

FACULTY OF EDUCATION

POSTGRADUATE CERTIFICATE IN EDUCATION (FURTHER EDUCATION AND TRAINING)

DAVIDS, Taffin Francois Ethan
MASABALALA, Yoliswa Jennifer

POSTGRADUATE CERTIFICATE IN EDUCATION IN FURTHER EDUCATION AND TRAINING TEACHING

CITA, Yongama Buhle Siphosethu
DICKS, Ashton Reece
FEBRUARY, Victory Emmanuel
FELIX, Liezel Rolene
FERNDALE, Mercy
FLEUR, Estelle Lusanda
FRANCIS, Abby
GIGI, Sesibulelenkosi
HASHE, Chwayita
HENDRICKS, Kayla Gabby
JAMIESON, Jean-Pierre
KOZA, David Mlungisi
KRIGE, Tarryn Kristen
KULA, Roundy Andisiwe
LEANYA, Kabelo Caswell
LOLO, Anele
MAKONGOLO, Masixole
MANELI, Zenande
MAQUME, Siphokuhle
MASIZA, Sibongile
MBANE, Nomaxabiso
MDEDELWA, Vuyisa Enest
MGUDLWA, Afikile
MKILA, Nonceba
MOFOKENG, Xatyiswa
MOKOTEDI, Thabiso
NORDIEN, Kamilah
QHWABA, Mawande
RAWANA, Noludwe
SAVAHL, Saadiqah
SIXAM, Khwezi
SOMPANI, Zanethemba
SOQAGA, Nomfezeko Alice
TALAMBA, Silindelokuhle
VAN REENEN, Jocelynn
ZILIMBOLA, Phumza Patience

CUM LAUDE

ALLISON, Amber Tegan
ARNOLDS, Micaelyn Christan
BAMBI, Lucian Byron
BELL, Benedict Gerome Abner
BHAT, Atifa Jan
BOTH, Montanna Grey
BURKE, Sydneigh
CLAASSEN, Weronique Alexandria Mare
DE KOCK, Chanté
GILBERT, Meryl Beth
HEMPEL, Michaela Elizabeth
HOLLAND, Anil Juan
JACOBS, Clarise Estrid
KINDNESS, Justin Eric
LE ROUX, Melissa
MAFENTILE, Nobahle
MAJARA, Sibongiseni
MGENGWANE, Okuhle Anita
MNCANYANA, Kanya
MONAKALI, Phatuxolo
MTSHENGU, Thozama Pamela
MUEDA, Fhulufhuwani
NGQAYIMBANA, Ayanda

NOKO, Aphiwe
PACKAREYSAMMY, Stacey Lee
PITI, Lihle
SAKI, Liviwe
SETLOBOKO, Kgutsang Alfred
SINGQOTO, Samantha Siyamthanda

SKORBINSKI, Jayden
TROSKE, Caylynn Mellisa
UITHALER, Hayley Hildegard
WAIT, Marcel Joshua
WARNER, Tarryn-Lee
ZIBULA, Bulelwa

POSTGRADUATE CERTIFICATE IN EDUCATION IN SENIOR PHASE AND FURTHER EDUCATION TRAINING TEACHING

DIBELA, Liso
DIDLOFT, Shenolene Luzanne
GOBA, Thoba
MADIKANE, Yonela Yvonne
MAKHADO, Phumudzo
MKALALO, Akhona
PETJA, Jim Seraga

CUM LAUDE

BLIGNAUT, Danielle Simone
BOWES, Alexandra Carlisle
CEKISO, Nwabisa
DLEDLE, Nombulelo
FRIESLAAR, Lashay Lynn Theresa
GESWINT, Dale Jonathan
GREEN, Elmorric Jovan
MAKALELA, Ruth Tshegofatso
MBENGASHE, Zintle Sesethu
NABAL, Ruhan
NCAMANE, Lona
NENZHELELE, Rendani
PHAKATHI, Lesanda
POFADDER, Jonandrea
ROBBY, Lelethu
ROTH, Heather Frances
SNYMAN, Sue-Ellen
SOBUWA, Lwanda
ZAWULA, Siyolise

FACULTY OF HEALTH SCIENCES

BACHELOR OF ENVIRONMENTAL HEALTH

BONGCO, Simamkele
BOUT, Yanga
MAKHUMSHA, Khanya
MLWANDLE, Sandisiwe
ZONDO, Zinhle Thakasile

CUM LAUDE

OMUTA, Nnenna Chisom

BACHELOR OF RADIOGRAPHY IN DIAGNOSTICS

BABOO, Jameel
BHURA, Siyabonga
BOOI, Aliziwe
DHEVER, Norval
DU PREEZ, Chante Sherall Bridgette
FRAY, Brittany Jennique
GOVENDER, Aaliya
JANSEN, Courtney Sophia
KANUKA, Zona
LAYITA, Aviwe
MAMEGWA, Mashudu Merina
MARITZ, Nicola
MASHIMBYI, Gavaza Shirley
MSIBI, Sbusile Tengetile Dorabella
NEL, Azahn
NOJIYA, Anathi Prudence
NONTANGANA, Sivuyisiwe
PINYANA, Inam
RAMAGE, Leigh Kelly
SAMUEL, Zizipho
TSHAPELA, Bulelani
VAN HEERDEN, Shannon Courtney

CUM LAUDE

KAPP, Shani
KNOESEN, Anneke

BACHELOR OF TECHNOLOGY: BIOMEDICAL TECHNOLOGY

BOOI, Yongama
FERREIRA, Etienne
NIEMAND, Nadia

CUM LAUDE

MAJAWA, Yacinta
NDENGEZI, Nwabisa

BACHELOR OF TECHNOLOGY: ENVIRONMENTAL HEALTH

ANTHONY, Monique Nicole
BEJA, Aluta Princess Zukiswa Zimkitha
BULANA, Ncumisa Anele
DIHANGWANE, Mmatlou Salphina
GXOLO, Mamusa
HERWELS, Linden Godwin
KOSTATA, Anelisa
KOTSELE, Nombulelo
LANDELO, Mthuthuzeli
LOQO, Yonela
MADATT, Jeane Rayline
MAPHAMELA, Abongile Florah
MATWEBU, Aphiwe Sibongile
NOMVETE, Cikizwa Noluthando
SIRAYI, Hlonipha
THUSWA, Axola
TSHOTYANA, Mcdonald Phumzile
TYHAWANA, Mendy
WATHI, Kholeka Nontando Gloria

BACHELOR OF TECHNOLOGY: RADIOGRAPHY: DIAGNOSTIC

ADU-NTOW, Daniel
BATYI, Thuliswa
BOTH, Faith Nicole
BUSAKWE, Nomawethu Florence
DYEYI, Nothemba
GANGATHELE, Sinoyolo Ongezwa
GRIFFITHS, Kelly
JONAS, Crystal
KUSE, Siphesihle
MAZWI, Ziyongama
PENNY, Sheree Theresa
WILLIAMS, Claire Sarah

CUM LAUDE

GREEN, Shannon Lee
VAN ROOYEN, Este-Meri

FACULTY OF SCIENCE**BACHELOR OF SCIENCE**

GUMEDE, Sphumelele Nokubonga

ADVANCED DIPLOMA IN ANALYTICAL CHEMISTRY

JACK, Yolando
KWINANA, Tsepo Nicholaas
MENZI, Lubabalo
WALSON, Bestman Menidin
WITBOOI, Cecile

CUM LAUDE

MOREKU, Clementine

BACHELOR OF TECHNOLOGY: AGRICULTURAL MANAGEMENT

BAMBISO, Olona
CHIANE, Antoineth
GEBUZA, Nathi Vuyolwethu
GXAKAZA, Luxolo
GXAKUMA, Phaphama Brian
KAMANGA, Bonisiwe Mitchell
MAFANYA, Bonga
MAGUGU, Nokulunga
MBULAWA, Esethu
MNCUBE, Sithembiso
MTHETHWA, Melissa Anele
NKASHA, Cleopatra Vukosi
NTSONTE, Sinovuyo
PLAATJIE, Sandisile
POSWA, Sipendulwe Siphesihle
SOKAPASE, Linda
XATE, Axolile Arnold

CUM LAUDE

VILAKAZI, S'Busisiwe Angel

BACHELOR OF TECHNOLOGY: GAME RANCH MANAGEMENT

DE NECKER, Anouschka
PRETORIUS, Danelle

BACHELOR OF ARTS HONOURS IN GEOGRAPHY

BLAAUW, Rosa Simone

BACHELOR OF COMMERCE HONOURS

BURRELL, Amber Lyndl
(Computer Science and Information Systems)
CHAKANYUKA, Phillip Muzadzi Tawanda
(Information Systems and Business Management)
KAPA, Sisiphosethu
(Information Systems and Business Management)
MAKAMURE, Kudakwashe Rodrick
(Information Systems and Business Management)
MNINZELWA, Lingelethu
(Information Systems and Business Management)
MUSHARU, Timothy Nyasha
(Computer Science and Information Systems)
NAKWA, Gaylene Sasha
(Information Systems and Business Management)
NETHANANI, Rinaemukundi
(Information Systems and Auditing)
NTAPU, Zuko
(Information Systems and Auditing)
OLVER, Kevin
(Computer Science and Information Systems)
WITBOOI, Cuan Bryan
(Computer Science and Information Systems)

CUM LAUDE

Rheeder, Maryna
(Information Systems and Business Management)

BACHELOR OF SCIENCE HONOURS IN BIOCHEMISTRY

ELSOM, Lisa-Marié
KOTZE, Gregory Benjamin
KRITZINGER, Donne Ashley
OLIVIER, Tiaan
SIRKHOTTE, Saeedah

BACHELOR OF SCIENCE HONOURS IN BOTANY

AWATI, Methuselah Bieghewori
BERNABAS, Lord- Carrington Numo
NORVAL, Zoe
NTSIKWE, Odwa

CUM LAUDE

BUTTNER, Daniel Harry
STROEBEL, Tiaan
WATTAM, Lara Mcleod

BACHELOR OF SCIENCE HONOURS IN CHEMISTRY

BARNARDO, Brandon
POSWAYO, Olwethu Oscarina
SINGATA, Mzuvukile

CUM LAUDE

MARITZ, Marius Johann

BACHELOR OF SCIENCE HONOURS IN COMPUTER SCIENCE AND INFORMATION SYSTEMS

BLANCO DE RUS, Carlos
FRANCIS, Dylan
NAUDE, Gerrit Stephanus Jacobus
SMITH, Nathan
WINFIELD, Philip John
YAWA, Siyabulela Siyasanga

CUM LAUDE

MAKUBALO, Themba

BACHELOR OF SCIENCE HONOURS IN ENVIRONMENTAL GEOGRAPHY

BASADIEN, Tashreeqa
BURGESS, Ashleigh Georgia
GASEALAHWE, Reoagile Refentse Thuto Gasealahwe
LE ROUX, Stefanus Johannes
MANQANE, Siphamandla
MANXIWANA, Thenjiswa
MPALULI, Rotondwa Loyd
NDYALUVANE, Anelisiwe Ayabonga
NTOMBELA, Njabulo Smangaliso
TSIPA, Vusumzi

BACHELOR OF SCIENCE HONOURS IN GEOGRAPHICAL INFORMATION SYSTEMS

IYAMBO, Sem Meke
MAGAQA, Qaphela
MPISANE, Khanyisa
NOBHEQWA, Sinalo Kamva
SITYEBI, Simamkele
XHALABILE, Unathi Sinovuyo
XONGO, Kanya

BACHELOR OF SCIENCE HONOURS IN MICROBIOLOGY

FERREIRA, Tiaan Pierre
KENNEDY, Chanté Leigh-Ann
RAMSERN, Sandhya
SETZKORN, Emma Renate

BACHELOR OF SCIENCE HONOURS IN PHYSIOLOGY

CHIMBETETE, Tafadzwa Edwin
GOLIATH, Taryn Clair
JAFTHA, Dylan Leon Steve
LUPUWANA, Vuyisa Luvuyo Richard

CUM LAUDE

ACKERDIEN, Shiraz
BOTH, Susanna Gertruida
KEKANA, Dikeledi Mahlaku Mmakgabo

BACHELOR OF SCIENCE HONOURS IN ZOOLOGY

BRODY, Blake Benjamin
GUMEDE, Sphumelele Nokubonga
HINTSA, Asafika Mbasakazi
JACOBS, Aidan Glenn
KING, Michaela Jade
POTGIETER, Tayla Lee

CUM LAUDE

BANDA, Shamiso

FACULTY OF SCIENCE

MASTER OF SCIENCE (RESEARCH)

CAMPBELL, Richard Duncombe - **Cum Laude**

(Geology)

Title of dissertation:

*IDENTIFYING METHANE EMISSIONS WITH ISOTOPIC AND HYDROCHEMICAL CLUES TO THEIR ORIGIN ACROSS
SELECTED AREAS OF THE KAROO BASIN, SOUTH AFRICA*

Supervisor: Prof MJ De Wit

d'HOTMAN, Jethan Shaun - **Cum Laude**

(Chemical and Physical Oceanography)

Title of dissertation:

*THE USE OF AUTONOMOUS INSTRUMENTATION TO INVESTIGATE SURFACE DYNAMICS IN THE AGHULAS
CURRENT*

Supervisor: Prof JC Hermes

Co-supervisor: Ms T Morris

ELS, Jessica - **Cum Laude**

(Botany)

Title of dissertation:

CARBON AND NUTRIENT STORAGE OF THE SWARTKOPS ESTUARY SALT MARSH AND SEAGRASS HABITATS

Supervisor: Dr LRD Human

Co-supervisor: Prof JB Adams

GADA, Abongile

(Chemistry)

Title of dissertation:

*TRIGGERING BIODEGRADATION OF LOW-DENSITY POLYETHYLENE FILMS CONTAINING BIOBASED ADDITIVES
FOR ECOLOGICAL APPLICATIONS*

Supervisor: Dr S Muniyasamy

Co-supervisor: Dr NM Vorster

GANDIDZANWA, Sendibityosi

(Chemistry)

Title of dissertation:

THE DEVELOPMENT OF PALLADIUM NANOPARTICLES FOR RADIOPHARMACEUTICAL APPLICATION

Supervisor: Prof ZR Tshentu

Co-supervisor: Prof ME Lee

Co-supervisor: Prof CL Frost

GINSBURG, Tayla - **Cum Laude**

(Zoology)

Title of dissertation:

*INVOLVING FISHERMEN IN SEABIRDS' CONSERVATION: BRIDGING THE GAP BETWEEN SOCIO-ECONOMIC NEEDS
OF INDUSTRY AND THE NEEDS OF SEABIRDS*

Supervisor: Dr LC Pichegru

Co-supervisor: Prof AT Lombard

HART-DAVIS, Michael Geoffrey - **Cum Laude**

(Chemical and Physical Oceanography)

Title of dissertation:

DEVELOPING OCEAN PARTICLE TRACKING TOOLS FOR CROSS-DISCIPLINARY OCEANIC RESEARCH WITH APPLICATIONS IN THE AGULHAS CURRENT REGION

Supervisor: Prof JC Hermes

Co-supervisor: Dr BC Backeberg

Co-supervisor: Dr M Bakhoday-Paskyabi

Co-supervisor: Prof J Johannessen

MLAMLA, Sive

(Geography)

Title of dissertation:

AN ASSESSMENT OF THE HYDROLOGIC RESPONSE OF THE KEISKAMMA CATCHMENT TO LAND USE/COVER CHANGES

Supervisor: Prof V Kakembo

RASOLOARIJAO, Zo Tsihoarana

(Biological Oceanography)

Title of dissertation:

COMPARISON OF MESOZOOPLANKTON COMMUNITIES AT THREE SHALLOW SEAMOUNTS IN THE WESTERN INDIAN OCEAN

Supervisor: Dr M Noyon

Co-supervisor: Dr JA Huggett

Co-supervisor: Prof M Roberts

SHOBA, Siyabonga Blessing - **Cum Laude**

(Chemistry)

Title of dissertation:

DEVELOPMENT OF SILVER-BASED POLYANILINE NANOCOMPOSITE FOR ELECTROCHEMICAL OXIDATION AND DETECTION OF ORGANOSULFUR COMPOUNDS

Supervisor: Dr AS Ogunlaja

SNYMAN, Dillon Jandre - **Cum Laude**

(Mathematics)

Title of dissertation:

APPLICATIONS OF COMPLEX FUNCTIONS ON PROBLEMS IN BANACH ALGEBRAS

Supervisor: Dr M Weigt

SWARTBOOI, Tarryn Beatrix - **Cum Laude**

(Chemistry)

Title of dissertation:

THE INFLUENCE OF HANDS-ON CHEMISTRY EXPERIMENTAL INTERVENTIONS ON THE ATTITUDES OF GRADE NINE LEARNERS TOWARDS NATURAL SCIENCE

Supervisor: Dr GR Rubidge

Co-supervisor: Dr MD Gibbs

Co-supervisor: Prof E Ferg

TRIEGAARDT, Inge

(Geography)

Title of dissertation:

A SUITABILITY STUDY FOR THE IMPLEMENTATION OF A CORPORATE GEOGRAPHICAL INFORMATION SYSTEM AT THE KING SABATA DALINDYEBO MUNICIPALITY

Supervisor: Dr HW Britz

VAN DER WESTHUIZEN, Tara Peggy

(Zoology)

Title of dissertation:

THE HYPOLITHIC INVERTEBRATE COMMUNITY IN THE EASTERN KAROO: THE ROLE OF ROCK SIZE, MICROCLIMATE AND RECOLONISATION

Supervisor: Prof GIH Kerley

Co-supervisor: Dr M Landman

MASTER OF TECHNOLOGY: CHEMISTRY (RESEARCH)

MASELE, Siyamtanda

Title of dissertation:

THE DEVELOPMENT OF POLYPROPYLENE-WASTE TYRE CRUMBS BASED TPE'S WITH THE AID OF VISTAMAXX™ AS A COMPATIBILISER

Supervisor: Dr SP Hlangothi

Co-supervisor: Dr MJ John

Co-supervisor: Dr K Garde

Co-supervisor: Dr MJ Phiri

NDOYANA, Lusanda

Title of dissertation:

COMPARISON OF CONSUMER PERSPECTIVES OF THE NATURAL AND COMMERCIAL SYNTHETIC CHEMICAL-BASED MOSQUITO REPELLENT PRODUCTS

Supervisor: Ms R Potgieter

Co-supervisor: Prof P Watts

FACULTY OF HEALTH SCIENCES

MASTER OF ARTS (RESEARCH)

ADAMS, Larissa Leanne
(Human Movement Science)

Title of dissertation:

EFFECT OF SCHOOL-BASED INTERVENTIONS ON ATTENTION AND ACADEMIC PERFORMANCE OF PRIMARY SCHOOLCHILDREN FROM LOWER SOCIOECONOMIC COMMUNITIES IN PORT ELIZABETH

Supervisor: Prof CM Walter

Co-supervisor: Prof R Du Randt

JANSEN VAN RENSBURG, Justine Margot
(Human Movement Science)

Title of dissertation:

EFFECT OF A WEB-BASED VISUAL SKILLS TRAINING PROGRAMME ON THE VISUAL PERFORMANCE OF RUGBY PLAYERS

Supervisor: Prof R Du Randt

Co-supervisor: Mr RP Raffan

MASTER OF ARTS IN CLINICAL PSYCHOLOGY (COURSEWORK)

DE VRIES, Laure - **Cum Laude**

Title of treatise:

AN INTERPRETIVE PHENOMENOLOGICAL ANALYSIS OF CHANGE IN ATTITUDES AND BELIEFS TOWARDS DOMESTIC VIOLENCE AND RAPE MYTHS AS EXPERIENCED BY EASTERN CAPE ADOLESCENTS

Supervisor: Prof DS Elkonin

Co-supervisor: Prof BML Pretorius

HANNIE, Robyn Chante

Title of treatise:

GROWING UP WITH A PARENT WHO HAS A MENTAL ILLNESS: EXPLORING THE DEVELOPMENT OF RESILIENCE

Supervisor: Ms LN Currin

MASILELA, Sonto Precious

Title of treatise:

RELIGIO-CULTURAL PERSPECTIVES ON THE UNDERSTANDING, AETIOLOGY AND TREATMENT OF EPILEPSY

Supervisor: Prof Y Ally

MLONYENI, Makhi

Title of treatise:

EXPLORING CULTURAL UNDERSTANDINGS OF TRAUMATIC STRESS AMONG THE AMAXHOSA TRADITIONAL HEALERS IN THE EASTERN CAPE

Supervisor: Prof MB Ngcobo-Sithole

MOKOLOBATE, Motshabi Catherine

Title of treatise:

ISIXHOSA SPEAKING BIOLOGICAL FATHERS' PERCEPTIONS AND EXPERIENCES OF PARENTAL ALIENATION

Supervisor: Prof DS Elkonin

Co-supervisor: Prof Y Ally

SCHEEPERS, Jessica

Title of treatise:

MENTAL HEALTH PRACTITIONERS' PERCEPTIONS OF UTILISING ANIMAL-ASSISTED INTERVENTIONS

Supervisor: Prof CN Hoelson

Co-supervisor: Prof JG Howcroft

WARMINGTON, Meagan Patricia

Title of treatise:

THE PSYCHOLOGICAL SEQUELAE OF THE IMPACT OF VIOLENCE PERPETRATED AGAINST MEN IN INTIMATE PARTNER RELATIONSHIPS: A SYSTEMATIC REVIEW

Supervisor: Prof Y Ally

Co-supervisor: Prof JG Howcroft

MASTER OF ARTS IN COUNSELLING PSYCHOLOGY (COURSEWORK)

BANDS, Luke Morgan

Title of treatise:

STUDENT PERCEPTIONS OF ONLINE INFIDELITY

Supervisor: Dr T Lambert

JINOYI, Nomava Siyasamkela

Title of treatise:

AN EXPLORATION OF THE ADOLESCENT MALTREATMENT EXPERIENCE AND ITS PERCEIVED IMPACT ON YOUNG ADULT SURVIVORS IN THE EASTERN CAPE PONDOLAND AREAS

Supervisor: Ms LN Currin

NTLANGU, Sihle Theophilus

Title of treatise:

A CASE STUDY OF NKOSI JOHNSON

Supervisor: Dr K Navsaria

Co-supervisor: Prof L-A Stroud

NTSHANGASE, Nandisile Elaine

Title of treatise:

EXPERIENCES OF PSYCHOLOGISTS WORKING WITH FEMALE CLIENTS WHO PRESENT WITH CHILDHOOD SEXUAL ABUSE

Supervisor: Prof Y Ally

Co-supervisor: Mr JO August

SESELINYANE, Lineo Dorah

Title of treatise:

YOUNG ADULTS' EXPERIENCES AND COPING STRATEGIES FOLLOWING THE TERMINATION OF A SIGNIFICANT ONLINE ROMANTIC RELATIONSHIP

Supervisor: Dr T Lambert

VAN VUGHT, Chandre Claire

Title of treatise:

THE SOCIAL CONSTRUCTION OF RACIAL IDENTITY ON SOCIAL MEDIA SITES: A NARRATIVE INQUIRY

Supervisor: Prof JG Howcroft
Co-supervisor: Prof VM Goliath

YOKWE, Zintle

Title of treatise:

ATTITUDES OF HEALTHCARE PROFESSIONALS TOWARDS SUBSTANCE-DEPENDENT CLIENTS WHO HAVE RELAPSED

Supervisor: Dr K Navsaria

MASTER OF ARTS IN PSYCHOLOGY (RESEARCH)

MEYER, Courtney Clarissa

Title of dissertation:

BULLYING VICTIMISATION AND TRAUMATIC STRESS SEVERITY AMONG HIGH SCHOOL LEARNERS

Supervisor: Ms LN Currin
Co-supervisor: Mr JH Cronje

MHLONGO, Lindokuhle Nqobile

Title of dissertation:

THE PERCEIVED IMPACT OF FATHER ABSENCE ON ADOLESCENTS SELF-ESTEEM IN A RURAL AREA IN MPUMALANGA

Supervisor: Dr K Navsaria

SIBAM, Zimkhitha - **Cum Laude**

Title of dissertation:

EXPLORING MYTHICAL CREATURES AND THEIR INFLUENCE ON MENTAL HEALTH AMONGST BLACK SOUTH AFRICANS RESIDING IN RURAL AREAS OF THE EASTERN CAPE PROVINCE, SOUTH AFRICA

Supervisor: Prof Y Ally

MASTER OF HUMAN MOVEMENT SCIENCE (RESEARCH)

JOUBERT, Nandi

Title of dissertation:

EFFECT OF A PHYSICAL ACTIVITY INTERVENTION ON THE PHYSICAL FITNESS OF PRIMARY SCHOOLCHILDREN IN DISADVANTAGED COMMUNITIES IN PORT ELIZABETH

Supervisor: Prof CM Walter
Co-supervisor: Prof R Du Randt

NIENABER, Madeleone

Title of dissertation:

COMPARISON OF LEG DOMINANCE AND FATIGUE STATE ON LOWER EXTREMITY KINEMATICS DURING CUTTING MANOEUVRES IN MALE SOCCER PLAYERS

Supervisor: Dr M Kramer

MASTER OF NURSING (COURSEWORK)

KRAMER, Mercia Virginia
(Advanced Primary Health Care)

Title of treatise:

PROFESSIONAL NURSES' EXPERIENCES REGARDING THE MANAGEMENT OF PATIENTS ON DRUG-RESISTANT TUBERCULOSIS TREATMENT AT PRIMARY HEALTH CARE CLINICS

Supervisor: Prof EJ Ricks
Co-supervisor: Prof M Williams

SOGCWAYI, Lulama Princess
(Advanced Midwifery and Neonatal Nursing Science)

Title of treatise:

KNOWLEDGE AND ATTITUDES OF WOMEN TOWARDS COMPANIONSHIP DURING LABOUR AND CHILDBIRTH AT MIDWIFE OBSTETRIC UNITS

Supervisor: Mr BSI Sonti
Co-supervisor: Dr DG Morton

STEYN, Laetitia
(Advanced Psychiatric Nursing Science)

Title of treatise:

THE EXPERIENCES OF PATIENTS WHO ABSCONDED FROM PSYCHIATRIC HOSPITALS IN THE EASTERN CAPE

Supervisor: Prof J Strümpher

SUMMERTON, Glenda Virginia
(Advanced Primary Health Care)

Title of treatise:

EXPERIENCES OF FEMALE ADOLESCENTS ATTENDING COMMUNITY HEALTH CENTRES REGARDING THE USE OF CONTRACEPTIVES IN BUFFALO CITY HEALTH DISTRICT

Supervisor: Prof M Williams
Co-supervisor: Dr DG Morton

MASTER OF NURSING (RESEARCH)

BOOYSEN, Cindy Lynn

Title of dissertation:

EFFECTS OF AN EDUCATIONAL INTERVENTION RELATED TO CLINICAL SIMULATION TERMINOLOGY ON THE KNOWLEDGE OF NURSE EDUCATORS AT A PUBLIC COLLEGE

Supervisor: Prof PJ Jordan
Co-supervisor: Dr WH Ten Ham-Baloyi

OAMEN, Benedict Raphael

Title of dissertation:

AN EDUCATIONAL INTERVENTION ON THE LIBERATION OF VENTILATED ADULT PATIENTS IN PUBLIC CRITICAL CARE UNITS

Supervisor: Prof PJ Jordan
Co-supervisor: Dr WH Ten Ham-Baloyi

TOKWE, Lwandile - **Cum Laude**

Title of dissertation:

LIVED EXPERIENCES OF PEOPLE LIVING WITH HIV AND HYPERTENSION WITH REGARDS TO DISEASE MANAGEMENT IN THE EASTERN CAPE

Supervisor: Prof JR Naidoo

MASTER OF PHARMACY(RESEARCH)

CHENG, Amber

Title of dissertation:

MULTI-DRUG RESISTANT TUBERCULOSIS RELATED ADVERSE DRUG REACTIONS: IMPLEMENTATION OF A DOCUMENTATION TOOL

Supervisor: Dr LC Kritiotis-Germanis

KLITSIE, Monique Antoinette - **Cum Laude**

Title of dissertation:

SIMULATED LEARNING: INTEGRATING CLINICAL KNOWLEDGE INTO THE DISPENSING PROCESS

Supervisor: Prof SF Burton

MASTER OF SCIENCE (RESEARCH)

JOUBERT, Tayla Kate

(Dietetics)

Title of dissertation:

A NUTRITIONAL EDUCATION TOOL FOR PRACTICAL APPLICATION OF THE FOOD BASED DIETARY GUIDELINES FOR PRIMARY SCHOOL TEACHERS IN NELSON MANDELA BAY

Supervisor: Prof A Gresse
Co-supervisor: Dr SS Pretorius

STRYDOM, Lana

(General Health Sciences)

Title of dissertation:

STATISTICAL OPTIMISATION OF A TERBINAFINE-CONTAINING CREAM

Supervisor: Prof G Kilian
Co-supervisor: Dr NM Vorster

MASTER OF SOCIAL WORK (RESEARCH)

PHILLIPS, Adelette - **Cum Laude**

Title of dissertation:

EXPERIENCES OF JUDICIAL OFFICERS' INCLUSION OF VICTIM IMPACT REPORTS DURING THE CRIMINAL JUSTICE PROCESS

Supervisor: Dr Z Abdulla

MASTER OF TECHNOLOGY: RADIOGRAPHY (RESEARCH)

HODGSON, Hayley Dianne - **Cum Laude**

Title of dissertation:

EXPERIENCES OF UNDERGRADUATE DIAGNOSTIC RADIOGRAPHY STUDENTS REGARDING ASSESSOR FEEDBACK DURING SUMMATIVE CLINICAL ASSESSMENTS

Supervisor: Ms AD Grobler
Co-supervisor: Dr DG Morton

FACULTY OF HEALTH SCIENCES

DOCTOR OF PHILOSOPHY IN PSYCHOLOGY

THOMPSON, Sandra

Title of thesis:

CULTURALLY-INFORMED COPING STRATEGIES OF POST TRAUMATIC STRESS DISORDERS AMONG THE BLACK AFRICANS IN THE GREATER ACCRA REGION OF GHANA AND BLACK AFRICANS IN THE EASTERN CAPE OF SOUTH AFRICA

Supervisor: Prof Y Ally

FACULTY OF SCIENCE

DOCTOR OF PHILOSOPHY

CAIRNCROSS, Lynn Candice
(*Biochemistry*)

Title of thesis:

EVALUATING THE SPECIFICITY OF CANCER TARGETING PEPTIDE-CONJUGATED GOLD NANOPARTICLES FOR POTENTIAL CANCER DIAGNOSTICS

Supervisor: Prof S Roux
Co-supervisor: Prof M Meyer

CORNHILL, Kristina
(*Zoology*)

Title of thesis:

CHEETAH ACINONYX JUBATUS BEHAVIOUR AND RESOURCE USE IN RESPONSE TO OTHER AFRICAN LARGE CARNIVORES

Supervisor: Prof GIH Kerley

FORTUIN-SEEDAT, Maleeha
(*Biochemistry*)

Title of thesis:

THE ANTI-INFLAMMATORY EFFECTS OF SUTHERLANDIA FRUTESCENS IN A CELL AND ANIMAL MODEL

Supervisor: Prof GB Dealtry

GOEDHART, Marc Leon
(*Geology*)

Title of thesis:

A PALAEOSEISMIC INVESTIGATION OF LATE QUATERNARY REACTIVATION OF THE KANGO FAULT, AND ITS RELEVANCE TO THE SITING OF CRITICAL STRUCTURES IN THE SOUTHERN CAPE FOLD BELT, SOUTH AFRICA

Supervisor: Prof PWK Booth

GREYLING, Lizé
(*Chemistry*)

Title of thesis:

THE SYNTHESIS AND ASSESSMENT OF THIOXANTHONE- AND XANTHONE- DERIVED COMPOUNDS AS HOSTS FOR APPLICATION IN HOST-GUEST CHEMISTRY

Supervisor: Prof B Barton

JJAGWE, Aisha
(*Environmental Geography*)

Title of thesis:

AN ASSESSMENT OF THE SOCIAL ECOLOGICAL SYSTEM OF MABIRA FOREST AND ENVIRONS: IMPLICATIONS FOR VULNERABILITY TO CLIMATE VARIABILITY

Supervisor: Prof V Kakembo

MINNAAR, Ettienne Gerald

(Physics)

Title of thesis:

CHARACTERISATION OF ULTRA-HIGH PRESSURE POLYCRYSTALLINE DIAMOND

Supervisor: Dr JE Westraadt
Co-supervisor: Prof JH Neethling

MLAMBO, Farai Fredric

(Mathematical Statistics)

Title of thesis:

WAVELET THEORY: FOR ECONOMIC AND FINANCIAL CYCLES

Supervisor: Prof IN Litvine

MOLEKO-BOYCE, Pulleng

(Chemistry)

Title of thesis:

DESIGN OF METAL ION-SELECTIVE REAGENTS FOR RECOVERY OF PRECIOUS METALS

Supervisor: Prof ZR Tshentu

MUEDI, Thomas Tshifhiwa

(Geology)

Title of thesis:

EARLY JURASSIC DOLERITES OF THE KAROO LARGE IGNEOUS PROVINCE (KLIP): AN ANALYSIS OF THEIR AGE AND EMPLACEMENT HISTORY FROM SEA LEVEL TO THE DRAKENSBERG MOUNTAINS IN THE EASTERN CAPE, SOUTH AFRICA

Supervisor: Prof MJ De Wit

RITCHIE, Michaela Claire

(Mathematical Statistics)

Title of thesis:

STATISTICAL CLASSIFICATION AT A PIXEL AND SUB-PIXEL LEVEL OF REMOTELY SENSED IMAGERY IN THE FALSE BAY REGION

Supervisor: Dr VL Goodall
Co-supervisor: Prof P Debba
Co-supervisor: Dr M Lück-Vogel

SALEHZADEH, Seyed Amirsaleh

(Computer Science)

Title of thesis:

A FRAMEWORK TO MEASURE HUMAN BEHAVIOUR WHILST READING

Supervisor: Prof AP Calitz
Co-supervisor: Prof JH Greyling

TRAI SNEL, Gwendoline

(Zoology)

Title of thesis:

BEHAVIOURAL FLEXIBILITY IN AN ENDANGERED SEABIRD DURING CURRENT CHANGES

Supervisor: Dr LC Pichegru
Co-supervisor: Prof T Clemen

WESTRAADT, Lindsay
(Computer Science)

Title of thesis:

A MODEL FOR CRIME MANAGEMENT IN SMART CITIES

Supervisor: Prof AP Calitz

WILLIAMS-BRUINDERS, Leizel Lynne
(Geography)

Title of thesis:

THE SOCIAL SUSTAINABILITY OF LOW-COST HOUSING: THE ROLE OF SOCIAL CAPITAL AND THE SENSE OF PLACE

Supervisor: Dr AH De Wit

WOODFORD, Grant Warren
(Computer Science)

Title of thesis:

STATIC AND BOOTSTRAPPED NEURO-SIMULATION FOR COMPLEX ROBOTS IN EVOLUTIONARY ROBOTICS

Supervisor: Dr MC Du Plessis

DOCTOR OF TECHNOLOGY: CHEMISTRY

MARX, Amor

Title of thesis:

AN INVESTIGATION OF THE LONG TERM CHEMICAL STABILITY AND PHYSICAL PERFORMANCE OF PMD-CITRONELLAL ACETAL COMPARED WITH DIBUTYL PHTHALATE AND BIS (2-ETHYLHEXYL) TEREPHTHALATE AS PLASTICISERS IN SELECTED COSMETIC FORMULATIONS

Supervisor: Dr NM Vorster

MARX, Johannes Scheepers

Title of thesis:

AN EVALUATION AND COMPARISON OF THE PLASTICISER EFFECTS OF P-MENTHANE- 3, 8 DIOL CITRONELLAL ACETAL PLASTICISER WITH TRIETHYL CITRATE AND BIS (2-ETHYLHEXYL) TEREPHTHALATE ON ETHYLCELLULOSE FILMS

Supervisor: Dr NM Vorster

THE DEGREE OF DOCTOR OF PHILOSOPHY (PSYCHOLOGY)

SANDRA THOMPSON

Previous qualifications:

2012 BA Hons Psychology
2014 BA Hons Psychology
2017 MA Psychology

University of Ghana, Legon
Nelson Mandela Metropolitan University
Nelson Mandela Metropolitan University

Thesis:

CULTURALLY-INFORMED COPING STRATEGIES OF POST TRAUMATIC STRESS DISORDERS AMONG THE BLACK AFRICANS IN THE GREATER ACCRA REGION OF GHANA AND BLACK AFRICANS IN THE EASTERN CAPE OF SOUTH AFRICA

While a great deal of existing knowledge revolves around the use of cognitive restructuring in treating symptoms of Posttraumatic Stress Disorder (PTSD), the study among black Ghanaians and black South Africans has proved otherwise. Several cultural factors have been demonstrated as influencing the coping strategies adopted in treating PTSD. Christian Religious norms, cultural traditions and social support, are the essential strategies used by the black Africans. The key understanding is that culturally-informed practices are the essential part of treating symptoms of PTSD in African lives and hence the need for their incorporation into therapeutic modalities.

Supervisor: Prof Y Ally

THE DEGREE OF DOCTOR OF PHILOSOPHY (BIOCHEMISTRY)

LYNN CANDICE CAIRNCROSS

Previous qualifications:

2012 BSc
2013 BSc Hons
2015 MSc Nanoscience (Biomed)

Nelson Mandela Metropolitan University
Nelson Mandela Metropolitan University
Nelson Mandela Metropolitan University

Thesis:

EVALUATING THE SPECIFICITY OF CANCER TARGETING PEPTIDE-CONJUGATED GOLD NANOPARTICLES FOR POTENTIAL CANCER DIAGNOSTICS

Colorectal cancer remains one of the most treatable forms of cancer if detected early. Unfortunately, it is a disease with an asymptomatic development. Conventional screening is not only costly but also a risk to elderly and vulnerable patients. Alternative diagnostic methods that are sensitive and specific are needed. The focus of this research was to develop a gold nanoparticle capable of enhancing cancer detection through the use of peptide biomarkers. This work culminated in the synthesis and characterization of three peptide-modified polyethylene glycol gold nanoparticles (peptide-PEG-AuNPs). The characteristics of these molecules did not change in a biological environment. Two of the synthesized molecules demonstrate significant targeting of colorectal cancer cells and cellular uptake into these cells.

Supervisor: Prof S Roux
Co-supervisor: Prof M Meyer

THE DEGREE OF DOCTOR OF PHILOSOPHY (ZOOLOGY)

KRISTINA CORNHILL

Previous qualifications:

2013	BSc (Zoology)	University of British Columbia
2015	MSc (Fish and Wildlife Management)	Swedish University of Agricultural Sciences

Thesis:

CHEETAH ACINONYX JUBATUS BEHAVIOUR AND RESOURCE USE IN RESPONSE TO OTHER AFRICAN LARGE CARNIVORES

Kristina Cornhill used cheetah as a model to explore competition and opportunities for resource partitioning among African large predators. She demonstrated a novel form of interference competition: cheetah avoid scent-marking sites visited by large predators. She assessed cheetah responses to lion using a unique 10-year radio-tracking data set, estimated prey use responses of cheetah to African wild dog, and explored spatiotemporal responses of cheetah to lion, leopard and spotted hyaena. All these predators shaped cheetah resource use. Cheetah employ a reactive response, avoiding risk while obtaining resources. Her work provides novel insights into competitive interactions among Africa's top predators, and is valuable for cheetah conservation.

Supervisor: Prof GIH Kerley

THE DEGREE OF DOCTOR OF PHILOSOPHY (BIOCHEMISTRY)

MALEEHA FORTUIN-SEEDAT

Previous qualifications:

2010	BSc (Human Life Sciences)	Stellenbosch University
2011	BSc Med Hons (Physiology)	Stellenbosch University
2013	MSc (Biochemistry)	Nelson Mandela Metropolitan University

Thesis:

THE ANTI-INFLAMMATORY EFFECTS OF SUTHERLANDIA FRUTESCENS IN A CELL AND ANIMAL MODEL

The South African medicinal plant, *Sutherlandia frutescens* has anti-diabetic and immune regulatory properties. Two cell sub-populations are involved in the regulation of inflammatory immune responses. These are M1 macrophages, that stimulate inflammation, and M2 macrophages, that reduce inflammation. This thesis demonstrated that *S. frutescens* maintains the balance between M1 and M2 macrophages during pro- and anti-inflammatory immune responses. *S. frutescens* acts early in the inflammatory process by rapidly deactivating M1 macrophages and maintaining M2 macrophages. The action is via GSK3 β signalling and the PI3K/Akt pathway, which is central to the control of inflammation in pathophysiological conditions, including diabetes and obesity.

Supervisor: Prof GB Dealtry

THE DEGREE OF DOCTOR OF PHILOSOPHY (GEOLOGY)

MARC LEON GOEDHART

Previous qualifications:

1987 BSc Geology
1988 BSc (Honours)
1991 MSc Geology
1997 Diploma (Project Management)

University of Cape Town
University of Cape Town
University of Illinois at Chicago
Damelin College

Thesis:

A PALAEOSEISMIC INVESTIGATION OF LATE QUATERNARY REACTIVATION OF THE KANGO FAULT, AND ITS RELEVANCE TO THE SITING OF CRITICAL STRUCTURES IN THE SOUTHERN CAPE FOLD BELT, SOUTH AFRICA

This study of pre-historic fault movement along the Kango Fault east of Oudtshoorn, shows that 10,000 years ago a 2 metre vertical surface displacement was caused by an earthquake of magnitude 7.2 on the Richter scale. A calculated recurrence interval of 100 000 years suggests that the mountainous region between Oudtshoorn and Port Elizabeth is less stable than the surrounding coastal zone. The results of this study have already significantly influenced decisions by governmental bodies and engineering firms in planning the Thyspunt nuclear power plant and in developments at the Port of Ngqura. The results also impact the seismic design of water storage dams, large bridges, tall buildings and other critical structures in the Eastern Cape.

Supervisor: Prof PWK Booth

THE DEGREE OF DOCTOR OF PHILOSOPHY (CHEMISTRY)

LIZÉ GREYLING

Previous qualifications:

2016 Baccalaureus Scientiae
2017 Baccalaureus Scientiae Honores
2018 Master of Science (upgraded to PhD)

Nelson Mandela Metropolitan University
Nelson Mandela Metropolitan University
Nelson Mandela University

Thesis:

THE SYNTHESIS AND ASSESSMENT OF THIOXANTHONE- AND XANTHONE- DERIVED COMPOUNDS AS HOSTS FOR APPLICATION IN HOST-GUEST CHEMISTRY

In this study, the feasibility of employing host-guest chemistry for the separation of industrially-relevant chemical mixtures was investigated, more especially those chemical mixtures that cannot ordinarily be separated facily through conventional means. Thus, two closely-related xanthenyl-type host compounds were presented with such mixtures and notably, they displayed significant and enhanced selectivity for only one guest in the mixture. The candidate therefore demonstrated that the supramolecular chemistry field has the potential to be utilized as an alternative separation strategy for difficult-to-separate chemicals. Nine publications in international journals emanated from this work, the results of which were revealed at both national and international conferences.

Supervisor: Prof B Barton

THE DEGREE OF DOCTOR OF PHILOSOPHY (ENVIRONMENTAL GEOGRAPHY)

AISHA JJAGWE

Previous qualifications:

1997 Bachelor of Arts with Education
2004 MSc. Development Studies

Islamic University in Uganda
London Southbank University

Thesis:

AN ASSESSMENT OF THE SOCIAL ECOLOGICAL SYSTEM OF MABIRA FOREST AND ENVIRONS: IMPLICATIONS FOR VULNERABILITY TO CLIMATE VARIABILITY

This study assessed the spatio-temporal changes of Mabira Central Forest Reserve in Uganda. It was using remote sensing, allometric equations and the Social Ecological Systems Framework to determine the implications of the changes for Above Ground Biomass (AGB), Soil Organic Carbon (SOC) and vulnerability of livelihoods to the impacts of climate variability. Subsistence farming was identified as the major driver of forest cover conversion, which has been reduced by 40km² between 2000 and 2015. An increase in deforestation and conversion of forest to agriculture implies loss of soil and above soil carbon. Consequently, this has increased the vulnerability of most household livelihoods to the impacts of climate variability. The study recommends that Uganda consider entering the carbon market and increase human resources for efficient monitoring of forest resources.

Supervisor: Prof V Kakembo

THE DEGREE OF DOCTOR OF PHILOSOPHY (PHYSICS)

ETTIÉENNE GERALD MINNAAR

Previous qualifications:

2009 BSc (Physics and Mathematics)
2010 BSc Hons (Physics)
2012 MSc (Physics)

Nelson Mandela Metropolitan University
Nelson Mandela Metropolitan University
Nelson Mandela Metropolitan University

Thesis:

CHARACTERISATION OF ULTRA-HIGH PRESSURE POLYCRYSTALLINE DIAMOND

Polycrystalline diamond are aggregates produced under high pressure, high temperature conditions for oil and gas drilling applications. This material exhibiting unique mechanical and thermal properties are however susceptible to degradation attributed to residual cobalt left in the structure after synthesis. Advanced electron microscopy was used to evaluate the resulting material microstructure when the processing parameters (pressure, temperature, and cobalt conditions) were changed. This study showed that cobalt is a necessity for a completely densified, graphite-free compact. When limiting the amount of cobalt, very high pressure is needed for successful sintering. Sintering at elevated pressure was found to reduce the amount of cobalt infiltration into the compact.

Supervisor: Dr JE Westraadt
Co-Supervisor: Prof JH Neethling

THE DEGREE OF DOCTOR OF PHILOSOPHY (MATHEMATICAL STATISTICS)

FARAI FREDRIC MLAMBO

Previous qualifications:

2013	BCom Hons Mathematical Statistics (<i>Cum Laude</i>)	Nelson Mandela Metropolitan University
2012	BCom Economics and Statistics (<i>Cum Laude</i>)	Nelson Mandela Metropolitan University
2015	MCom Statistics (<i>Cum Laude</i>)	Nelson Mandela Metropolitan University

Thesis:

WAVELET THEORY: FOR ECONOMIC AND FINANCIAL CYCLES

In this study, a scalable, smooth and differentiable quarter-circular wavelet basis for the smoothing of business, economic and financial time series is explored. A new method for the dating of cycles is discovered, by bringing wavelets, circle geometry and non-linear regression analysis together. The models are implemented in Wolfram Mathematica®, which affords efficient algorithms for symbolic, numerical and functional computation of the proposed methodology. Practical illustrations are given, from South African and other international indices. This work has been presented at the Bureau of Economic Theory and Application (France) and the annual conference of the South African Statistical Association and recently won the Best Paper Award at the European Modelling and Simulation Conference in Spain.

Supervisor: Prof IN Litvine

THE DEGREE OF DOCTOR OF PHILOSOPHY (CHEMISTRY)

PULLENG MOLEKO-BOYCE

Previous qualifications:

2011	BSc	Rhodes University
2012	BSc (Hons) in Chemistry	Rhodes University
2015	MSc in Chemistry	Nelson Mandela Metropolitan University

Thesis:

DESIGN OF METAL ION-SELECTIVE REAGENTS FOR RECOVERY OF PRECIOUS METALS

This study has investigated the chemistry that leads to selective separation of iridium(IV) from rhodium(III). The theoretical and experimental approach adopted has demonstrated the important parameters for the ion-pairing reaction that promotes hexachloridoirdate(IV) specificity. The selective uptake of rhodium has also been demonstrated to be possible *via* coordination of rhodium(III) to tridentate ligands in presence of base metals and other platinum group metals (PGMs). The global demand for platinum group metals in the chemical, petrochemical and automobile industries, against the dwindling natural deposits, requires the development of more efficient recovery methods. This research work thus, provides a significant contribution towards precious metal ions separation in South Africa, and towards recycling of PGMs from spent secondary materials.

Supervisor: Prof ZR Tshentu

THE DEGREE OF DOCTOR OF PHILOSOPHY (GEOLOGY)

THOMAS TSHIFHIWA MUEDI

Previous qualifications:

2009	BSc	University of Venda
2011	BSc Honours	University of Venda
2012	BSc Honours	University of Cape Town
2014	MSc	Nelson Mandela University

Thesis:

EARLY JURASSIC DOLERITES OF THE KAROO LARGE IGNEOUS PROVINCE (KLIP): AN ANALYSIS OF THEIR AGE AND EMPLACEMENT HISTORY FROM SEA LEVEL TO THE DRAKENSBERG MOUNTAINS IN THE EASTERN CAPE, SOUTH AFRICA

Dolerites in the Eastern Cape represent igneous rocks across the Karoo Large Igneous Province (KLIP) that record the initial separation between Africa and Antarctica. Thomas Muedi provides isotope and geochemical data on how and when these extensive rocks intruded from sealevel to nearly 2000 meters close to Lesotho. His results indicate that KLIP took place within less than 750 thousand years, during a transition period that marks a global extinction event 183 million years ago across the southernmost section of the Gondwana supercontinent. His results provide new ferment about how past climate change drove linked continental and oceanic ecosystems.

Supervisor: Prof MJ De Wit

THE DEGREE OF DOCTOR OF PHILOSOPHY (MATHEMATICAL STATISTICS)

MICHAELA CLAIRE RITCHIE

Previous qualifications:

2011	BSc	Nelson Mandela Metropolitan University
2012	BSc (Hons) Applied Mathematics	Nelson Mandela Metropolitan University
2013	BSc (Hons) Applied Sciences (Mechanics)	University of Pretoria
2014	MSc Applied Sciences (Mechanics)	University of Pretoria

Thesis:

STATISTICAL CLASSIFICATION AT A PIXEL AND SUB-PIXEL LEVEL OF REMOTELY SENSED IMAGERY IN THE FALSE BAY REGION

This study investigates the use of varying distributions within a statistical classifier for land cover in the False Bay Region of South Africa. The classifier is applied at both a pixel (commercial imagery) and sub-pixel (free imagery) level under varying data availability conditions to enable recommendations for not only the distribution to be used but also for the number of data points required. Additionally, seasonality is considered to determine the optimal season for classification. The results of the investigation will be of use to analysts concerned with classifications at both a pixel and sub-pixel level in resource constrained environments.

Supervisor: Dr VL Goodall
Co-Supervisor: Prof P Debba
Co-Supervisor: Dr M Lück-Vogel

THE DEGREE OF DOCTOR OF PHILOSOPHY (COMPUTER SCIENCE)

SEYED AMIRSALEH SALEHZADEH

Previous qualifications:

2008	Bachelor of Information Technology	Institute for Advanced Studies in Basic Sciences
2010	BSc Information Technology	Heriot Watt University
2017	MCom Computer Science and Information Systems	Nelson Mandela University
2015	BCom Honours Computer Science and Information Systems	Nelson Mandela University

Thesis:

A FRAMEWORK TO MEASURE HUMAN BEHAVIOUR WHILST READING

Several factors influence human behaviour characterisation whilst reading text. This thesis introduced a novel framework, called ARSAT, that measures the behaviour of humans whilst reading text. The Muse headband, an electroencephalography (EEG) and head motion-sensing wearable device, was used to collect data from participants. The research study further introduced BehaveNet, a deep learning modelling approach, which was used for training deep learning models for human behaviour measurement from sensory data. BehaveNet outperformed previous models when classifying data of two forehead EEG channels (Accuracy = 95%). The Muse headband was also shown as an economical and standard wearable device that can be successfully used in human behaviour research. The research produced 3 international publications.

Supervisor: Prof A Calitz
Co-supervisor: Prof JH Greyling

THE DEGREE OF DOCTOR OF PHILOSOPHY (ZOOLOGY)

GWENDOLINE TRAISNEL

Previous qualifications:

2012	Biological Engineering Degree	Université de Bretagne Occidentale, Brest, France
2013	BSc	Université de Bretagne Occidentale, Brest, France
2015	MSc Marine and Coastal Sciences	IUEM, Plouzané, France

Thesis:

BEHAVIOURAL FLEXIBILITY IN AN ENDANGERED SEABIRD DURING CURRENT CHANGES

Seabirds spend most of their life cycle at sea, facing major changes in their environment. Penguins are amongst the most threatened. In this thesis, the role of individual variability in population dynamics and species survival of the endangered African penguin was investigated. This study revealed that, individual African penguins differed in foraging and parental behaviour, as well as in breeding success, according to their personality and sex. For example, bolder females explored their environment intensively, compared to reserved ones. To understand species' resilience and vulnerability during global changes, integrating individual variability in future population dynamic models is crucial.

Supervisor: Dr L Pichegru
Co-Supervisor: Prof T Clemen

THE DEGREE OF DOCTOR OF PHILOSOPHY (COMPUTER SCIENCE)

LINDSAY WESTRAADT

Previous qualifications:

2005	BSc	Nelson Mandela Metropolitan University
2006	BSc Honours	Nelson Mandela Metropolitan University
2008	MSc	Nelson Mandela Metropolitan University

Thesis:

A MODEL FOR CRIME MANAGEMENT IN SMART CITIES

South African cities are not effectively integrating and utilising available, and rapidly emerging smart city data for planning and management. The main objective of this study was to develop and evaluate a predictive model for crime management in smart cities that effectively assimilated data from traditionally isolated management silos. The practical contribution of this study was the development of an artificial neural network for integrated crime management, and the associated guidelines for the implementation thereof within the South African context. Theoretically, this work contributed towards the development of a generic modelling paradigm for effective integrated decision-making in smart cities. The research produced three international publications.

Supervisor: Prof AP Calitz

THE DEGREE OF DOCTOR OF PHILOSOPHY (GEOGRAPHY)

LEIZEL LYNNE WILLIAMS-BRUINDERS

Previous qualifications:

1998	BA (Sociology and Geography)	University of Port Elizabeth
1999	BA Hons (Geography)	University of Port Elizabeth
2002	MA (Geography)	University of Port Elizabeth

Thesis:

THE SOCIAL SUSTAINABILITY OF LOW-COST HOUSING: THE ROLE OF SOCIAL CAPITAL AND THE SENSE OF PLACE

This study navigated through the complex field of a social sustainability assessment of the housing delivery programme, a topic that continues to attract critical discourse in both policy and praxis, particularly in post-Apartheid South Africa. This is a fairly articulated blend of theoretical review in conjunction with the empirical analysis of the social sustainability parameters of social capital and sense of place, in a highly social fluid community. The study raises a clear argument that the housing agenda in South Africa can only be sustainable if it considers the socio-cultural context of residents. This work has been published in two international accredited journals, and has made a significant contribution to the knowledge of operationalising sustainable housing.

Supervisor: Dr A de Wit

THE DEGREE OF DOCTOR OF PHILOSOPHY (COMPUTER SCIENCE)

GRANT WARREN WOODFORD

Previous qualifications:

2007 BSc

2008 BSc (Hons)

2015 MSc

Nelson Mandela Metropolitan University

Nelson Mandela Metropolitan University

Nelson Mandela Metropolitan University

Thesis:

STATIC AND BOOTSTRAPPED NEURO-SIMULATION FOR COMPLEX ROBOTS IN EVOLUTIONARY ROBOTICS

Through this thesis, entitled “*Static and Bootstrapped Neuro-Simulation for Complex Robots in Evolutionary Robotics*”, an essential contribution to the field of Evolutionary Robotics has been made. The work investigates the development of Artificial Neural Network-based simulators before and after the Evolutionary Robotics process in order to evolve effective control policies for real-world, complex robot morphologies. Two robot morphologies were chosen for the study, namely, Hexapod and Snake robot morphologies. Various proposals for improvements to the approaches investigated in this work were devised and demonstrated to perform better than traditional approaches. The performance, transferability and behavioural properties of the proposed improvements were identified and presented. The study investigates the early foundations of developing more autonomous robotics systems that do not require significant human interventions or knowledge.

Supervisor: Dr MC Du Plessis

THE DEGREE OF DOCTOR OF TECHNOLOGY (CHEMISTRY)

AMOR MARX

Previous qualifications:

1991 BSc

2004 MTech

University of Port Elizabeth

Port Elizabeth Technikon

Thesis:

AN INVESTIGATION OF THE LONG TERM CHEMICAL STABILITY AND PHYSICAL PERFORMANCE OF PMD-CITRONELLAL ACETAL COMPARED WITH DIBUTYL PHTHALATE AND BIS (2-ETHYLHEXYL) TEREPHTHALATE AS PLASTICISERS IN SELECTED COSMETIC FORMULATIONS

Authorities have banned phthalate plasticisers in cosmetic products since they may pose health risks to the consumer. It is, therefore, necessary to find plasticisers of natural origin e.g. bio-plasticisers, as replacement. The aim was to establish if the novel bio-plasticiser, PMD-citronellal acetal, exhibits chemical stability and plasticising properties which are similar or better than bis(2-ethylhexyl)terephthalate (DEHT) and the problematic dibutyl phthalate (DBP) within selected cosmetic formulations. Some novel analytical techniques were executed and cogent remarks were made regarding results obtained. PMD-citronellal acetal and DEHT can be selected as alternative plasticisers to DBP. This investigation contributed to new knowledge, which will assist in replacing hazardous phthalate ester plasticisers, especially in cosmetic formulations.

Supervisor: Dr N Vorster

THE DEGREE OF DOCTOR OF TECHNOLOGY (CHEMISTRY)

JOHANNES SCHEEPERS MARX

Previous qualifications:

1985 BSc

University of Port Elizabeth

1990 BPharm

University of Port Elizabeth

2005 MTech

Port Elizabeth Technikon

Thesis:

AN EVALUATION AND COMPARISON OF THE PLASTICISER EFFECTS OF P-MENTHANE- 3, 8 DIOL CITRONELLAL ACETAL PLASTICISER WITH TRIETHYL CITRATE, AND BIS (2-ETHYLHEXYL) TEREPHTHALATE ON ETHYLCELLULOSE FILMS

In recent years, much attention has been focused on the use of natural or biodegradable plasticisers with low toxicity and good compatibility with polymer materials. The main research objective entailed the behaviour of the novel bio-plasticiser, PMD-citronellal acetal, derived from Eucalyptus oil, and its comparison with a commercial bio-plasticiser, triethyl citrate, and a non-phthalate plasticiser, DOTP, on ethylcellulose films used as enteric coatings in the pharmaceutical industry. The research concluded that the plasticising properties of PMD-citronellal acetal are similar compared to DOTP, and superior to triethyl citrate and could therefore be considered as an effective bioplasticiser for enteric coating formulations in the pharmaceutical industry.

Supervisor: Dr N Vorster