It is my great honour and pleasure to write the first editorial to welcome you to this, the first edition of the DRILL newsletter! The Developing Research Innovation, Localisation and Leadership (DRILL) programme has been initiated to produce excellent and highly skilled scientists of the future and we are extremely grateful to Fogarty International Center (FIC) of the US National Institutes of Health (NIH) for awarding this competitive grant to the UKZN team.

The DRILL programme is run by the five DRILL Principal Investigators, Professors Jonathan Burns, Fatima Suleman, Douglas Wassenaar, Petra Brysiewicz and Dr Mosa Moshabela, who head the various theme areas, Mental Health, Health Systems Strengthening, Research Ethics and Research Integrity, Health Professions Education and HIV/AIDS.

We are very proud to introduce you to our first cohort of DRILL fellows and this newsletter will give you a brief overview of these outstanding individuals, who are from various schools in the College of Health Sciences. We are excited to be starting on this journey with them.

The DRILL Mentors and Supervisors will be instrumental in providing guidance and support to the individual DRILL fellows and are key to the success of this programme. It is a pleasure to work together with these exceptional researchers from within the University of KwaZulu-Natal and we thank them for their invaluable support.

A programme such as this requires attentive programme management and we are very appreciative of our DRILL project management team (Aruna Sevakram, Prem Ramnarain, Themba Manqele, Lungelo Khanyile and Felicity Ngcobo) headed by Dr Nisha Nadesan-Reddy who is a voting member of the DRILL Executive team.

Embarking on such an ambitious programme would not be possible without extensive involvement and support from colleagues and management in the College of Health Sciences and the larger university community, as well as the valued support of the MEC for Health Dr Sibongiseni Dlomo and Dr Elizabeth Lutge of the KwaZulu-Natal Provincial Government.

We sincerely hope you enjoy this first DRILL newsletter and we look forward to sharing more news in the future with you.

Professor Petra Brysiewicz
DRILL: Communicating Principal Investigator

About DRILL

In 2015, the Fogarty International Center (FIC) of the National Institutes of Health (NIH) in the United States of America awarded a competitive R45 million grant to UKZN to begin implementing the DRILL project at the University’s College of Health Sciences. DRILL stands for Developing Research Innovation, Localisation and Leadership.

DRILL is a five year research training programme designed to produce 20 excellent highly skilled scientists. Junior health science lecturers and health professionals interested in research will be appointed as Research Fellows for the programme. Appointed Mentors will mentor the Fellows so they can apply to become National Research Foundation (NRF) rated academics.

There is a growing need in South Africa for locally produced experts. This programme will enable DRILL Fellows to fill that need, and develop leadership skills to strengthen the University’s capacity and strategic direction going forward. The Fellows will also become experts who are world class leaders, in a local setting, allowing for local knowledge development.
To date, ten DRILL Research Fellows have been appointed at UKZN. They will mentor postgraduate students, and themselves be mentored by DRILL programme staff at the University. The ten fellows and their areas of focus are:

**Meet the first DRILL Fellows!**

### Mental Health

#### Dr Hendricks

*BSc (University of the Western Cape), MSc (Stellenbosch University), PhD (University Medical Center Groningen)*

Dr Hendricks is a Molecular Immunologist and a lecturer in the Discipline of Human Physiology, School of Laboratory Medicine and Medical Sciences, UKZN. He is responsible for the supervision of research students. Hendricks’ current research explores the impact of HIV on the cellular structures of infected persons’ immune systems through a study of individuals who are already infected with HIV.

His goals as a DRILL Fellow are to create communities of practice for researchers to collaborate and communicate, improve his publishing record, and his funding capabilities. He would like to ensure more postgraduate students become research scientists.

### Health Systems Strengthening

#### Dr Varsha Bangalee

*B Pharm (University of Durban-Westville), PG Dip (Business Management) (University of Natal), M Pharm (Pharmacoeconomics) (UKZN), PG Dip (Pharmacovigilance and Pharmacoepidemiology) (James Lind Institute), PhD (UKZN)*

Dr Bangalee is a Pharmacist and a lecturer in the Discipline of Pharmaceutical Sciences, School of Health Sciences, UKZN. She supervises postgraduate students and is a lecturer on the on-line Master’s program in Pharmacoeconomics. Her project for DRILL will focus on the use, benefit and applicability of Health Technology Assessments (HTA) with regard to pharmaceutical pricing, policy monitoring and development, and decision making.

#### Dr Verusia Chetty

*BSc (University of Durban-Westville), MSc Physiotherapy (UKZN), PhD (UKZN)*

Dr Verusia Chetty is a Physiotherapist. She practiced both nationally and internationally and joined the Department of Physiotherapy at UKZN in 2003. She is also the Academic leader of Teaching and Learning, School of Health Sciences, UKZN. Her duties include supervising postgraduate students. She completed her PhD where she developed a model of care for the rehabilitation of people living with HIV.

Her goal as a DRILL Fellow is to inform, design, and determine the feasibility of an integrated rehabilitation and paediatric HIV model while developing her research capacity and mentorship skills.

#### Dr Mbali Mhlongo

*Diploma in General Nursing and Midwifery (King Edward VIII Hospital), B Cur et A (UNIZULU), Diploma Community Health Nursing (UNIZULU), M Cur Community Health Nursing (UKZN), Certificate Human Resources (UNISA), PhD (WITS), AHMP (Yale University), Certificate Primary Health Care (UKZN)*

Dr Mbali Mhlongo has the role of quality improvement advisor in healthcare for a research project at Hlabisa in KZN in collaboration with Africa Centre and the Centre for Rural Health at UKZN. She has spent the majority of her professional career in the field of HIV/AIDS research. Her current research project aims to understand factors that are associated with treatment of HIV infection.

Her project for DRILL will focus on the effectiveness of ward care programmes.

#### Dr Thabisile Mpofana

*BSc, BSc Hons (UKZN), MSc (UKZN), PhD (UKZN)*

Dr Mpofana is a Neuroscientist and is interested in Neuroscience research, neurodegenerative disorders, and the study of addiction. She is a developmental lecturer in the School of Laboratory Medicine and Medical Sciences at UKZN.

Her aims as a DRILL Research Fellow are to learn mentorship and teaching skills to help her develop others. She also seeks to learn how to manage research programmes, and successfully apply for funding grants.

### HIV/AIDS

#### Dr Jacobus Hendricks

*BSc (University of the Western Cape), BSc Hons (Stellenbosch University), MSc MedSc (Stellenbosch University), PhD (University Medical Center Groningen)*

Dr Hendricks is a Molecular Immunologist and a lecturer in the Discipline of Human Physiology, School of Laboratory Medicine and Medical Sciences, UKZN. He is responsible for the supervision of research students. Hendricks’ current research explores the impact of HIV on the cellular structures of infected persons’ immune systems through a study of individuals who are already infected with HIV.

His goals as a DRILL Fellow are to create communities of practice for researchers to collaborate and communicate, improve his publishing record, and his funding capabilities. Dr Hendricks hopes to help others achieve academic excellence.

#### Dr Wendy Mphatswe

*M BCH (UKZN), Dip HIVDiploma, MPH (Harvard T.H.Chan School of Public Health), FCOU-SA, MMED*

Dr Mphatswe is an Obstetrician and Gynaecologist, and is a lecturer in the Discipline of Obstetrics and Gynaecology, School of Clinical Medicine, UKZN. She also has the role of quality improvement advisor in healthcare for a research project at Hlabisa in KZN in collaboration with Africa Centre and the Centre for Rural Health at UKZN. She has spent the majority of her professional career in the field of HIV/AIDS research. Her current research project aims to understand factors that are associated with treatment of HIV infection.

Her research productivity, and build his capacity to successfully apply for funding grants.

#### Dr Nkambule

*BSc (University of the Western Cape), BSc Hons (Stellenbosch University), MSc (Cum Laude) (Stellenbosch University) PhD (Stellenbosch University)*

Dr Nkambule is a Medical Biological Scientist in the Discipline of Haematology. He is currently a Senior Lecturer in the Discipline of Human Physiology, School of Laboratory Medicine and Medical Sciences, UKZN and is responsible for the supervision of postgraduate research students. Dr Nkambule's study focuses on inflammation and thrombosis in conditions such as HIV and Type 2 diabetes.

As a DRILL Fellow he hopes to learn how to provide leadership to his students, increase his funding capacity, publishing record, and research productivity, and build his capacity as a teacher and mentor.

#### Dr Qulu

*FCOG-SA, MMED (Harvard T.H.Chan School of Public Health), MBChB (UKZN), Diploma, MPH (UNISA), PhD (WITS), AHMP (Yale University), Certificate Primary Health Care (UKZN)*

Dr Qulu is a Neuroscientist and a lecturer in the Discipline of Human Physiology, School of Laboratory Medicine and Medical Sciences at UKZN. Her study focuses on developing an animal model of sexual defeat to assess behavioural and neuronal changes of both victim and sexual offender and understanding other factors that affect sexual defeat.

Her aims as a DRILL Fellow are to improve as a teacher, learn mentoring, research capacity building and research funding skills. Dr Qulu hopes to help others achieve academic excellence.

#### Dr Mbali Mhlongo

*Diploma in General Nursing and Midwifery (King Edward VIII Hospital), B Cur et A (UNIZULU), Diploma Community Health Nursing (UNIZULU), M Cur Community Health Nursing (UKZN), Certificate Human Resources (UNISA), PhD (WITS), AHMP (Yale University), Certificate Primary Health Care (UKZN)*

Dr Mbali Mhlongo is a Registered Nurse, Midwife, manager and Primary Health Care nurse. She followed her nursing career with extensive study both in SA and abroad. She is also a lecturer in the Discipline of Nursing, School of Nursing and Public Health, UKZN. She completed an Advanced Health management programme with Yale University and the Foundation for Professional Development.

The aim for her research study for DRILL will be to investigate the effectiveness of ward based primary health care outreach teams in their introduction and use of primary health care programmes.

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### Health Professions Education

**Dr Saul Cobbing**
- BSc (Rhodes University), BSc Hons (UCT), BSc Hons (Oxford Brookes University), MSc (UKZN), PhD (UKZN)

Dr Cobbing is a Physiotherapist and Biokineticist, and currently is a lecturer in the Discipline of Physiotherapy, School of Health Sciences, UKZN. His duties include teaching and supervising research for both undergraduate and postgraduate students. He is also a facilitator for the decentralised training programme for undergraduate students.

His proposed project for DRILL aims to develop and implement community interventions for the rehabilitation of people living with chronic diseases, in the comfort of their homes, in an under-resourced district in KZN.

**Dr Diane van Staden**
- B Optom (University of Durban-Westville), MPA (UPS) (Golden Key HIS Membership), PhD (Dublin Institute of Technology)

Dr van Staden is an Optometrist. She is currently the Academic Leader for the Discipline of Optometry, School of Health Sciences, UKZN. Her responsibilities include managing the academic programme within the discipline and the supervision of postgraduate research students. She was central in the development and implementation of a Decentralised Community-Based training model for optometry. Her experience in developing and implementing optometric services and programmes in South Africa and other countries has spurred her interest in the field of health professional development.

Dr van Staden’s goals as a DRILL Fellow are to explore development and Health Professions Education, with the aim of contributing to the development of training programmes and strategies to suit the local context.

### DRILL Advisory Committee

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<tr>
<th>Name</th>
<th>Position</th>
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<tr>
<td>Prof Thumbi Ndung’u</td>
<td>Victor Daiz Chair in HIV/TB Research at the Nelson R. Mandela School of Medicine, UKZN and an Investigator at the Africa Health Research Institute (AHRI).</td>
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<td>Prof Inge Petersen (Deputy Chair)</td>
<td>Director of the Centre for Rural Health, College of Health Sciences, UKZN</td>
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<td>Prof Sabha Essack</td>
<td>Professor in Pharmaceutical Sciences at UKZN, the South African Research Chair in Antibiotic Resistance and One Health and a Wellcome Trust Research Fellow</td>
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<td>Dr Stephen Knight (Chair)</td>
<td>Public Health Medicine Physician</td>
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<td>Prof Miriam Adhikari</td>
<td>Emeritus Professor for Paediatrics, Postgraduate Advisor across disciplines</td>
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<td>Prof Steven Collings</td>
<td>Professor in the Discipline of Psychology</td>
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<td>Dr Elizabeth Lutge</td>
<td>Director of Epidemiology, Health Research and Knowledge Management Units of the KZN Provincial Department of Health; Chairperson of the KZN Provincial Health Research and Ethics Committee.</td>
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<td>Prof Anthony Pillay</td>
<td>Principal Clinical Psychologist and Midlands Complex Head</td>
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<td>Prof Yunus Moosa</td>
<td>Chief Specialist and Head of the Infectious Diseases Unit at the University of KwaZulu-Natal</td>
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<td>Prof Deenan Pillay</td>
<td>Director of African Health Research Institute</td>
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<td>Prof Hoosen Coovadia</td>
<td>Director at MatCH (Maternal Adolescent &amp; Child Health), Emeritus Professor of Paediatrics and Child Health and Emeritus Victor Daiz Professor of HIV (UKZN)</td>
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<td>Prof Quarraisha Abdool Karim</td>
<td>Associate Scientific Director of Centre for the AIDS Programme in South Africa (CAPRISA)</td>
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### Scientific Area

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<td>Dr Mosa Moshabela</td>
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<td>Dr Jacobus Hendricks</td>
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<td>Prof Daya Moodley</td>
<td>Dr Wendy Mphatswe</td>
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<td>Dr Koleka Mlisana</td>
<td>Prof Frank Tanser</td>
<td>Dr Bongani Nkambule</td>
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<td>Prof Jonathan Burns</td>
<td>Dr Anand Moodley</td>
<td>Prof Ahmed Bhigjee</td>
<td>Dr Thabisile Mpfoua</td>
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<td>Dr Suivira Ramilll</td>
<td>Prof Perminder Sachdev</td>
<td>Prof Moses Chimbari</td>
<td>Dr Lihle Qulu</td>
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<td>Prof Fatima Suleman</td>
<td>Prof Busi Ncama</td>
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<td>Dr Jaqui Van Wyk</td>
<td>Prof Ruth Searle</td>
<td>Dr Diane van Staden</td>
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Professor Petra Brysiwicz
B Sc Sc (Nursing) (University of Natal)
B ARTS (Nursing Administration & Nursing Education) (UNISA), M Cur (Critical Care & Trauma) (University of Natal), PhD (Health Sciences) (UKZN)
Professor Brysiwicz has worked with research and education of health professionals in South Africa and Africa for almost 20 years. Through her work in the development of emergency care in Africa, she has experience in multidisciplinary medical education and research. She is currently developing a mentorship programme for emergency nurses in Africa, and is the immediate past president of Emergency Nurses Society of South Africa.
Her role in DRILL is as communicating Principal Investigator and will be to support and mentor the research fellows engaged in work on Health Professionals Education.

Professor Jonathan Burns
MBCHB (UCT), FCPsych(SA), MSc(Res) (University of Edinburgh) and PhD (UKZN)
Professor Burns is Head of the Department of Psychiatry at UKZN and has been closely involved with the development of mental health policy and services in the province. His research interests are global mental health, social epidemiology of mental disorders in low and middle-income countries and mental health systems and services development. He is a member of the ICD-10 Revision Expert Working Group on the Classification of Psychotic Disorders for WHO, a Fellow of the American Psychopathological Association (APPA); and Assistant Editor of the African Journal of Psychiatry.
His role in DRILL will be to support the Research Fellows concerned with Mental Health.

Professor Fatima Suleman
B Pharm (University of Durban-Westville),
M Pharm (University of Durban-Westville),
PhD (University of Illinois at Chicago)
Professor Suleman is Associate Professor of Pharmaceutical Sciences, School of Health Sciences, UKZN. Her professional work has been focused on setting medicine pricing policy and practice both nationally and internationally. She was awarded the Distinguished Teachers’ Award in 2010 by the UKZN for her role in curriculum development and innovative teaching practices. She has a C2-rated research rating from the South African National Research Foundation (NRF). She is the chair of the National Pricing Committee for medicines, a ministerial appointment. She is Professor, and the Prince Claus Chair of Development and Equity for the theme Affordable (Bio) Therapeutics for Public Health, at Utrecht University, Netherlands. She has served on a number of World Health Organization panels and committees in relation to medicine access and pricing.
Professor Suleman’s role in DRILL will be to provide guidance and support to the Health Systems Research Fellows.

Professor Douglas Wassenaar
BA (University of Natal), BA (Hons) (University of Natal), MA (Clin Psych) (Cum Laude) (University of Natal), HPCSA Registered Clinical Psychologist, PhD (University of Natal), Intensive Bioethics Course (Georgetown University)
Professor Wassenaar is a Professor in Psychology at the UKZN School of Human Sciences. His focus for the last 15 years has been on building research ethics capacity for researchers and research ethics committees in developing country settings.
Prof Wassenaar’s role in DRILL will be to contribute to overall program management and specifically oversight of the Research Ethics and Research Integrity requirements, and he will oversee the grant writing workshops component.

Professor Suleman’s role in DRILL will be to support the Research Fellows concerned with Mental Health.

Address

Acknowledgments

Fogarty International Center (FIC), NIH Common Fund,
Office of Strategic Coordination, Office of the Director (OD/OSC/CF/NIH),
Office of AIDS Research, Office of the Director (OAR/NIH),
National Institute of Mental Health (NIMH/NIH) of the
National Institutes of Health under Award Number D43TW010131.

Centre for Rural Health (CRH)
The DRILL offices are based at the Centre for Rural Health (CRH) at the University of KwaZulu-Natal, Howard College. The Centre for Rural Health aims to engage in research, service, and teaching and learning that promotes equitable and quality health care for all through strengthened appropriate health systems (HS), human resources for health (HRH); as well as addressing the social determinants of ill-health in South Africa and other low- and middle-income countries.

Contact Information

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Telephone: 031 260 4781

Further information

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