

# IMPERIAL

## Africa Innovates

Wednesday 17 July, 2024, 3.00pm - 19.30pm. Room G34

Africa Innovates is a new conference that aims to promote internal collaborations between Africa-focused Science, Policy and Education initiatives at Imperial College and build bridges with external partners. With a specific focus on STEMB (Science Technology, Engineering, Medicine, and Business). Africa Innovates cultivates an interdisciplinary dialogue for key researchers, shapers, and decision-makers to explore innovative ideas of how to address some of the grand challenges that African societies are facing today. This first conference will showcase some of the Africa-focused activities currently taking place at Imperial.

### Speakers



**Professor Faith Osier, Visiting Professor, Faculty of Natural Sciences**

**Talk: Make Malaria History**

Professor Osier's vision is to "Make Malaria History" through vaccination. Her team designed an innovative custom protein microarray KILchip and tested this on over 10,000 samples from across Africa. She is passionate about emerging African scientists as key agents of change, delivering the health interventions our continent urgently needs.



**Professor Hippolite Amadi, Visiting Professor, Department of Bioengineering**

**Talk: Neonatal Concerns in Africa**

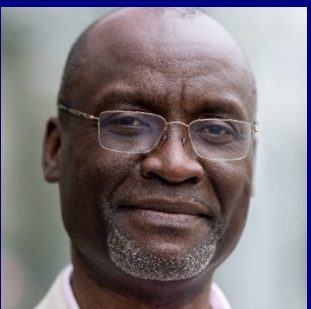
Hippolite and his Nigerian research group have devised numerous, globally applauded medical procedures and devices to help save African infants, including the Politeheart ventilator. He is a regular in the WHO and World Bank list of global thinkers on impact of climate change on neonatal health from the African perspective. Hippolite is the 2023 laureate of the prestigious Nigeria Prize for Science.



**Professor Julie Makani, Provosts Visiting Professor, Faculty of Medicine Dept. Haematology**

**Talk: Curing Sickle Cell Disease**

Julie is a Physician Scientist in the Department of Haematology and Blood Transfusion at Muhimbili University and Muhimbili National Hospital in Tanzania. Her work integrates public health interventions with genomics including gene therapy to improve health and cure sickle cell disease in Africa.



**Professor Washington Ochieng CBE, Head of Dept Civil and Environmental Engineering**

**Talk: Engineering Safety**

Washington has pioneered award-winning research in safety-critical navigation and positioning systems, critical infrastructure resilience and user-centric mobility. He contributes to professional, government and related entities working to end extreme poverty and to help to save lives when humanitarian emergencies hit. He is the first Black Professor to be Head of an Engineering Department at Imperial and was

awarded a CBE in this year King's Birthday Honours list.



**Dr Sunday Popo Ola, Research and Teaching Fellow**

**Talk: Building Bridges**

Dr Sunday Popo Ola is a multi-disciplinary expert in Structures, Systems and Mechanics. Sunday manages large-scale international engineering projects such as FutureHome. He brings together people and interdisciplinary networks for united efforts in engineering, business, and innovation. He is the founder of an initiative called 'Creative Futures – Achieving your Potential' and plays an active role on 'Imperial as One'.



**Dr Shamsuddeen Hassan Muhammad, Google DeepMind Fellow, Dept of Computing**

**Talk: Democratizing AI**

Shamsuddeens' ground-breaking research in Computer Science and Artificial Intelligence is inspired by a deep passionate about diversity and inclusion. He co-founded the HausaNLP research group, to advance research and development in Hausa language, and the Arewa Data Science Academy, to democratize data science and AI education by providing free data science and machine learning training to underserved students in Nigeria.



**Professor Samuel Agyei-Mensah, Visiting Professor of Population Health**

**Talk: The Next African Academics**

Professor in the Department of Geography and Resource Development at the University of Ghana. His areas of expertise are in using geographical concepts, geospatial technology, and citizen science in studying population health and spatial inequality. He is the Director of the Andrew Mellon Foundation funded Centre for Teaching and Learning Innovation (CTLI) and Building the Next Generation of African Academics (BANGA 3) projects.



**Professor Mike Templeton, Professor of Public Health Engineering**

**Talk: Sustainable Sanitation for All**

Michael is Professor in the Department of Civil and Environmental Engineering at Imperial College London and the Oxfam and Water For People / Royal Academy of Engineering Research Chair in Global Sanitation Technology. He is a Fellow of the Institution of Civil Engineers. Prof Templeton is also Co-Chair of Imperial College London's Global Development Hub. He has conducted research and co-authored publications with partners in a number of countries, including Ethiopia, Tanzania,

Ghana, Sierra Leone, Côte d'Ivoire, Sénégal, Bénin, India, and Nepal.

## Programme

**15.00-15.10:** Opening Remarks, Black Inclusivity Catalyst at Imperial

### Science Talks

**15.10 - 15.30:** Professor Faith Osier: Make Malaria History

**15.30 - 15.45:** Professor Hippolite Amadi: Neonatal Concerns in Africa

**16.00 - 16.15:** Professor Mike Templeton: Sustainable Sanitation for All

**16.15 - 16.35:** Professor Julie Makani: Curing Sickle Cell Disease

**16.35 - 16.45:** Professor Washington Ochieng CBE: Engineering Safely

**16.45- 17.15:** Q&A, Refreshments, Outreach & Entrepreneurship

**17.15 - 17.25:** AIMS

**17.25 - 17.35:** Imperial Enterprise Ghana

**17.35 - 17.50:** Dr Shamsuddeen Muhammad: Democratizing AI

**17.50 - 18.05:** Professor Samuel Agyei Mensah: The Next African Academics

**18.05 - 18.15:** Dr Sunday Popo Ola: Building Bridges

**18.15 - 18.30:** Q&A

**18.30 - 19.30:** Networking