cara Hope (Foundation Phase)
 Cassiem, Waafiq (Intermediary and Senior Phases)
 Christians, Tatum Olivia (Foundation Phase)
 Cilliers, Jean-Marie (Intermediary and Senior Phases)
 Clarke, Amber (Intermediary and Senior Phases)
 Cloete, Monique Inge (Intermediary and Senior Phases)
 Collett, Jessica (Intermediary and Senior Phases)
 Cox, Tayla Jordyn (Foundation Phase)
 Cupido, Keanu Giobanian (Intermediary and Senior Phases)
 Curtain, Marguerite Evelyn (Intermediary and Senior Phases)
 Daniell, Alana-Lee Elizabeth (Foundation Phase)
 Daniels, Carey-Leigh Adrainne (Intermediary and Senior Phases)
 Daniels, Earl Gary (Intermediary and Senior Phases)
 Dannhauser, Brogan Leigh (Intermediary and Senior Phases)
 De Kock, Marijke (Intermediary and Senior Phases)
 De Lange, Claire (Foundation Phase)
 De Necker, Danielle Louise (Foundation Phase)
 De Villiers, Frances Alexandra (Foundation Phase)
 Dippenaar, Lize-Maré (Foundation Phase)
 Dondas, Jamé-Lee Elrine (Intermediary and Senior Phases)
 Du Plessis, Georgina Sophie (Foundation Phase)
 Du Preez, Cara (Foundation Phase)
 Du Toit, Alme (Foundation Phase)
 Du Toit, Melliniq (Intermediary and Senior Phases)
 Dunjua, Inez (Intermediary and Senior Phases)
 Engelbrecht, Ninéne (Foundation Phase)
 Evetts, Leigh (Intermediary and Senior Phases)
 Falconer, Danielle Storm (Intermediary and Senior Phases)
 Farley, Jo-Anne (Intermediary and Senior Phases)
 February, Bilqees (Intermediary and Senior Phases)
 Fernandes, Monica (Foundation Phase)
 Ferreira, Andrea (Foundation Phase)
 Ferreira, Gayla (Intermediary and Senior Phases)
 Filter, Stefan (Intermediary and Senior Phases)
 Fourie, Jenique (Foundation Phase)
 Fourie, Martin (Intermediary and Senior Phases)
 Fourie, Mienke (Foundation Phase)
 Fourie, Tanya (Intermediary and Senior Phases)
 French, Mercia Joan (Intermediary and Senior Phases)
 Gafieldien, Isma-Eel (Intermediary and Senior Phases)
 Giliomee, Anine (Foundation Phase)
 Gillman, Savannah (Foundation Phase)
 Gouws, Celeste Andrea (Foundation Phase)
 Gouws, Janida Carina (Foundation Phase)
 Greyling, Inge Bianca (Intermediary and Senior Phases)
 Griessel, Helanie (Foundation Phase)
 Grobbelaar, Megan (Intermediary and Senior Phases)

Groenewald, Remay (Intermediary and Senior Phases)
 Grunewald, Inge (Foundation Phase)
 Haasbroek, Deon (Intermediary and Senior Phases)
 Haricombe, Cassidy Jacqueline Claire (Foundation Phase)
 Hawu, Simamkele (Intermediary and Senior Phases)
 Hendricks, Saskia Diana (Foundation Phase)
 Henwood, Dillon (Intermediary and Senior Phases)
 Heyns, Helen-Louise (Intermediary and Senior Phases)
 Heyns, Marzaan (Foundation Phase)
 Hilton, Jared Alan (Intermediary and Senior Phases)
 Hine, Nichole Roche (Foundation Phase)
 Hochfelden, Shannon Lees (Foundation Phase)
 Hoskin, Danielle Lauren (Intermediary and Senior Phases)
 Inch, Brittany Leigh (Foundation Phase)
 Jacobs, Domien Jodine (Intermediary and Senior Phases)
 Janse van Vuuren, Wilmarie (Foundation Phase)
 Jones, Chanel Kay (Foundation Phase)
 Jones, Daniel (Intermediary and Senior Phases)
 Jones, Skye Louise (Intermediary and Senior Phases)
 Jordaan, Kara (Foundation Phase)
 Kayat, Kasia (Intermediary and Senior Phases)
 Keller, Helene-Mari (Foundation Phase)
 Kock, Glenwille Dwayne (Intermediary and Senior Phases)
 Koen, Ramona Marie (Foundation Phase)
 Kok, Lauren (Intermediary and Senior Phases)
 Kraak, Mirinthea (Intermediary and Senior Phases)
 Kriel, Caylin Beatrice (Intermediary and Senior Phases)
 La Marque, Maxine (Foundation Phase)
 Lahner, Kealan Beatrice (Intermediary and Senior Phases)
 Lawrence, Aubrey John (Intermediary and Senior Phases)
 Le Roux, Bea (Foundation Phase)
 Le Roux, Esmari (Foundation Phase)
 Lombard, Larissa (Intermediary and Senior Phases)
 Lourenco, Melissa Leigh (Foundation Phase)
 Lubanga, Sihle (Intermediary and Senior Phases)
 MacDonald, Joshua Marc Skye (Intermediary and Senior Phases)
 Makin, Emma (Foundation Phase)
 Marais, Lötter Adriaan Louis (Intermediary and Senior Phases)
 Marx, Reinier Murray (Intermediary and Senior Phases)
 Matroos, Gift-Jewel (Intermediary and Senior Phases)
 Mostert, Lelanie Beatrice (Intermediary and Senior Phases)
 Mulder, Angélique (Foundation Phase)
 Ndawana, Anati Caroline (Intermediary and Senior Phases)
 Neave, Kirsten (Foundation Phase)
 Nelani, Tabisa (Intermediary and Senior Phases)
 Nero, Nadia (Foundation Phase)
 Niewoudt, Mare (Foundation Phase)
 Nkqayi, Abonga (Intermediary and Senior Phases)
 Ockhuis, Cari-Maree (Intermediary and Senior Phases)
 October, Erin (Intermediary and Senior Phases)
 Odendaal, Suné (Foundation Phase)
 Oosthuizen, Liné (Intermediary and Senior Phases)
 Opperman, Lauren-Rose (Intermediary and Senior Phases)
 Osman, Farhana (Foundation Phase)
 Petersen, Lorenzo Curtley (Intermediary and Senior Phases)
 Pienaar, Nadia (Intermediary and Senior Phases)
 Pienaar, Rachel Nicola (Intermediary and Senior Phases)
 Pietersen, Tashneen Saskia (Intermediary and Senior Phases)
 Plotz, Falyne Michaela (Foundation Phase)

Polman, Kim (Intermediary and Senior Phases)
 Posthumus, Amy Leigh (Foundation Phase)
 Pretorius, Prisca (Intermediary and Senior Phases)
 Pretorius, Samantha (Intermediary and Senior Phases)
 Price, Caroline Elizabeth (Intermediary and Senior Phases)
 Prins, Jana Elizabeth (Intermediary and Senior Phases)
 Prinsloo, Jan Jacobus (Intermediary and Senior Phases)
 Qhoji, Amanda (Intermediary and Senior Phases)
 Rademan, Annelize (Intermediary and Senior Phases)
 Rademeyer, Kaybri (Intermediary and Senior Phases)
 Reed, Helette (Foundation Phase)
 Reed, Rebecca Elizabeth (Intermediary and Senior Phases)
 Robertson, Alche Paula (Foundation Phase)
 Robyntjies, Demiley Clemise (Intermediary and Senior Phases)
 Roelf, Tamryn (Intermediary and Senior Phases)
 Roets, Carmen (Intermediary and Senior Phases)
 Roos, Sujen (Foundation Phase)
 Ruhl, Tamsyn (Intermediary and Senior Phases)
 Safedien, Yusrah (Foundation Phase)
 Sieberhagen, Jasminka Anastasia (Foundation Phase)
 Skiffers, Emile Anrich Grant (Intermediary and Senior Phases)
 Smit, Barend Christiaan (Intermediary and Senior Phases)
 Smit, Karla (Intermediary and Senior Phases)
 Smit, Lindsay Anne (Intermediary and Senior Phases)
 Smith, Engela Magdalena (Foundation Phase)
 Smith, Jessica (Foundation Phase)
 Smith, Marze (Intermediary and Senior Phases)
 Smith, Shannon (Intermediary and Senior Phases)
 Snyders, Mariëtha Debbie (Intermediary and Senior Phases)
 Stalmeester, Ramecia (Foundation Phase)
 Steenkamp, Isabel (Foundation Phase)
 Steenkamp, Yvonne (Intermediary and Senior Phases)
 Stofberg, Elizna (Foundation Phase)
 Stofberg, Niki (Intermediary and Senior Phases)
 Stroh, Tiane (Intermediary and Senior Phases)
 Swanepoel, Devon (Intermediary and Senior Phases)
 Swanepoel, Renske Celeste (Intermediary and Senior Phases)
 Swati, Riaan Jason (Intermediary and Senior Phases)
 Taylor, Cara (Foundation Phase)
 Theron, Carla (Foundation Phase)
 Theron, Jaco (Intermediary and Senior Phases)
 Thomson, Sarah Anne (Foundation Phase)
 Tities, Jamie Jeanetta (Intermediary and Senior Phases)
 Tshabe, Anita (Intermediary and Senior Phases)
 Van Deventer, Vicky (Foundation Phase)
 Van Eeden, Kaylee Sage (Foundation Phase)
 Van Jaarsveld, Andrea (Intermediary and Senior Phases)
 Van Niekerk, Chantelle (Foundation Phase)
 Van Niekerk, Izanne (Foundation Phase)
 Van Reenen, Tami-Lee (Intermediary and Senior Phases)
 Van Rensburg, Amore Storm (Intermediary and Senior Phases)
 Van Rensburg, Janke (Foundation Phase)
 Van Rensburg, Saskia (Intermediary and Senior Phases)
 Van Romburgh, Rynhardt Burger (Intermediary and Senior Phases)
 Van Rooy, Irvin John (Intermediary and Senior Phases)
 Van Wyk, Illse Donell (Intermediary and Senior Phases)
 Van Zyl, Chante Mari (Foundation Phase)
 Van Zyl, Esta Rebecca Naledi (Foundation Phase)
 Verster, Sumari (Foundation Phase)

Viljoen, Xanthe (Foundation Phase)
 Von Wielligh, Monéne (Foundation Phase)
 Vorster, Anzel (Foundation Phase)
 Vosloo, Lenika (Intermediary and Senior Phases)
 Wanza, Keneatha Lizmary (Intermediary and Senior Phases)
 Ware, Nicole Mishka (Foundation Phase)
 Webster, Angela Helen Marchant (Foundation Phase)
 Weyers, Nina (Intermediary and Senior Phases)
 Whitebooi, Christen Leigh (Intermediary and Senior Phases)
 Willemse, Whinique (Intermediary and Senior Phases)
 Williams, N-Tonio Armand (Intermediary and Senior Phases)
 Wilson, Sasha-Leigh (Intermediary and Senior Phases)
 Zeelie, Colleen Emmerentia (Intermediary and Senior Phases)
 Zietsman, San-Mari (Intermediary and Senior Phases)

Baccalaureus in die Opvoedkunde (Algemene Onderwys) Cum Laude

Bachelor of Education in General Education Cum Laude

Arendse, Shihaam (Foundation Phase)
 Bailey, Georgia Madeleine (Foundation Phase)
 Batchelor, Jade Kendal (Foundation Phase)
 Blaauw, Clyde Denovan (Intermediary and Senior Phases)
 Bowers, Charmay Annerith (Intermediary and Senior Phases)
 Cloete, Jennifer Jane (Foundation Phase)
 De Necker, Amy Wendy (Foundation Phase)
 De Villiers, Tamsen Kayla (Intermediary and Senior Phases)
 De Waal, Wilma (Intermediary and Senior Phases)
 Doman, Jameelah (Intermediary and Senior Phases)
 Dreyer, Eldane (Intermediary and Senior Phases)
 Els, Liné (Foundation Phase)
 Farrell, Stacey June (Intermediary and Senior Phases)
 Fourie, Cari (Intermediary and Senior Phases)
 Geustyn, Melissa (Intermediary and Senior Phases)
 Guest, Dilynn Kelsey (Intermediary and Senior Phases)
 Haywood, Andrea (Foundation Phase)
 Janse van Rensburg, Anri (Intermediary and Senior Phases)
 Janse van Rensburg, Micaela (Foundation Phase)
 Matthee, Nielke (Intermediary and Senior Phases)
 Niemand, Stephne (Foundation Phase)
 Odendal, Elizabeth Hermiena (Foundation Phase)
 Parker, Megan Ann (Intermediary and Senior Phases)
 Pienaar, Lauren Suné (Intermediary and Senior Phases)
 Scott, Claire Elizabeth (Foundation Phase)
 Steyn, Lindie (Intermediary and Senior Phases)
 Strydom, Marlee (Foundation Phase)
 Taljaard, Esmé (Foundation Phase)
 Truter, Johanna Wilhelmina (Foundation Phase)
 Van Aarde, Winona Gabriella (Intermediary and Senior Phases)
 Van der Linde, Janeta (Intermediary and Senior Phases)
 Van Tonder, Chané Lacia (Intermediary and Senior Phases)
 Van Tonder, Chrisstoffel Stephanus (Intermediary and Senior Phases)
 Wessels, Jeanne (Foundation Phase)

Fakulteit Krygskunde | Faculty of Military Science

**Honneurs-baccalaureus in die Krygskunde
 Bachelor of Military Science Honours**

De Bruin, Martin Mathley (Public and Development Management (Mil))
 Dhlalani, Nomcebo Marry (Technology)
 Manamela, Dolik Kwena (Industrial Psychology (Mil))
 Maseko, Londiwe Precious (Public and Development Management (Mil))
 Maswanganyi, Mhloti Miranda (Industrial Psychology (Mil))
 Moorcroft, James (Organisation and Resource Management)
 Motsamai, Edwin Marose (Industrial Psychology (Mil))
 Nkongo, Theodora Babalwa (Industrial Psychology (Mil))
 Nkwanyana, Nqobizwe Agostina (Organisation and Resource Management)
 Ramphadi, Tlhaloso (Industrial Psychology (Mil))
 Seiso, Tumelo Kingsley (Military History)
 Semenya, Linda Dineo (Industrial Psychology (Mil))
 Shabe, Tisetso Karabo (Organisation and Resource Management)
 Shongwe, Sipho Anton (Public and Development Management (Mil))
 Thapedi, Tsatsi Isaac (Organisation and Resource Management)
 Tshabalala, Priscilla Ntombana Dipuo (Industrial Psychology (Mil))

**Baccalaureus in die Krygskunde
 Bachelor of Military Science**

Britz, Michelle
 Chetty, Cameron
 Dlamini, Londa Mickey
 Flores, Lindsay David
 Godlwana, Sikelela
 Jantjies, Lorato
 Kgophane, Dikgetho
 Khobane, Lucky Macdavis
 Khosa, Jabu Justice
 Kivido, Lucia Elaine Palesa
 Klaasen, Tanya Theresa
 Kupke, Ernst Wilhelm
 Lethuba, Phiri George
 Letseka, Thabo Lucas
 Maleka, Karabo Noko
 Mamba, Ida Mathilda
 Manailane, Prince
 Masenamela, Karabo Donald
 Mashau, Zwivhuya
 Mataboge, Thato Ericah Sibonda
 Mateba, Molefi Richard
 Mathibela, Puseletso
 Matlou, Ruth Nthabiseng
 Memani, Bathandwa
 Mkoyana, Akhona Babalwa
 Mmasa, Thabo Edward

Mohale, Mohlominyana William
 Mokhotsoa, Kgothatso Illsley
 Mokoena, Kogolakae Yvonne
 Mokwena, Rebecca
 Molokomme, Tshepiso Ismail
 Montjane, Conny Ngoato-Mosadi
 Montsheng, Kabelo Daniel
 Monyeki, Dimakatso Phridah
 Motau, Goodman Innocent
 Msimango, Faith Tslegohatso
 Mtjwara, Alfred Gcinumuzi
 Nkwana, Thabo Matlapana
 Ntsaluba, Thulisa
 Ntuli, Nomsa Idoh
 Nxumalo, Gugu Ntobeko
 Nyembe, Nompumelelo
 Peter, Siyamthanda Odwa
 Pule, Sibongile Lizzy
 Ram, Sivuyile
 Ratshivhadelo, Talifhani Victor
 Ruiters, Rayno Mome
 Sandleni, Lucky Philemon
 Sebulela, Boitumelo Maureen
 Shabangu, Wandile Comfort
 Sibeko, Mhlakala Peter
 Smit, Lucrecia Lizell
 Thamaga, Kgabo Perseverence
 Tshabalala, Sibusiso John
 Williams, Thembinkosi Elvis
 Zwane, Mkhululi Sazi

**Baccalaureus in die Krygskunde Cum Laude
 Bachelor of Military Science Cum Laude**

Ruiters, Shinay
 Tomlinson, Wayne Mark

KANSELIERSTOEKENNINGS | CHANCELLOR'S AWARDS

Fakulteit Opvoedkunde | Faculty of Education

ASLAM FATAAR

Prof Aslam Fataar het as Vise-dekaan: Navorsing van twee universiteite gedien. Hy dien tans op verskeie internasionale kommissies, was die hoofredakteur van die geakkrediteerde *Southern African Review of Education* en was voorheen die president van die Suid-Afrikaanse Onderwysnavorsingsvereniging. Hy het verder op die rade van drie universiteite in die Wes-Kaap gedien. Prof Fataar het studieleiding verskaf vir 20 PhD-proefskrifte en 43 MEd-tesisse, meer as 80 artikels gepubliseer, vyf boeke as mede-redakteur gepubliseer en as gasredakteur vir vier spesiale vaktyskrifuitgawes opgetree. Hy het drie toekennings vir sy publikasies en 'n eremedalje van die Onderwysvereniging van Suid-Afrika ontvang. Teen die agtergrond van hierdie commendatio versoek ek dat die Kanseliersmedalje vir Navorsing aan prof Fataar toegeken word.

Prof Aslam Fataar has served as Vice-dean: Research at two universities. He currently serves on various international commissions, was the former editor-in-chief of the accredited *Southern African Review of Education* and was a former president of the South African Education Research Association. He has served on the councils of three universities in the Western Cape. Prof Fataar has supervised 20 PhD dissertations and 43 MEd theses, published over 80 articles, co-edited five books and was guest editor of four special journal editions. He has won three awards for his publications and was awarded a medal of honour by the Education Association of South Africa. Against the background of the foregoing commendatio, I request that the Chancellor's Medal for Research be awarded to Prof Fataar.

*Kantoor van die Viserektor: Leer en Onderrig
Office of the Vice-Rector: Learning and Teaching*

JEAN PRETORIUS

Me Jean Pretorius se loopbaan getuig van volgehoue uitnemendheid. Op haar toegewyde en noukeurige manier het sy 'n groot bydrae gelewer tot die sukses van die Universiteit Stellenbosch om leer en onderrig tot hoër prestasievlakke te verhoog. Haar uitstekende kennis van die Universiteit en haar goeie verhoudings met ondersteunende personeel, akademië en studente het die werksaamhede van die Viserektor se kantoor aansienlik verbeter. Haar sewe Rektorstoekennings vir Algemene Prestasie en 15 jaar diens in die Rektoraat vir vyf verskillende bestuurders getuig van haar besondere kundigheid en vermoë om aan te pas by veranderende omstandighede en tye. Sy is 'n verdienstelike ontvanger van hierdie gesogte Kanselierstoekenning.

Ms Jean Pretorius's career attests to sustained excellence. In her dedicated and meticulous way she has greatly contributed to Stellenbosch University's success to elevate learning and teaching to higher performance levels. Her excellent knowledge of the University and her sound relationships with support staff, academics and students alike have greatly enhanced the operations of the Vice-Rector's office. Her seven Rector's Awards for General Performance and 15 years of service in the Rectorate for five different managers testify to her particular expertise and ability to adapt to changing circumstances and times. She is a deserving recipient of this prestigious Chancellor's Award.

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12 Desember | 12 December

17:30

Fakulteit

Ekonomiese en Bestuurswetenskappe

Dip (Openbare Verantwoordbaarheid), NGDip (Besigheidsbest en -admin), NGDip (Dispuutbesl), NGDip (FinBepI), NGDip (Leierskapontw), NGDip (Omgewingsbes), NGDip (Ontwikkelingsfinansies), NGDip (Projekbest), NGDip (Toekomsstud), NGDip (VolbOntw), HonsBPA, MPhil (Bestuursaf), MPhil (Omgewingsbes), MPhil (Ontwikkelingsfinansies), MPhil (Toekomsstud), MPhil (VolbouOntw), MPA, MBA, BRek, BRekLLB, HonsBRek, MRek, PhD (Bestuurskool)

Faculty

Economic and Management Sciences

Dip (Public Accountability), PGDip (Business Managmnt and Admin), PGDip (DispRes), PGDip (FinPlan), PGDip (Leadership Dev), PGDip (EnvironMan), PGDip (Dev Finance), PGDip (ProjMan), PGDip (Futures St), PGDip (Sustainable Dev), BPAHons, MPhil (Management Coaching), MPhil (EnvironMan), MPhil (Dev Finance), MPhil (Futures St), MPhil (Sustainable Dev), MPA, MBA, BAcc, BAccLLB, BAccHons, MAcc, PhD (Business School)



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PROGRAM

- Staan asseblief* 1. Akademiese prosesie kom die saal binne.
- Staan asseblief* 2. Sing van die Nasionale Lied (kyk aan die binnekant van die agterblad).
- Sit asseblief* 3. Konstituering deur die Visekanselier.
4. Verwelkoming deur die Visekanselier en prof Mawande Dlali.
5. Voorstelling van kandidate wat kwalifikasies ontvang deur die dekaan van die fakulteit en toekenning van kwalifikasies deur die Visekanselier.
6. Voorstelling van kandidate vir die Kanselierstoekennings en oorhandiging van die toekennings deur die Visekanselier.
7. Sluiting deur die Visekanselier.
- Staan asseblief* 8. Akademiese prosesie verlaat die verhoog.

PROGRAMME

- Stand please* 1. Entrance of academic procession into the hall.
- Stand please* 2. Singing of the National Anthem (see inside back cover).
- Sit please* 3. Congregation formally constituted by the Vice-Chancellor.
4. Welcome by the Vice-Chancellor and Prof Mawande Dlali.
5. Presentation of candidates receiving qualifications by the dean of the faculty and conferment of qualifications by the Vice-Chancellor.
6. Introduction of the candidates for the Chancellor's Awards and presentation of the awards by the Vice-Chancellor.
7. Closing by the Vice-Chancellor.
- Stand please* 8. The academic procession leaves the stage.

*Fakulteit Ekonomiese en Bestuurswetenskappe
Faculty of Economic and Management Sciences*

**Doktor in die Wysbegeerte
Doctor of Philosophy**

ADEJUMO, Afolabi Olubunmi (Development Finance)

The Dutch disease effects of remittances in Nigeria

This study econometrically investigated the effects and transmission channels of remittance inflows on the tradable and non-tradable sectors of the Nigerian economy. The study found that remittance inflows have a negative effect on the real exchange rate and positively affects the non-tradable sector of the economy. The study further found that remittances exert a positive effect on the output of the industrial and agricultural outputs. Policy recommendations were made to channel remittance inflows to investment in agriculture and manufacturing, which have implications for poverty reduction and employment generation, especially for smallholder farmers and small- and medium-scale entrepreneurs.

Supervisor: Prof S Ikhide

AKOTO, Richard Kofi (Development Finance)

Essays on finance and international trade in sub-Saharan Africa

This research shows that non-bank credit is vital in overcoming the sunk costs of foreign market entry of small and medium-sized enterprises (SMEs) in sub-Saharan African (SSA) countries. Using data from Nigeria, it demonstrates that suppliers' and customers' credit is more appropriate in dealing with the maturity mismatch associated with bank credit and in meeting the peculiar needs of exporting SMEs. The study provides pioneering empirics into how financial sector development engineers export diversification in SSA. The design of structured finance and financial sector development policies is important in unlocking the export potentials of SMEs and export diversification in SSA.

Supervisor: Prof C Adjasi

ALUKO, Timothy Olaniyi (Development Finance)

The effectiveness of small enterprise cost sharing and cooperative grant incentive schemes in South Africa

The aim of this study was to measure and evaluate the effectiveness of small enterprises cost sharing and the cooperative grant incentive scheme in South Africa. The theory utilised in this study provided a better understanding of the various mechanisms for economic development. It contributed furthermore to the current debate on the measurement of the effectiveness of grant funding programmes. The study contributed to the development of a new method that could be utilised to measure the performance of grant funding programmes in the South African context. The study proposes an adaption to an existing model for the evaluation economic development-based programmes and its application to the BBSDP and the CIS, which are aimed at small and cooperative enterprise development.

External supervisor: Prof P Kibuuka

Internal co-supervisor: Prof A Vanroose

BATINGE, Benjamin (Public and Development Management)

Expediting transitions in unmet electricity markets: The case of leapfrogging renewable energy in Africa

Universal access to modern energy, such as electricity, improves the quality of services in different economic sectors and facets of human living. However, most Africans still do not have electricity access due to limited finance. Using a systematic literature review and system dynamics modelling, the study designed an energy transition framework and developed simulation models to assess roadmaps towards universal energy access. The study found that investment from the private sector would increase access to finance, leapfrog Africa's unmet electricity markets to renewable energy and address the energy infrastructure challenge. This requires governments to introduce regulatory reforms that attract private investment.

Supervisor: Prof J Musango

Co-supervisor: Prof AC Brent

MARITZ, Yrika Vanessa (Public and Development Management)

A public sector model for government, leadership and management development: The Namibian case

This study analysed government training institutes conceptually, comparatively and concretely on whether and how these institutes develop leadership and management for government. The lessons learnt were then used to develop a grounded model for government leadership and management development in Namibia and applied to the Namibian Institute of Public Administration and Management (NIPAM), the national leadership development institute for governance leaders and senior management in Namibia. The outcome of analysis was a normative model that was scientifically validated. The model was applied to NIPAM to assess its relevance and shortcomings and to ultimately contribute towards a public sector learning governance culture.

Supervisor: Prof E Schwella

METELERKAMP, Luke (Public and Development Management)

Learning for change: Youth and niche environments in food system transitions

This study dealt with an extremely important challenge, found at the intersection of three related areas: the unemployment crisis among the youths of (South) Africa, the need for transformation of the food (production) system to a more sustainable one that can provide healthy diets for all in harmony with the biosphere, and the role young people may play here. The study also assessed the breakdown of the formal education system, which in itself is in need of transformation to be able to provide young people with the skills they need to navigate towards a more sustainable agricultural future.

Supervisor: Prof S Drimie

MUSHONGA, Master (Development Finance)

The efficiency and sustainability of co-operative financial institutions in South Africa

Globally, membership-owned cooperative financial institutions (CFIs) are an effective grassroots innovation to bring about local sustainable development. Despite the potential delivery of financial services in South Africa, their performance has been contentious and under-researched. This study explored the performance of these organisations in terms of efficiency, sustainability and key barriers. The evidence showed that South African CFIs are financially unsustainable at 91.3% against a benchmark of 100%. An efficiency study showed that the industry is socially and financially inefficient at 91.6% and 61.57%, respectively. A productivity study revealed an annual productivity regress of 3.9% on average, which is attributable to a technical efficiency decline of 12.3% annually. The study presents a CFI performance ecosystem based on identified key performance drivers, inhibitors and strategies to achieve high-performance growth.

Supervisor: Dr N Marwa

NORDJO, Ralph Essem (Development Finance)

Essays on finance, productivity, market participation and welfare: The case of smallholder agricultural farmers in Ghana

This study evaluated finance, integrated soil fertility management (ISFM), market access, productivity and welfare of smallholder farmers in Ghana. It found, using non-experimental econometrics on unique survey data, that structured finance and ISFM enhance the productivity and welfare of smallholder farmers, with a significantly amplified impact on more financially constrained farmers. There were also significant differential effects of transaction costs and socio-economic factors on market access and participation. These differences signify separability between market access and the market participation decisions of smallholder farmers across crop types. The evidence provides new pathways for deepening the value chain of smallholder farming.

Supervisor: Prof C Adjasi

NYEADI, Joseph Dery (Development Finance)

Essays on foreign direct investment and firm economic activities in selected sub-Saharan African countries

This research provides new insights into the firm-level impact of foreign direct investment (FDI) in selected African countries. The firm value effect of FDI is more enhanced in matured stock market contexts. Furthermore, the innovation effect of FDI depends on the distance to technology frontier (DTF) between FDI source and host firms. FDI positively impacts firm innovation in Nigeria with a large DTF, but has no innovation effect in South Africa with a smaller DTF. It also shows the role of FDI in corporate social responsibility (CSR) using a comprehensive index of CSR, thereby revealing the bias in previous one-dimensional CSR studies.

Supervisor: Prof C Adjasi

ODURO-AFRIYIE, Emmanuel (Development Finance)

Essays on sectoral inflation persistence and threshold differentials in Ghana

This was a pioneering study on sector-specific inflation thresholds in Ghana. It revealed that the food sector has an optimal but seasonal threshold band of 11.5 to 15.2% and lies outside the national target. There exists a 97% chance of a high inflation regime succeeding a low inflationary period, but a 3% chance of a low-to-low inflation period. There is a 94% chance of a high-to-high inflationary period, but a 6% chance of a high-to-low inflation era. It will take the economy 37 years to exit a high inflation spell, while low inflation spells last for one year.

Supervisor: Prof C Adjasi

YEBOAH-ASSIAMA, Emmanuel (Public and Development Management)

Theory and practice of governance collaboration: Institutional assessment in collaborative natural resource governance

The complexities of governance in the post-new public management era and the quest for sustaining natural resources have necessitated the notion of collaboration and networks. The study assessed the theory and praxis of governance networks with a focus on institutionalism in collaborative natural resource governance. The empirical work examined the notion, drivers, strength and strategies for institutional complementation as well as governance collaboration using the experience of a wildlife sanctuary in Ghana. The results have so far been published in five peer-reviewed articles in reputable international journals, with a sixth paper in production.

Supervisor: Prof JJ Müller

*Fakulteit Ekonomiese en Bestuurswetenskappe
Faculty of Economic and Management Sciences*

**Magister in die Wysbegeerte
Master of Philosophy**

Ahmed, Riedwaan (Futures Studies)
Ali, Nolufefe (Management Coaching)
Badenhorst, Annaliese Jeanne (Futures Studies)
Cox, Michael Leon (Futures Studies)
De Beer, Lulu-Merle (Management Coaching)
Deighton, Tessa Lilian (Management Coaching)
Govender, Arthee (Management Coaching)
Joseph, Gabriel (Environmental Management)
Kabeni, Nosipho (Management Coaching)
Sewpershad, Pranesha (Environmental Management)
Sulon, Jean-René Antoine Henri (Management Coaching)
Van Rensburg, Ronell (Management Coaching)

**Magister in die Wysbegeerte Cum Laude
Master of Philosophy Cum Laude**

Amah, Dede (Environmental Management)
Benjamin, Lucinda Justine (Management Coaching)
Cherry, Jonathan Jerome (Futures Studies)
Fölscher Kingwill, Maria Barbara (Management Coaching)
McHendrie, Gregory Charles (Management Coaching)
Samson, Deidre (Futures Studies)

**Magister in die Wysbegeerte in Ontwikkelingsfinansies
Master of Philosophy in Development Finance**

Bapoo, Keshri
Bödecker, Xolile
Chingambu, Graham Kalezhi
Chingoiro, Samuel
Chirefu, Chipu
Hamunyela, Heiki
Hantise, Mmabatho Motlalepula
Joloba, Paula Ddundu Joloba
Luthuli, Sandile
Mabena, Bonginkosi Vincent
Magagula, Sifiso Charles
Maradzika, Mazvita
Mogodi, Palesa
Moletsane, Mosa
Mulenga, Frank
Namukwambi, Maria Kalaputse
Ndara, Daniel Sipopa
Nkungwana, Landile
Onyekwere, Cyriacus
Oula, Cleopatra Duduzile Nomthandazo
Pila, Thlapedi Vivian
Sebico, Sebico Sylvester
Shipahu, Julia Ndeyapo Magano
Sterras, Nazeem
Thebuho, Winifred Nsozi

**Magister in die Wysbegeerte in Ontwikkelingsfinansies Cum Laude
Master of Philosophy in Development Finance Cum Laude**

Adongo, Patricia
Geldenhuis, Andries Francois
Mudimbu, Simbarashe Phineas

**Magister in Rekeningkunde
Master of Accounting**

Kok, Michael

**Magister in Rekeningkunde Cum Laude
Master of Accounting Cum Laude**

Basson, Remerta

**Magister in Besigheidsbestuur en -administrasie
Master of Business Management and Administration**

Antunes, Rubiane
Bailey, Dwain Vaughn
Britain, Ryan Julian
Chauke, Chesa Gift
Chauke-Moagi, Bafedile Evah
Crown, Raymond Thomas
Dube, Thulani Lawrence
Else, Jacques
Festers, Loren Lana
Galada, Ncebakazi
Haasbroek, Louwrens Jacobus
Herman, Saima Nambahu
Ipangelwa, Markus
Isaacs, Wayne Winston
Jakavula, Kanya Zimkita
Jansen, Gerhard Gideon
Johannes, Petrus Alwoodi
Kotzee, Floris Petrus
Maphaka, Joel Sereme
Marais, Charl Willem
Maraka, Mancha Marcia
Marx, Liesle Catherine
Masondo, Tholakele Pearl
McLeod, Iain Barry
Murigwathoho, Mulalo
Mvana, Sibulele
Njenga, James Kariuki
Nwebani, Vuyo Otshepeng Njoza
Ononju, Victoria Nwanyibuife
Poonah, Olivia
Prinsloo, Johan Charl
Sandi, Luvuyo Henderson
Schlebusch, Jurgen Hugo
Shaanika, Selma Dhiginina
Sheetekela, Severus Panduleni Napandulwe
Shimweefeleni, Ndafapawa Tulipomwene

Shongwe, Fikile Patience
Swiegelaar, Jurgens
Terblanche, Marco
Tshivhase, Nkhipitheni Godfrey
Van der Merwe, Christiaan
Van Heerden, Natasha
Wapenaar, Hermanus Georg

**Magister in Besigheidsbestuur en -administrasie Cum Laude
Master of Business Management and Administration Cum Laude**

Van der Merwe, Carla
Van Zyl, Jacobus Gerrit Visser

**Magister in Publieke Administrasie
Master of Public Administration**

Botha James, Charlotte
Mgijima, Bongani
Swanepoel, Daryl Wade
Tukwayo, Pamela Charmaine
Zulu, Vincent Nkosinathi

**Honneurs-baccalaureus in die Handelswetenskappe
Bachelor of Commerce Honours**

Adams, Gretchen Taryn (Public and Development Management)
Apollis, Elynn Fran (Public and Development Management)
Booi, Lelethu Irvan (Public and Development Management)
De Vlieg, Katelin Elizabeth (Public and Development Management)
Shaku, Matlaweng Stanley (Public and Development Management)
Williams, Robyn-Ann Sylvia (Public and Development Management)

**Honneurs-baccalaureus in die Handelswetenskappe Cum Laude
Bachelor of Commerce Honours Cum Laude**

Lategan, Cindy Edwina (Public and Development Management)

**Honneurs-baccalaureus in Rekeningkunde
Bachelor of Accounting Honours**

Abrahams, Evan Eugene
Anderson, Daniel Paul
Applewhite, Sarah Michelle
Arenz, Carlo
Arthur, Courtney Evelyn
Austen, Blake John
Avenant, Pierre
Azar, Eamón Anne
Badenhorst, Casper Heinrich
Badenhorst, Louise Frances
Beesley, Rowan George
Bekker, Mauritz Briers
Besselaar, Carmen Joey
Bester, Frederick Christoffel Johannes
Biebuyck, Lauren
Boezaart, Ulric Andre

Botten, Paige Ashley
Bougas, Robert le Roux
Brand, Karla
Brink, Derek Anthony Meynell
Brönn, Petrus Juwán
Bryant, Richard Gordon
Bull, Ashley Anne
Burton, Olivia Rose
Buys, Tristan
Carter, Alexander Richard
Cilliers, Carina
Cloete, Bingle Kruger
Coetzee, Pieter Steyn
Collins, Sandra Operebea
Conway, Murray Kilgour Davison
Crimp, Micaela Elizabeth
Cromhout, Megan
Da Silva, Jacinto
Daniels, Ridaw
Davids, Moegamat Tashriq
Davids, Zaakirah
De Jager, Tiffany
De Klerk, Altru Johannes
De Kock, Zahnré
De Ponte, David James
De Villiers, Shaun
De Waal, Tess
De Wet, Miché
Dlephu, Thandokazi
Domehl, Lizaan
Draper, Nicole
Du Plessis, Abrie
Du Plessis, Freddie
Du Preez, Helena Sibella
Du Toit, Jako Stefan
Du Toit, Jandré
Du Toit, Mitchell Sean
Duffy, Logan Peter
Ehlers, Bianca
Elliott, Matthew James
Els, Jeandre
Erasmus, Daniela Aletta
Espach, Elizabeth
Evans, Murray
Fahrenheit, Nicholas Charles
Fakee, Muhammad Ikraam
Faure, Taylor Ashley
Ferreira, Anja
Foord, Julia Katherine
Fourie, Charles Ralph
Fourie, Liam
Geyer, Brittny Demi
Gonteb, Immanuel Khitago Andy

Goosen, Jamie-Lee
Gordon, Kurt Harold
Gouws, Jolandi
Gray, Shannon
Gregorowski, Larissa
Grieve, David Ramsay
Gunther, Craig
Hellemans, Michelle
Henn, Nina
Hepburn-Brown, Robyn
Herberger, Marcel
Hughes, Merve John
Jacobs, Aden Ryan
Jakob, Monique Elli
James, Andrew Thomas
Janeke, Michelle
Johannes, Andrea
John, Talia Sarah
Jonker, Jan Beyers
Jordaan, Etienne
Jordaan, Leande
Joubert, Jacobus Johannes
Joubert, Wilene
Kasselman, Johannes Johannes Jurie
Kempff, Casper Nicolaas
King, Ellen Margie
Kirsten, Johan Frederick
Koch, Emile Egbert
Kock, Michael Albertus
Koning, Charlotte
Kotze, Nicolette Louise
La Grange, Yancke
Lake, James Giliomee
Lambrechts, Danielle Monica
Last, Jolanie
Laubscher, Rian
Le Roux, Luke
Lellyett, Matthew James
Lochner, Adri Christelle
Lohmann, Janice
Lombard, Levi Spencer
Loubser, Nic
Lourens, Bridget
Lourens, Monica
Louw, Ilse Carissa
Louw, Suenét
Loxton, Fletcher Scott
Mabaso, Sandile
Madzhe, Hulisani Precious
Mao, Juei-Yun
Marais, Dewald
Maree, Madri
Marshall, Charl Neville
Mavundla, Nothando
Mc Diarmid, Carolyn Santie
McWilliams, Christopher Bruce
Melck, Ronald Rijk Albertus
Meyer, Line
Meyer, Ryan

Meyer, Vincent Clement
Michau, George
Michau, Pieter Paul
Middleton, Jason James
Möller, Hendrik Francois
Mostert, Ismaré
Mouton, Karli
Müller, David Andries CJ
Muller, Hilgard Petrus
Neely, Jess-Keir
Nel, Anje
Neveling, Kara
Ngobese, Lungelo Mthunzi
Odendal, Luan
Oellermann, Christoph Ludwig
Oerlemans, Christina Comelia
Olivier, Marco
Oosthuizen, Johan Arno
Orsmond, Miche Joi
Passerini, Daniela
Pautz, Jessica Denise
Pellissier, Siegfried Charl
Perkins, Kate Nicola
Perrott, Nicola Maire
Piedt, Lindel Astrid
Pienaar, Carolina Frederika
Pietersen, Christiaan Johannes
Postma, Estienne
Pretorius, George Eduard
Raats, Jonyke
Rampedi, Matsoarane William
Rickerts, Kezia
Roux, Willem Jacobus Louwrens
Russell, Dale Edward
Salakuvuwela, Bulelani
Sassin, Robin André
Saunders, Annika Maria
Scheepers, Anri
Schmidt, Zando
Scott, Tamryn
Seale, Jenna Leigh
Shepherd, Nathan John
Slater, Gregory James
Smit, Liame
Smit, Mia Anjé
Smith, Juan John
Smith, Lisa
Smith, Nicola René
Snyders, Helené
Snyman, Anika
Strydom, Marilie
Suchet, Joshua
Swanepoel, Tiffany-Lee
Theart, Ockert Johannes Walters
Theron, Dénik
Theron, Hanél
Theron, Jacob Philippus Arnoldus
Thiart, Marchant Josua
Tomaselli, Jenna Carita

Torr, Kenyon Michael
Trumpelmann, Simone
Truter, Anélie
Truter, Lee-Roy Metrix
Tully, Cameron James
Van Blerk, Adri
Van Bosch, Elré
Van den Heever, Randall Robert
Van der Merwe, Maricis
Van der Spuy, Jean-Jacques
Van Dyk, Kyron John
Van Heerden, James Jeremy
Van Huyssteen, Bianca
Van Jaarsveld, Devin
Van Jaarsveld, Nienke
Van Schalkwyk, Gerit Dirkse
Van Schalkwyk, Kobie
Van Staden, Roenie
Van Zyl, Etienne Francois
Van Zyl, Hermanus Johannes
Van Zyl, Maria Susanna
Viljoen, Carel-Bart
Viljoen, Olivia
Visagie, Kyle Emile
Visser, Kelly
Visser, Monre Andre
Vlok, Janét
Vosloo, Daniel Marais
Waldeck, Wesley Vincent
Watkins, David Geoffrey
Weilbach, Emma
Wentzel, Waylon
Wesson, Ernst Solomon
West, Michael John
White, Kelly Robyn
Willemse, Cathrine Maria
Williams, Matthew Phil
Williams-Jones, Thomas Daniel
Wyatt, Mark Andrew

**Honneurs-baccalaureus in Rekeningkunde Cum Laude
Bachelor of Accounting Honours Cum Laude**

Crawford, Jason Robert
Hartmann, Thomas Robert
Kanzler, Anja

**Honneurs-baccalaureus in Publieke Administrasie
Bachelor of Public Administration Honours**

Bamard, Nicolene Yvette
Bosman, Ashwill Justin
De Vries, Anna-Louise
Jacobs, Dalleel
Lakay, Jill Summer
MacDonald, Grant Elroy
Madondile, Nozuko
Makanda, Nozibele
Malongwe, Simpiwe
Morgan, Anthony Johannes
Morudi, Ezekiel

Ntlokwana, Mava Lesley
Ohlson, Irene Dhavagi
Okkers, Shannon Celeste
Phillips, Eben Oliver
Polansky, Joslyn René
Qawu, Thula
Sango, Nolubabalo
Sifunda, Martin Siphon
Solomons, Raydene Roché
Stuurman, Brendon Warren Branwill
Vilakazi, Nhlanhla Wilfred
Zazini, Buyelwa

**Honneurs-baccalaureus in Publieke Administrasie Cum Laude
Bachelor of Public Administration Honours Cum Laude**

Bhaga, Anusha Shatish
Hansen, Rozain Hamiet
Nugent, Daniel John
Pienaar, Adri
Selematsela, Modiegi Pertunia

**Nagraadse Diploma in Volhoubare Ontwikkeling
Postgraduate Diploma in Sustainable Development**

Crewe-Brown, Bernadette Edna
Engelbrecht, Paulina Jacoline
Hobo, Mhlali Vuyolwethu
Jacobs, Jonathan
Kadzere, Wimbayi
Liphoto, Mosili Jacqueline
Molapo, Relebohile
Parker, Yumna
Rightford, Brett Warwick Bevan
Rikhotso, Vongani
Sheard, Kate Helen
Thomson, Alice
Wollow, Nathan John

**Nagraadse Diploma in Volhoubare Ontwikkeling Cum Laude
Postgraduate Diploma in Sustainable Development Cum Laude**

Aebischer, Amy Dominique
Bosworth, Amy
Cruywagen, Michelle
Fileczki, Kate Sarah
Janse van Rensburg, Johannes Gerhard
Jhetam, Tasneem
Jordaan, Melanie
Kavari, Usuta Himeezembi
Lager, Zachary Witwer
Laingui, Katja Sybille
Mancebo Masa, Elena
Maree, Fabriccio Shaun
Muranda, Andy
Ottanelli-Gale, Toni
Paes Ramalho, Eloah
Peixoto, Mariana Chicaybam
Rae, Gordon Charles
Reilly, Samantha Frances
Rist, Inge Monique
Slabbert, Annika

**Nagraadse Diploma in Omgewingsbestuur
Postgraduate Diploma in Environmental Management**

Brink, Richelle
Cupido, Carlynn
De Behr, Leroy
Du Plessis, Heloise
Henry, Marlin Lenco
Kakuva, Selma Twapewomaano
Kweleta, Sivuyile
Lennon, Thomas Alexander
Marilele, Mkatoko Patricia
Mohale, Matodzi Odium
Morwamoche, Sibongile Angelic Hlageng
Nelukalo, Khathutshelo
Nleya, Fanuel
Nyamunda, Taringana William
Ofori, Clement
Rorke, Joshua Edward Thabo
Sithole, Samantha
Tsiane, Kegomoditswe
Van Zyl, Kyla
Vries, Chrystal Amber

**Nagraadse Diploma in Omgewingsbestuur Cum Laude
Postgraduate Diploma in Environmental Management Cum Laude**

Hagen, Bianca Louise
Marais, Kay-Leigh
Stofberg, Joanne
Strauss, Stephanie Junitha

**Nagraadse Diploma in Projekbestuur
Postgraduate Diploma in Project Management**

Gwadiso, Nozipho Gertrude
Mosehla, Aaron Thapelo
Ndlovu, Babalwa Gloria
Shinana, Abednego Kondjela

**Nagraadse Diploma in Finansiële Beplanning
Postgraduate Diploma in Financial Planning**

Abdulla, Zainab
Abrahams, Madle
Baker, Nicholas Thomas James
Bell, Marjorie
Bergs, Brendan Dieter Ayre
Botha, Anelma
Botha, Marius Hendrik
Botha, Martha Cecilia Maria
Burton, Gideon Johannes
Campbell, Jason Clive
Carter, Nicole Lauren
Celliers, Neil
Davidson, Bronwyn
De Villiers, Jacques
De Vries, Gerrit Dawid
Dladla, Sanelisiwe Sindisiwe
Du Plessis, Dahne
Du Toit, Aneshia
Du Toit, Franciska

Feinberg, Michael John
Ferguson, Callum Munro
Fourie, Rohan Armand
Gool, Mareldia
Grobbelaar, Suzaan
Guwa, Mbasa Vukile
Hartzenberg, Samantha Judith
Havenga, Ruan
Heckroodt, Hendrik Christoffel
Hendricks, Tara
Hermanson, Celeste Ingrid
Hulett, Rachel Robyn
Hussain, Shane Shahzad
Keogh, Christopher Neil
Koen-Volschenk, Vegardt
Kruger, Annemie Francis
Le Roux, Daniël Emile
Le Roux, Dawid Benjamin
Lombard, Willem Adriaan
Lourens, Byron
Malan, Beatrix Janneke
Mans, Willem Frederik
Marais, Etienne
Martin, Deen
McCaul, Matthew Michael
Meiring, Rehan
Mhlongo, Siyabonga Lindubuhle
Moir, Marc Richard
Mukuddem, Mohammed Waseem
Potgieter, Saretha
Powell, Taryn Elizabeth
Rossouw, Werner
Roux, Willem Petrus
Samuels, Aron Bernard
Schreuder, Gerda Carmen
Sharp, Kendon
Smit, Rory
Theron, Lourens Johannes
Van Rooyen, Jean
Wolmarans, Gustav Louis

**Nagraadse Diploma in Finansiële Beplanning Cum Laude
Postgraduate Diploma in Financial Planning Cum Laude**

Anthonissen, Chris
De Nobrega, Enrico
Engelbrecht, Johannes Albertus
Janse van Rensburg, Bradley Brian
Keal, Nakita
Samsodien, Dilshaad
Van Zyl, Comel Herman

**Nagraadse Diploma in Besigheidsbestuur en -administrasie
Postgraduate Diploma in Business Management and Administration**

Bennett, Nicole
Chevallier, Antoine Jules Baptiste
Daniels, Donavan
Gaffley, Mario Edward
Haywood, Jarome Ashley

Mostert, Chrizaan
Mutlane, Alec Baile-Batlile
Neumann, Shanon Samantha
Umaru, Godwin
Whitehead, Johanna Jacoba

**Nagraadse Diploma in Toekomsstudie
Postgraduate Diploma in Futures Studies**

Booyesen, Althea Liezel
Bresendale, Diana
De Klerk, Eben
Dhliwayo, Kaizer Mbongeni
Eigelaar, Deidre
Else, Jacques
Fester, Leon Jason
Fillis, Wayne John
Fisher-Hill, Robert Alexander Henry
Jack, Zuko Andrew
Jacobs, Levon Clayton
Jones, Gareth John
Kabaale, Andrew Gideon
Le Grange, Barend Johannes Marthinus
Manyana, Bandile
Marks, Gregory Ivor
Middleton, Michael Paul
Moatshe, Ramotlhatlhane Johannes
Mohale, Tanith
Moolman, Jan Adriaan
Morris, Bridgette Nomsa
Nabbi, Zurika
Nel, Frederik Petrus
Padayachi, Nadia
Parkies, Mpolokeng
Pooe, Karabelo Collen
Robertson, Owen Dillon
Sejane, Teboho Penelope
Smith, Molelekoa
Turkovic, Damir
Vetrova, Ivana

**Nagraadse Diploma in Toekomsstudie Cum Laude
Postgraduate Diploma in Futures Studies Cum Laude**

Hiemstra, Shanna Carmen
Hofmeyr, Jan Hendrik
Mbundu, Owen
Michael, Shantal Natasha
Nagtegaal, Jackie
Roesch, Jan Frederik

**Nagraadse Diploma in Ontwikkelingsfinansies
Postgraduate Diploma in Development Finance**

Bopape, Gertrude Mokete
Eastes, Dorothea
Hardnick, Monray Manfred
Kapitako, Millicent
Kauvee, Samueline
Khanyile, Thandekile Sphindiwe
Khumalo, Nkosingiphile Lucia

Maramba, Sharon Sekai
Matsebanane, Tshepo Vincent
Mavengere, Tarirai
Mncube, Zinhle
Mqadi, Phesheya Lady Diana Emily
Mushi, Agathamarie John
Ntshingwa, Bulelwa
Nyokong-Crossman, Ipeleng Tlhage
Sipula, Maphefo
Tibone, Tebogo Rebecca
Wells, Dominique Carmen
Xolo, Nomfuneko

**Nagraadse Diploma in Ontwikkelingsfinansies Cum Laude
Postgraduate Diploma in Development Finance Cum Laude**

Bhagwan, Shivangi
Buthelezi, Londiwe

**Baccalaureus in Rekeningkunde en Baccalaureus in die
Regsgeleerdheid
Bachelor of Accounting and Bachelor of Laws**

Alexander, Cailan
Esterhuizen, Sanette Deborah
Fourie, Nicola
Gerber, Sasha-Lee
Pagel, Werner Alexander
Simon, Chantel
Sparrow, Ashleigh Erin
Swart, Gerbagch Jacobus
Weyer-Henderson, Elizabeth
Wolfson, Adrian Roy

**Baccalaureus in Rekeningkunde en Baccalaureus in die
Regsgeleerdheid Cum Laude
Bachelor of Accounting and Bachelor of Laws Cum Laude**

Naidu, Shevelle Cecilia
Van der Meulen, Christopher John

**Baccalaureus in Rekeningkunde
Bachelor of Accounting**

Abels, Tiffany Geranda
Adendorff, Annie Petronella
Anderson, Alecia
Badenhorst, Kristie
Baleson, Roark
Bauer, Matthew Richard
Bestbier, Carel Brink
Biesenbach, Werner Ernst
Binda, Dylan
Birk, Zain Tyron
Blok, Michael Tom
Booi, Sivenathi
Booyesen, Shannon Simone
Botha, Cyril Vincent
Botha, Melissa
Brand, Hugo Daniël
Brand, Jacobus Le Roux
Brown, Michael
Brussow, Mitch Daren

Buck, Murray Ian Allan
Buys, Marvin Lee
Cardoso, Marcelo Joao
Cilliers, Andreas
Claasen, Matthew Peter
Coad, Geoné
Coetze, Kara
Coetzee, Carla
Coetzee, Louis Jacobus
Conradie, Kelsey Zetske
Corbett, Sasha-Lee
Cyster, Shanice Micaela
De Bruyn, Karli
De Clercq, Jaco Johann
De Kock, Esna
De Lange, Janie
De Villiers, Sybrand Abraham
De Wit, Kayla
Dietrich, Lynn-Marié
Du Plessis, Gerhard
Du Plessis, Jean Prieur
Du Plessis, Kevan Bary
Du Toit, Anel
Duthie, Melissa Jane
Ehlers, Jason Joubert
Erwee, Catherine Claire
Feris, Duane
Figland, Ju-Ne Tamrin
Firth, Gene
Fortuin, Levern
Fourie, Lara
Foxon, Charles Robert
Geary, Jamie-Anne
Geldenhuis, Jásanne
Gilbert, Danel
Giles, Michelle Louise
Gilson, Matthew Anthony
Griesel, Andries
Hankey, Hary Thomson
Havenga, Jó
Hefer, Carla Careen
Herholdt, Margaux Stephanie
Hughes, Cameron-Scott Macqueen
Human, Nadine
Jackson, Ryan Gordon
Janse van Rensburg, Christopher
Janse van Rensburg, Janine
Jansen, Amy
Jansen, Shandre Jade
Jansen van Rensburg, Leemé
Johnson, Shannon Robin
Jonker, Simoné
Joubert, Elizma
Julies, Cullen
Kampher, Jesse Cilicia
Kangumba, Kevemuine Mgonry
Karaan, Aishah
Kleynhans, Jeannette Bisschoff
Knoetze, Michael

Kotze, Lize
Kozuchowski, Paulina Marzena
Kroukamp, Marlise
Kruger, Tarien
Land, Kyle Allan
Lategan, Jacobus Adriaan
Liasides, Phillipa Artemis
Liebetrau, Madelie
Litster, Blake Stuart
Loffstadt, Helen Maude
Lombard, Christiaan Colin
Louw, Frederik Antonie
Maingard, Cameron Herve
Malan, Johannes Hendrik
Mars, Marlon Allan
Matthews, Kayla Hagan
McGear, Kelly Ruby-Ann
Meikle, Jillian Audrey
Meiring, Elizabeth Ann
Mellet, Judy
Meuldijk, Jemma Stephanie
Minnaar, Tammy
Minnaar, Tori Sue
Mitchell, Chloe Ashley
Molokana, Vhuthu-Hawe Malete
Momoh, Christabell
Mostert, Jaco
Mouton, Jana
Mujokoro, Brian Junior Tinashe
Neethling, Japie
Nefdt, Maviano Romario
Nel, Danielle
Nel, Liani
Nhlapo, Bandile
Nieuwoudt, Jan-Hendrik
Njuguma, Maureen
O'Reilly, Robert Sidney
Oosthuizen, Niritha
Opperman, Monique
Pieters, Johané
Pieterse, Arina
Pitout, Alexandra Megan
Plaatjies, Cee-Jay Robin
Pretorius, Pieter Abraham
Quenet, Nicholas Anton
Rademeyer, Wilhelm Jacobus
Ramere, Mapule Dorah
Raynard, Joshua David
Redelinghuys, Nicola
Rheeder, Engeli
Rightford, Thyme
Robertson, Ronell
Robinson, Justin Dylan
Rossouw, Lizelle
Roux, Eben
Rubidge, Charlotte Rosalie
Sampson, Chad
Schleifer, Courtney
Schlemmer, Craig Stanley

Schoeman, Edith
Schoeman, Luam
Searle, James Matthew
Seegmuller, Joan Hilda
Shaboodien, Sara
Simon, Liezel
Smit, Huibrecht Illze
Smit, Lezanne
Smit, Maatje Gertruida
Smit, Micaela
Smit, Natalien
Smit, Nicolaas
Smit, Sunette Megan
Snyman, Nicolaas Tjaart
Spring, Caleb Lee
Stemmet, Marius
Stemmet, Ninette
Steyn, Roelene
Stone, Dale Frances
Strydom, Tania
Strydom, Willem Francois Burger
Taylor, Daniel Royden
Terblanche, Murette
Thorpe, Ryan
Tippett, Matthew
Trumpie, Francois Hendrik Hermanus
Truter, Denise Eileen
Truter, Mari
Tshaka, Keitumetse Lesego Eva
Tshipala, Khetho Clifford
Van der Gryp, Dewald André Frank
Van der Merwe, Jean
Van Rensburg, Emwee
Van Schalkwyk, Duan
Van Wyk, Renske
Vermaak, Tristan Paul
Vickers, Graham Warren Leighton
Viljoen, Marique
Visser, Gideon Gabriël
Vorster, Elmé
Vries, Erin
Webster, Robyn
Weyers, Beane
Wiese, Jacob Abraham
Williams, Mogamat Ashraf
Zeelie, Konrad Luc

Baccalaureus in Rekeningkunde Cum Laude
Bachelor of Accounting Cum Laude

Arjun, Kamir
Boleslawsky, Jana
Bredenkamp, Lelani
Brokensha, Christine Lee
Clarkson, Gabriella Pascale
De Kock, Emma Louise
Dempers, Danielle Elizabeth
Du Plessis, Benjamin Deon
Du Plessis, Jean-Mari
Durand, Mariëtte

Gerber, Shannon May
Haselau, Tegan Lyn
Kluyts, Nerita
Kruger, Sharlé
Louw, Cecile
Matthee, Marilie
Olyn, Curtley
Reddan, Kalsey Lynnette
Reinhardt, Brett Mitchell
Small, Alwyn Johannes
Spangenberg, Henro Ehlers
Steyn, Ruan Louis
Strauss, Sybrand Albertus
Swanepoel, Anel
Swart, Larissa
Tito, Bradley
Van der Merwe, Mignon
Van der Walt, Sonja
Van der Westhuizen, Dewald
Van Wyk, Lené Jonette
Vermaak, Mari-Louise
Vermeulen, Jan Pieter Hamman
Viljoen, Roelof Johannes
Woest, Marena Esté

Diploma in Openbare Verantwoordbaarheid
Diploma in Public Accountability

Bezuidenhout, Ian Franklin
Brown, Marsha Bemidet
Chinasamy-Dampies, Desiree
Dlamini, Nothile Gracious
Fielding, Hazelene
Maarman, Jennifer
Mahlaba, Kwame
Malisa, Panashe Patson
Marupula, Busisiwe Grace
Mlambo, Bongani Joseph
Ngalo, Carmichael Nkululo
Plaatjies, Lezelle Lee-Ann
Pretorius, Rosina Joy
Van den Heever, Portia
Van Niekerk, Adriaan Erasmus
Velaphi, Sithandiwe

Diploma in Openbare Verantwoordbaarheid Cum Laude
Diploma in Public Accountability Cum Laude

Hougaard, Susanna Wilhelmina

KANSELIERSTOEKENINGS | CHANCELLOR'S AWARDS

Fakulteit Ekonomiese en Bestuurswetenskappe Faculty of Economic and Management Sciences

PIET NAUDÉ

Sedert sy aanstelling in 2014 as direkteur van die Universiteit van Stellenbosch Bestuurskool het prof Piet Naudé 'n sleutelrol gespeel om die Bestuurskool na groter hoogtes te neem. Onder prof Naudé se leierskap het die Bestuurskool op die ranglyste gestyg en die hoogaangeskrewe driedubbele internasionale akkreditering vir bestuurskole behou. Gedurende sy ampstermyn het sowel die kwantiteit as die kwaliteit van navorsingsuitsette vermeerder, die getal PhD-graduandi het skerp gestyg en die internasionale voetspoor van die Bestuurskool is vergroot deur middel van 'n fyn uitgewerkte strategie wat 'n ewewig tussen plaaslike geworteldheid en 'n wêreldingesteldheid verseker. Prof Naudé is boonop 'n hoog aangeskrewe navorser, akademiese skrywer, dosent, spreker en konsultant. Vandag se toekenning voltooi die kringloop van sy verbintenis met die Universiteit Stellenbosch, aangesien hy as finalejaarstudent die Kanseliersmedalje vir Akademiese Prestasie in hierdie einste saal ontvang het.

Prof Piet Naudé has been instrumental in taking the University of Stellenbosch Business School to new heights since his appointment as director in 2014. Under Prof Naudé's leadership, the Business School has risen in the rankings and retained its prestigious triple-crown business school accreditation. During his tenure, both the quantity and quality of research outputs have increased, the number of PhD graduates has risen sharply and the international footprint of the Business School has been enlarged through a carefully crafted strategy that balances local rootedness with a global mindset. In addition, Prof Naudé is a highly rated researcher, academic publisher, lecturer, speaker and consultant. Today's award closes the circle of Piet Naudé's association with Stellenbosch University, as he was awarded the Chancellor's Medal for Academic Achievement as final-year student in this very venue.

MARIE MALHERBE

Me Marie Malherbe se dienstyd van 39 jaar by die Universiteit Stellenbosch – waarvan 36 jaar by die Fakulteit Ekonomiese en Bestuurswetenskappe – getuig van volgehoue uitnemendheid. Haar loopbaan by die Fakulteit begin in 1986 toe sy as dekaansekretaresse aangestel word, en sy vervul dié rol gedurende die ampstermyne van ses dekane, nl. proff Izak van Biljon, Blackie Swart, Johan Matthee, Estian Calitz, Johann de Villiers en Stan du Plessis. In 2014 word sy tot fakulteitsbeampte bevorder. Prof. Matthee het 'n paar maande voor sy afsterwe vroeër vanjaar haar loopbaan soos volg opgesom: "Personeel se verbintenis tot hul werksomgewing het oor die laaste paar dekades wesenlik verander. Die hedendaagse norm is om herhaaldelik van werksomgewing te verander, en soos 'n sprinkaan van blaar tot blaar te beweeg en dikwels niks blywends agter te laat nie. Marie Malherbe is nie deel van hierdie groep nie." Haar loopbaan getuig van uitsonderlike lojaliteit aan die Fakulteit, werksetiek en omgee vir personeel. Sy is 'n waardige ontvanger van die Kanselierstoekenning.

Ms Marie Malherbe's 39 years of service at Stellenbosch University – of which 36 years at the Faculty of Economic and Management Sciences – attests to continued excellence. Her career at the Faculty began in 1986, when she was appointed Dean's secretary, and continued throughout the tenure of six deans, viz. Profs Izak van Biljon, Blackie Swart, Johan Matthee, Estian Calitz, Johann de Villiers and Stan du Plessis. In 2014 she was promoted to faculty officer. A few months prior to his passing earlier this year, Prof. Matthee summarised her career as follows: "During the past few decades, the commitment of personnel to their working environment has changed fundamentally. The present-day norm is to repeatedly change working environments, and to move from leaf to leaf like a grasshopper, often leaving nothing enduring behind. Marie Malherbe does not belong to this group." Her career bears testimony to exceptional loyalty to the Faculty, work ethics and caring for staff. She is a worthy recipient of the Chancellor's Award.