



NSTF

S.E.T. for socio-economic growth

Preparing for Epidemics in South Africa- human and animal

25-26 February 2021

Speakers and Biographies



Dr Kerrigan McCarthy

Kerrigan McCarthy is a medical doctor who specialised in the laboratory diagnosis of infectious disease. She has spent her professional life supporting public health responses and health system strengthening for communicable diseases. Her experience includes providing clinical care for persons living with HIV, implementation and support for TB/HIV integration and infection prevention and control, and evaluation of new TB diagnostic tests. Since 2015 she has worked at the NICD supporting outbreak investigation and management. Most recently, she has provided technical support for COVID-related public health responses at national and provincial level, including COVIDConnect, COVIDAlert. Most importantly, she is a mother of two vibrant young adults who are pursuing their own careers to make the world a better place!



Prof Nceba Gqaleni

Prof Nceba Gqaleni trained as a biochemist at the former University of Natal and obtained his doctorate at the University of Strathclyde in Scotland in 1996. He is a National Research Foundation rated researcher with interest on immunology, infectious and non-infectious diseases and traditional medicine. He has served on the Interim Traditional Health Practitioners Council of South Africa appointed by the Minister of Health.

In 2007 was appointed Chair of Indigenous Health Care Systems Research, a prestigious programme funded by the Department of Science & Technology and administered by the National Research Foundation. Prof Gqaleni has also served in various positions within UKZN including Director of the Doris Duke Medical Research Institute, Deputy Dean and Director of the Centre for Occupational and Environmental Health.

He has served on various national and international bodies including the Presidential Task Team on African Traditional Medicine, Chairperson of the IKS Bioprospecting and Product Development Platform of the Department of Science & Technology, Deputy Chairperson of the KwaZulu-Natal Provincial Council on AIDS, and has been a member of the WHO (African Regional Office) expert committee on Traditional Medicine. Currently, he is the member of the task team drafting SA's Policy on African Traditional Medicine, Project leader of the KwaZulu-Natal IK-Based Healthy Lifestyle Strategy to fight COVID-19 and beyond, and member of the WHO Regional Expert Committee on Traditional Medicine for COVID-19.



Prof Sheetal Silal

Prof. Sheetal Silal is the Director of the Modelling and Simulation Hub, Africa (MASHA) and Associate Professor in the Department of Statistical Sciences at the University of Cape Town (UCT). She is an Honorary Visiting Research Fellow in Tropical Disease Modelling at the Nuffield Department of Medicine at Oxford University. She received a PhD in Mathematical Modelling of Infectious Diseases in 2014 from UCT. Her primary research area is the development and application of mathematical models to malaria, COVID-19, and other infectious diseases in South Africa, sub-Saharan Africa and globally, with a focus on using mathematical models to predict the dynamics and control of diseases to evaluate the potential impact of control programmes in reducing morbidity and mortality, and supporting policy development.



Ms Gladina Loots

Gladina Loots is the Director for Health Innovation at the Department of Science and Innovation in South Africa and as such is responsible for the implementation of the Health components of the Bioeconomy strategy for South Africa. She concentrates on enabling research and innovation that leads to discovery and evaluation of new drug and treatment regimes, the development of new vaccines and new robust diagnostics, as well as the development of medical devices. Gladina was instrumental in the creation of the Strategic Health Innovation Partnership Initiative at the South African Medical Research Council.

Amongst others, Gladina is a member of the Ministerial Advisory Committees on COVID-19 Vaccines. She also serves on the South African National Health Research Committee, the South African National AIDS Council, and the Advisory Board of the "Towards and HIV Cure Initiative" of the International AIDS. She is a Board member of The Biovac Institute, a Public-Private-Partnership aimed at the local manufacturing of vaccines and biologics.

Prof Stephanie Burton



Professor Stephanie Burton is Professor at Future Africa and Professor in Biochemistry, at the University of Pretoria (UP). From 2011 to March 2020, she was the Vice-Principal for Research and Postgraduate Education at the University of Pretoria. Professor Burton is the President and a Fellow of the Royal Society of South Africa (RSSA), Vice-President of the Academy of Science of South Africa (ASSAf), a Research Fellow for Universities South Africa (USAf), and the Chairperson of the Future Earth Regional Office for Southern Africa (FEROSA).

Professor Burton holds an MSc in Organic Chemistry (1990) and a PhD in Biochemistry (1994) from Rhodes University. Her academic career started in Biochemistry and Biotechnology at Rhodes University, and then as Professor in Chemical Engineering at the University of Cape Town. She served as Director of Postgraduate Studies and Director of the Biocatalysis and Technical Biology Group at Cape Peninsula University of Technology before her UP appointment. Her research interests are in sustainability, applied biochemistry and biotechnology, and she has published widely and supervised numerous postgraduate students. She also has a strong interest in research capacity development and postgraduate training, and she serves on several national bodies related to research and doctoral training. She is recognised for her leadership in managing research strategy and performance, innovation and commercialisation activities, open science and science communication initiatives and internationalisation programmes.

Prof Jeffrey Mphahlele



Dr Jeffrey Mphahlele (PhD) is the Vice President for Research at the South African Medical Research Council (SAMRC) since October 2014. He is an elected member of Academy of Science of South Africa (ASSAf) and National Research Foundation C1 rated researcher. He previously served, inter alia, as a full-time academic at MEDUNSA in various capacities: Professor and Academic Chair of the Department of Virology and National Health Laboratory Service (2005 to Sep 2014) and Co-Director of the SAMRC/Diarrhoeal Pathogens Research Unit, which is also a WHO Rotavirus Regional Reference Laboratory for Africa (2010 to March 2018) and recently designated a WHO Collaborating Centre for Diarrhoeal Diseases Research and Surveillance.

Jeffrey's research publications cover epidemiology, vaccination control of infectious diseases and strengthening immunisation services and policies. He trained, supervised and mentored several Post-Doctoral, Doctoral and Master students as contribution towards developing the next generation of scientists.

He serves on number of governance and advisory structures. These include Vice Chairperson of the European and Developing Countries Clinical Trials Partnership (EDCTP) Association Board (May 2019 to May 2021), South African Deputy Representative in the General Assembly of EDCTP, Vice-Chair of the Global Research Collaboration for Infectious Disease Preparedness (GloPID-R) coordinated by the European Commission (2015 to present), Member of the Interim Board of Coalition for Epidemic Preparedness Innovations (CEPI (Nov 2016 to Mar 2018), Vice Chairperson of the National Health Laboratory Service (NHLS) Board (June 2020 to present), Board member of the South African Health Products Regulatory Authority

(SAHPRA - New Regulator of Medicines, Medical Devices and IVDs) (Oct 2017 to present) and Board of Directors of the Poliomyelitis Research Foundation NPC (Apr 2018 to present).

Finally, Jeffrey is part of the following scientific committees or Task Groups: WHO Scientific Advisory Group of Experts (SAGE) Polio Working Group, Ministerial Advisory Committee on Covid-19 vaccines, South African NITAG (National Advisory Group on Immunisation - NAGI) and South African National Task Force (NTF) for Laboratory Containment of Poliovirus.

Prof Lucia Anelich

Prof Anelich has a PhD in Microbiology and has over 40 years' experience in food microbiology and food safety. She is the owner of her own successful food safety consulting and training business, Anelich Consulting. Prior to starting her own business, she established and headed up a food safety body, at the Consumer Goods Council of South Africa, a first for the country. Prior to that, she spent 25 years at Tshwane University of Technology where she was Head of Department and Associate Professor. She is the only person in South Africa and Africa to be a member of the International Commission on the Microbiological Specifications for Foods (ICMSF). She is Fellow of the International Academy of Food Science and Technology and was President of SAAFoST for 4 years until 2019. She is Adjunct Professor in the Centre for Applied Food Sustainability and –Biotechnology at the Central University of Technology.



During the South Africa listeriosis crisis, she was instrumental in assisting industry and conducted over 40 media interviews. Related to COVID-19, she was the first person in SA to present a webinar on SARS-CoV-2 and Food Safety in March 2020 and has since then presented at several international forums on this same and similar topics. She has written numerous popular articles, press statements and opinion pieces on SARS-CoV-2 and food safety and has co-authored a peer-reviewed publication on SARS-CoV-2 and food safety, published in Frontiers. She formed part of a team at ICMSF in authoring a white paper on this same topic together with her international colleagues, which was circulated widely in United Nations organizations, amongst others. Prof Anelich has served as technical expert on several FAO (Food and Agriculture Organization)/WHO (World Health Organization) committees and consults for FAO and UNIDO. She served as food hygiene expert for the African Union for four years and formed part of an African Union team in 2020, to develop a strategy for the planned AU Food Safety Authority.

She has presented over 140 talks at local and international conferences, most by invitation and is currently co-editor of 2 books on food safety.

Prof Wanda Markotter



Prof. Wanda Markotter started her academic career at University of Pretoria in 2004 where she is currently the Director of the Centre for Viral Zoonoses, Department of Medical Virology, Faculty of Health Sciences. Since January 2016 she is also occupying a DSI-NRF South African Research Chair in “Infectious Diseases of Animals (Zoonoses)”. She is a virologist who has been involved in a multidisciplinary research programme on disease ecology in bat species in South Africa and other African countries since 2005. Research includes extensive fieldwork focusing on bats and potential spillover hosts, virological testing, bat biology, ecological investigations and human behaviour studies. The focus is not only to detect viruses but to understand the factors involved in spillover and develop mitigation strategies. More than 40 postgraduate students already graduated under her supervision, and she has mentored several postdoctoral fellows and emerging researchers. She has published more than 70 scientific publications and several book chapters and regularly contribute to public media forums. Her research is supported by several multi-collaborative international viral surveillance programmes including the Global Disease Detection Programme, Centres for Disease Control and Prevention and Defence Threat Reduction Agency, USA. She also plays a leading role in several governmental committees, including the National Rabies Advisory Group and National One Health forum.

Dr Wynand Goosen



During his postgraduate (2012-2016) and associate years (2017-2020), Dr Goosen has published over 30 peer-reviewed articles in various international journals including 8 first author, 9 senior author and numerous co-author research articles on the enhanced diagnosis of Mycobacterium tuberculosis complex (MTBC) members through the direct detection of mycobacteria DNA by PCR and its growth through culture as well as indirect detection through the measurement of the host’s immune responses towards MTBC antigens. The scope and quality of his research led to public interests (News 25, Eyewitness news, Cape Argus, RSG), collaborations with various other international and local research institutions, private companies, various associations and recently his inauguration into the National Geographic Society. Moreover, over the course of his graduate training, he organized one international conference (5th biannual MDR-, XDR-TB conference, UCT, Cape Town), presented at 13 international conferences and countless local South African conferences. In 2016, he was awarded the Young Einstein of the Year award by LitNet publishers in South Africa and recently received the Vice Rector’s Postdoctoral Fellow Award for Exceptional Achievements in 2020. During 2018, 2019 and 2020 he was also recognized as one of the top 10 young emerging scientists in South Africa by the National Science and Technology Forum together with South-32. He has successfully supervised and graduated one M. Med students, one Honours student, five MSc candidates and 2 PhD candidates. Dr Goosen is also the vice-chairman of the Wildlife Disease Association - Africa and Middle East Section. Dr Goosen closely works with the following institutions: 1) Wildlife Ranching South Africa, 2) Kruger National Park (South Africa), 3) KwaZulu-Natal Enzemvelo Wildlife (South Africa), 4) TiKa-Diagnostics Ltd (UK), 5) Cepheid Inc. (USA), 6) International Livestock Research Institute (Kenya), 7) Institute of Infection and Global Health, University of Liverpool (UK), 8) Saint Louise Zoo (USA), 9) Schulich School of Medicine & Dentistry, Western University (Canada), 10)

London University (UK) and 11) Prifysgol Aberystwyth University (UK) – Prof Glyn Hewinson (external mentor).
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