

# Current Challenges in RDI Systems in South Africa

## NSTF Discussion Forum

DAY 1: 13 August 2024

### Speakers' Biographies





**09:10-09:40**  
**Challenges in Cancer Research and Innovation**



**Prof Mike Sathekge** is the President & CEO of the South African Nuclear Medicine Research Infrastructure (NuMeRI). He is the Professor of Nuclear Medicine at University of Pretoria (UP) & Steve Biko Academic Hospital. Mike has published over 270 peer-reviewed articles, excluding abstracts and book chapters. He is one of the global leaders concerning treatment of prostate cancer using targeted alpha therapy. He also led and introduced several targeted molecular imaging and therapeutic probes in infection and oncology in Africa. Mike is the Editor-in-Chief of Seminars in Nuclear Medicine and Associate Editor of the EJNMMI, the JNM and the WJNM. He is the Chair of the Africa Health Research Institute and the ASSAf panel on research, development and innovation (RDI) of peaceful uses of nuclear technologies in South Africa (SA). Mike is the recipient of numerous international and national merit awards including the [NSTF-South32 Innovation Award: Corporate Organisation](#) for 2024.



**09:50-10:10**  
**Changing the innovative mindset at our State Owned Entities**

**Dr Pradish Rampersadh** is a professional Natural Scientist who is a Group Executive: Research and Innovation at the South African Nuclear Energy Corporation (NECSA) where he oversees the development of new and existing technology in the fundamental and commercial nuclear space. He joined NECSA from the South African Council for Natural Scientific Professions (SACNASP), the legislated regulatory body for natural science practitioners, where he was the Chief Executive Officer. He obtained his PhD in Inorganic Chemistry in Hydrogen Fluoride Adsorption while employed at NECSA. He held various scientific positions in Applied Chemistry, including Section Head of Plasma Technology. In terms of scientific experience, he served a term as a Senior Scientific Consultant at the Fuel Development Laboratories at Pebble Bed Modular Reactor (PBMR) Company,

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|   | <p>where he took responsibility for chemical research and development, and quality test development for the high temperature reactor fuel.</p> <p>Prior to joining SACNASP he was the Content Adviser to the Portfolio Committee on Energy in the National Assembly at the Parliament of South Africa. In this role he advised the Committee on aspects related to its oversight of the Department and Entities involved in the Energy space in South Africa.</p> <p>Dr Rampersadh represented SA at local and international platforms including the Organization for Economic Co-operation and Development (OECD) Global Science Forum Expert Group on Integrity and Security in the Global Research Ecosystem.</p>   |
|  <p><b>10:10-10:30</b><br/><b>Challenges in commercialisation</b></p> | <p><b>Dr Cynthia Motsi</b> is currently the Senior Manager: Intellectual Property Management &amp; Commercialisation at the Agricultural Research Council (ARC) and has experience in the IP management and commercialisation value chain, during which she has been a key strategic, functional and operational decision maker. Her role is to ensure that IP is protected from idea generation to commercial products and services. She supports all ARC campuses by developing and implementing strategies for the management of IP and commercialisation of the ARC's research and development outputs which includes amongst others, assessment of novelty and market access of the potential IP, compliance with relevant legislation on research agreements and also the negotiation of commercialisation agreements.</p> |
|    | <p><b>Dr Mary-Jane Bopape</b> is the Managing Director of the South African Environmental Observation Network (SAEON), a business unit of the National Research Foundation (NRF). She holds a PhD degree in meteorology from the UP, and also held a position as a Postdoctoral Research Fellow at the University of Reading. She worked at the Council for Scientific and Industrial Research (CSIR) and South African Weather Service (SAWS) on weather and climate studies. She cosupervises postgraduate students at UP and the Universities of the Witwatersrand, Limpopo, Cape Town and North-West.</p>  |

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| <p><b>10:30-10:50</b><br/> <b>Research and Development at the South African Environmental Observation Network (SAEON)</b></p>   | <p>She is one of twenty-one 2019 Climate Research for Development (CR4D) fellowship grantees and a 2021 AIMS Women Fellow in Climate Change Science. She was recognised by the President of South Africa as a pathfinder in a 9 August 2019 speech on Women’s Day. She is a co-recipient of the 2008 World Meteorological Organization (WMO) award for young researchers. She served as the vice- and co-President of the South African Society for Atmospheric Sciences (SASAS) during the 2018-2020 term. She was listed as one of the most influential Africans of 2021 by the New African magazine and was honoured as a scientist by the Ghana based Humanitarian Awards Global.</p>  |
|  <p><b>11:05-11:25</b><br/> <b>Challenges in RDI system in SA: Space Science (SANSA)</b></p>          | <p><b>Ms Zama Katamzi-Joseph</b> is a space physics researcher at the South African National Space Agency (SANSA), research associate at Rhodes University (RU) and a NASSP (National Astrophysics and Space Science Programme) guest lecturer at the University of KwaZulu-Natal (UKZN). Her main research interests include ionospheric dynamics and the influence of geomagnetic storms, thermospheric dynamics from neutral winds measurements, coupling between the thermosphere and ionosphere through traveling ionospheric disturbances and tides. She is passionate about science advancement and actively participates in public outreach events aimed towards promoting science and technology to the youth and the general public.</p> |
|  <p><b>11:25-11:45</b><br/> <b>Challenges in commercialisation: Early-stage tech instruments</b></p> | <p><b>Ms Brigitte Binneman</b> is a finance investment professional with more than 15 years’ experience in the public sector, providing access to skilled expertise and infrastructure to lower the barriers for others to innovate and early-stage funding from pre-seed to commercialisation. Brigitte has a passion for innovation and to grow a vibrant and ambitious early-stage tech businesses support ecosystem in South Africa. Inspired by the impending ‘youthquake’ across the African markets and the hustle, grit, creativity, and return that comes along with it, she has a particular interest in early-stage deep tech and converging technologies.</p>  |



**11:45-12:05**

**Innovation at the Council for Geoscience (CGS)**

**Dr Patrick Cole** obtained a Ph.D. from the University of the Witwatersrand (Wits) in 2018. He has been working at the Council for Geoscience (CGS) since 1996, and managed the geophysics unit between 2004 and 2012. He was instrumental in the airborne operation at the CGS, both on a technical and management point of view. Subsequent to this he developed an open source package for the interpretation and modelling of geoscience data, which includes potential field data in 3D and multivariate statistical analysis. He is involved in remote sensing and Python software development. He is currently a chief scientist in the Minerals and Energy unit.



**12:30-12:50**

**Research Infrastructure as a barrier to RDI**

**Ms Sipehele Mafuleka** is the Research Infrastructure and Integrity Officer in the RDI Operational Services Division at Mintek. She is responsible for Mintek's strategy for the planning, investment, and management of research infrastructure; and Mintek's research integrity policies and processes. Sipehele holds an MSc in Microbiology from the University of KwaZulu-Natal (UKZN). She has over 8 years of experience in research infrastructure management and research integrity.



**12:50-13:10**

**Ms Jetane Charsley** is the Head of NIPMO, a specialised service delivery unit within the Department of Science and Innovation (DSI). NIPMO is the implementing office of the Intellectual Property Rights from Publicly Financed Research and Development Act (or IPR Act for short). She started her career at NIPMO in 2012 as Deputy Director: IP Attorney, was appointed in 2014 as Director: Regulatory and Compliance and in 2022 appointed as the Head. Prior to her appointment at NIPMO she was employed by Kisch IP patent and trade mark attorneys for over 3 years and concluded her pharmacist community service year in Sabie, Mpumalanga.

Jetane completed her Bachelor of Pharmacy in 2006 and Bachelor of Law (LLB) in 2010. She is registered as a patent attorney and pharmacist

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|  | <p>and an admitted attorney of the High Court of South Africa. Jetane is a mother of two (very active toddlers), loves coffee and has a passion for intellectual property advocacy and awareness and ensuring that IP outputs (particularly from publicly financed R&amp;D) find application and make a real difference and impact in our society”.</p> |
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