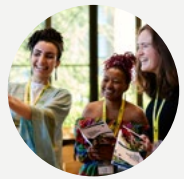


Africa Oxford Initiative 10th Anniversary

Speakers and Programme of Events



8th - 11th June 2026
Maths Institute
University of Oxford

Contents



Foreword

The entire AfOx team is delighted to welcome you to a series of events to celebrate our tenth anniversary.

AfOx began as a series of conversations involving Oxford based researchers and students and research leaders from across Africa. One of the key questions we asked colleagues from across the continent was 'what, if anything, can a global university like Oxford contribute to your mission?'

We based our emerging strategy for facilitating equitable collaborations on the answers to this question. Over the ten years AfOx has grown from two people to a team of twenty and our numbers of Scholars, Visiting Research Fellows, Innovation Fellows and awardees of various grants are ever rising. We are enormously grateful to our funding partners and to so many colleagues in departments and colleges across Oxford and in institutions across the continent, without whose support none of this would be possible.

If one thing characterises all our efforts it is networking, bringing people together across disciplines, cultures and institutions. Of course, the long-term success of such networks depends on all of us and AfOx's role is to facilitate and support. There is no better illustration of the potential power of networking than the group of amazing people who are assembling in Oxford and online this week.

We look forward to an intense week of learning, talking, seeing old friends and making new ones but the real test of success will be the energy and new ideas that we are confident will come out of the week and which will energise and inspire us all as we plan for the next ten years.



Kevin Marsh
DIRECTOR

Speakers



SPEAKER

Prof Alexander Betts

Alexander Betts is Pro-Vice-Chancellor (External Engagement, Sport, and Community), Professor of Forced Migration and International Affairs, and William Golding Senior Fellow in Politics at Brasenose College, University of Oxford.

His research centres on the political economy of refugees' access to socio-economic rights, and he has undertaken extensive research across East Africa. His recent books include the award-winning *The Wealth of Refugees: How Displaced People Can Build Economies* (Oxford University Press, 2021) and *Social Science: A Very Short Introduction* (Oxford University Press, 2024). His forthcoming books include *Authoritarian Sanctuaries: How Dictators Use Refugee Policy* (with Julia Schweers, Oxford University Press, 2027), which provides a political history of refugee policy in Rwanda, Uganda, Ethiopia, and Sudan. He is principal

investigator on the Refugee Economies Programme and is co-founder and faculty director of the Refugee-Led Research Hub (RLRH), which supports people with lived experience of displacement to become thought-leaders and changemakers across society. He has previously been awarded the ESRC's Outstanding International Impact Award, been recognised as a World Economic Forum Young Global Leader, and named by Foreign Policy magazine as among the top 100 global thinkers. His TED talks on refugees and migration have been viewed by over 5 million people, and he has written for the New York Times, the Washington Post, and the Guardian. He was previously Director of the Refugee Studies Centre and Associate Head of the Social Sciences Division. He is a Fellow of the British Academy and the Academy of Social Sciences.



SPEAKER

Prof Kevin Marsh

Kevin Marsh is Director of AfOx and global health researcher who has spent over 30 years living and working in Africa.

In 1989 he established with colleagues a series of research projects on the immunology and clinical epidemiology of malaria at Kilifi on the Kenyan coast. The KEMRI Wellcome Trust Research Programme has subsequently developed into an international health research programme with around 800 staff working across a number of countries in east Africa of which he was director until August 2014. He was chair of the WHO Malaria Policy Advisory Committee from 2012-2019 and is a member of many international

advisory committees relating to malaria and to global health research. Kevin Marsh has a particular interest in supporting science and scientific leadership in Africa and from 2014 he led the development of the concept for a major new platform, the Alliance for the Acceleration of Science in Africa (AESA) which in 2022 transitioned to a free standing Pan African Organisation, The Science for Africa Foundation (SFA), of which he was a founding director. In 2016 he led the establishment of the Africa Oxford Initiative (AfOx) a cross-disciplinary platform to build equitable partnerships with African academics and researchers.



SPEAKER

Ambassador Dr John N. Nkengasong

Ambassador John N. Nkengasong is a distinguished virologist and global health leader with over 30 years of experience in public health.

Currently, he is Executive Director for Higher Education at the Mastercard Foundation, overseeing the higher education and health workforce development portfolios. Previously he was the U.S. Global AIDS Coordinator and the Senior Bureau Official for Global Health Security and Diplomacy (GHSD), leading U.S. efforts to strengthen global health security and manage infectious diseases, including HIV/AIDS. He was the founding Director of the Africa CDC, where he established it as a key autonomous health agency and coordinated Africa's

COVID-19 response, securing vaccines for the continent. He held critical roles at the U.S. CDC and contributed extensively to global health diplomacy. He holds a B.Sc. from the University of Yaoundé, an M.Sc. from the Institute of Tropical Medicine in Antwerp, and a Ph.D. from the University of Brussels, and leadership training certification from Harvard's Kennedy School. Recognized among Time's 100 Most Influential People in 2021, Ambassador Nkengasong has received numerous awards, including the Virchow Prize for Global Health. He is a member of the National Academy of Medicine and the Vatican Pontifical Academy of Life.



SPEAKER

Dr Anne Makena

Dr Anne Makena is Co-Founder and Special Advisor of the Africa Oxford Initiative at the University of Oxford, where she has built cross-continental research and innovation partnerships spanning over 30 African countries.

A Rhodes Scholar with a DPhil in Biochemistry and an Executive MBA from Oxford, she bridges science, business, and capital to accelerate impact. Anne has led

programs on scholarships, fellowships, and innovation incubation, while advising start-ups, INGOs, VCs, and investors. She recently launched Research Alpha, a platform providing scientific advisory and technical due diligence for Africa-focused capital allocators, leveraging her extensive expertise in translational science and strategic partnerships.



SPEAKER

Mr Adrian Bukenya

Adrian Bukenya has more than 20 years of global professional experience in energy, infrastructure, and financial services, 16 of which have been spent in operations across Africa in senior leadership roles. His experiences also include business development, government relations, and regulatory affairs. He is a Board Member of the Petroleum Authority of Uganda and Majestic Brands, Ltd (Kingdom of Buganda).

Prior to joining the Mastercard Foundation as the Country Director - Uganda, Adrian worked as the Country Manager, providing advisory services to the Baker Hughes and GE Businesses with respect to the legal and regulatory frameworks. Previously, Adrian worked with Tullow Uganda Operations as

Commercial and Joint Venture Manager, Shell Oil Products Africa as Lubricants and Liquefied Petroleum Gas Sales Manager for Uganda, Macquarie Bank as Strategic Consultant, Black and Decker Corporation, Maryland, USA as Materials Engineer and Purchasing Manager, and SUNOCO CHEMICALS, Philadelphia, PA, USA as Process and Environmental Engineer.

Adrian holds an MBA in Finance and Economics from the University of Oxford, Said Business School, Oxford, UK, and a Bachelor of Science in Chemical Engineering from Drexel University, Philadelphia, PA, USA, and an International Baccalaureate Diploma from St. Mary's School, Nairobi, Kenya.



SPEAKER

Prof Caesar Atuire

Caesar Atuire is a Ghanaian philosopher and global health ethicist whose work bridges conceptual and empirical bioethics.

He is Professor of Global Health Ethics, Co-Director of Oxford Global Health, and Ethics and Governance Lead for the MSc in International Health and Tropical Medicine at the University of Oxford. He also holds an Adjunct Professorship of Philosophy at the University of Ghana and is an affiliate instructor at the University of Washington. He currently serves as President of the International Association of Bioethics (2024–2026) and was an AfOx Visiting

Fellow in 2018. His research critically examines the conceptual foundations of bioethics, drawing on African and global philosophical traditions to address inequities in global health and advance debates on decolonization and pluriversality. He co-edited *Bioethics in Africa* (2019) and leads a Wellcome-funded international project on solidarity, including the development of a global health solidarity index. His recent book, co-authored with Nancy Jecker, *What is a Person? Untapped Insights from Africa* (2025), proposes “Emergent Personhood.”



SPEAKER

Prof Salome Bukachi

Prof Bukachi is a distinguished scholar in medical anthropology and One Health, with over two decades of experience at the intersection of human, animal, and environmental health.

She is a Professor at the University of Nairobi's Institute of Anthropology, Gender and African Studies, where her research focuses on socio economic and behavioural dimensions of infectious diseases, gender, food systems, and community engagement.

Prof. Bukachi has published widely on integrating social science and gender perspectives into disease prevention, food and water security, and health systems development. She has played a leading role in regional initiatives such as the EU funded COHESA project, which strengthened One Health governance and incubated innovative solutions across 12 African countries.

Internationally, she is a member of the One Health High Level Expert Panel (OHHLEP), providing scientific guidance on global health security. She also serves on the Lancet–PPATS Commission on Viral Spillover Prevention, the Scientific Advisory Board of the Circular Bioeconomy Alliance, and has advised WHO on gender and intersectionality in infectious diseases of poverty.

A recipient of multiple research grants and fellowships, Prof. Bukachi is deeply committed to mentorship, having trained many young African anthropologists and One Health practitioners. She has carved a niche in the emerging field of the anthropology of infectious diseases, advancing African leadership in global health.



SPEAKER

Prof Arjune Sen

Arjune is appointed as Professor of Global Epilepsy at The University of Oxford and Consultant Neurologist at Oxford University Hospitals NHS Foundation Trust.

He is a NIHR Global Research Professor, CEO of the Centre for Global Epilepsy and Fellow of the Oxford Martin School, where he leads the [Programmes on Global Epilepsy](#) and [Equitable Allocation of Medicines](#). Arjune is also Head of the Oxford Epilepsy Research Group; topic advisor to the NICE Epilepsy Guidelines; and a member of Commissions and Councils at the International League Against Epilepsy.

Clinical interests include cognitive, psychological and psychosocial difficulties in people with epilepsy. At a research level, Arjune works on trying to better understand the intersections between epilepsy and

dementia. He is Chief Investigator of the ILiAD (Investigation of Levetiracetam in Alzheimer's Disease) study and leads multiple other trials both in Oxford and the UK more broadly. Over the past several years, a clear focus has been global epileptology with a view to improving care for people in low to middle income countries through the development of culturally tailored, scalable technologies. Such work is just as applicable to marginalised communities in high income countries as it is in resource underprivileged settings.



SPEAKER

Dr Evelyn Gitau

Dr Evelyn Gitau is Chief Scientific Officer at the Science for Africa Foundation (SFA Foundation), shaping a pan-African science, innovation and global health portfolio that tackles the continent's grand challenges—from epidemic preparedness and resilient health systems to equitable research capacity and data-to-impact pathways.

With 25+ years in biomedical research and scientific leadership, she architects high-impact initiatives, mobilises and stewards strategic funding, and builds partnerships with African and global institutions to expand reach, influence and sustainability. Her work spans impact evaluation and implementation research, and she brings deep laboratory expertise in cellular immunology, molecular biology and infectious diseases, including the

discovery and validation of biomarkers of severe disease using omics approaches (genomics, transcriptomics, proteomics and metabolomics) to strengthen diagnosis, risk stratification and targeted interventions. She drives innovation and translation by aligning research agendas with policy and practice, converting evidence into scalable solutions and decision-ready insights for governments, funders and implementers. Previously, she was Director of Programmes at the African Population and Health Research Centre (APHRC). Her contributions have been recognised through multiple awards, including selection as a Next Einstein Forum Fellow (African Institute for Mathematical Sciences). She serves on advisory boards supporting Africa's science and evidence ecosystem and is committed to mentoring the next generation of African research leaders.



SPEAKER

Prof Jimmy Volmink

Dr Jimmy Volmink is the Executive Director for Equity at Wellcome, where he champions the vision to create a healthier future for everyone through transformative research, leadership and innovation for health equity.

Jimmy combines a foundation in clinical practice with significant contributions to academic medicine. He is an Emeritus Professor of Global Health and former Dean of the Faculty of Medicine and Health Sciences at Stellenbosch University, South Africa. He is recognised for his global

contributions to evidence-based healthcare, equity in health and society, research capacity building, and leadership in health sciences education. Jimmy's research has significantly influenced global health policy and practice, particularly in the fields of tuberculosis, HIV/AIDS and cardiovascular disease. He earned his medical degree from the University of Cape Town, a Master of Public Health from Harvard University, and a Doctor of Philosophy in Epidemiology from the University of Oxford.



SPEAKER

Dr Naadira Vanker

Dr Naadira Vanker (MBChB, MBA) is a clinician-scientist and biotech entrepreneur, and the Co-founder and CEO of B-Phage – a biotech startup developing a platform for targeted bacteriophage therapies to address the escalating global threat of antimicrobial resistance (AMR).

She holds both medical and business degrees, with postgraduate training in clinical pathology; and has nearly two decades of experience across the healthcare ecosystem – including clinical medicine, diagnostics, laboratory research, clinical trials, and operational leadership. Naadira

brings a systems-thinking approach to health innovation and has led cross-functional teams in diverse settings, translating scientific research into tangible impact. B-Phage was founded in response to the profound effects of AMR she witnessed first-hand in both clinical and laboratory environments, as well as the challenges encountered in clinical research and drug development. Naadira is deeply committed to advancing global health through collaborative, innovative, and impact-driven solutions.



SPEAKER

Ms Mercy Masanga

Mercy Masanga is an Energy Systems Associate at Ubuntu Energy, where she contributes to the development of decentralised, peer-to-peer energy platforms in Nigeria, with a focus on data integrity, real-time performance tracking, and system reliability to support efficient system design and scalability in resource-constrained settings.

She specialises in energy transitions, digital energy systems, and natural resource management. She holds a Master of Science in Energy Systems from the University of Oxford and has experience supporting governments, multilaterals, and utilities in advancing low-carbon development. Her work focuses on applying geospatial analytics, Python-based modelling, and data-driven approaches to strengthen monitoring, reporting, and decision-making in complex energy environments.

She has also contributed to Tanzania's clean energy policy framework and supported digital energy pilot projects across Africa. Her work emphasises the role of high-quality, verifiable data in de-risking investments and enabling the replication of innovative energy solutions across emerging markets.

Mercy is passionate about driving innovation in clean energy infrastructure as a pathway to climate security, economic resilience, and inclusive growth. She aspires to lead transformative energy solutions across the continent and to establish an African innovation hub dedicated to solving energy access and climate challenges through technology, research, and systems thinking.



SPEAKER

Dr Emeka Nwangele

Emeka is a Rhodes Scholar with a BSc from the University of Nigeria, an MSc and PhD in Engineering Sciences from the University of Oxford, and is reading for an MBA at Harvard Business School.

His career spans sustainable policy, economic planning, technology deployment, and human capacity development, with roles at McKinsey, the World Bank (South Asia), Ariya Finergy (Nairobi), and the Oxford Low Carbon Hub, where he served as a Non-Executive Director.

As co-founder of Greenage Technologies, Emeka has pioneered clean energy solutions, catalysing the deployment of over 9 MW of power and electrifying thousands of households, transforming lives and communities. He has secured multiple venture capital and grant funding rounds, positioning Greenage as a leader in Nigeria's

energy sector. Emeka leads a consortium deploying smart grid systems to modernise Nigeria's energy infrastructure, partnering with the University of Oxford, Innovate UK, and the United Nations Industrial Development Organization (UNIDO).

He envisions a world where equitable access to opportunities enhances livelihoods, and mentors African youth to cultivate the next generation of leaders. Through his technical expertise, strategic vision, and dedication to doing good, Emeka is redefining sustainable development in Africa and beyond.



SPEAKER

Ms Sepiso Mwamelo

Sepiso Mwamelo is the AfOx Head of Education and Training Programmes at the University of Oxford, where she provides strategic leadership and operational oversight for AfOx's education portfolio.

Her work spans key initiatives including the AfOx Graduate Scholarships, Student Engagement, the Scholars Entrepreneurship Fund (SEF 2.0), and Alumni Engagement. Central to the education pillar is the Mastercard Foundation Scholars Program, a flagship initiative that enables passionate, locally rooted, and globally minded African students to pursue graduate studies. The programme offers comprehensive support

for scholars before and during their time at Oxford, with a strong emphasis on holistic development beyond academia, alongside the cultivation of a lifelong and engaged alumni network. Sepiso's research interests focus on the experiences of African scholarship recipients studying in the UK. She is particularly interested in examining how scholarship programmes shape scholars' identities, agency, and future imaginaries, and how these experiences influence their personal trajectories, aspirations, and contributions to their home communities and beyond.



Programme of Events

8-11 June

Monday, 8 June 2026

Time	Session
06:00 – 23:59	All day arrival and registration

Day 1

AfOx Leadership and Impact symposium:
'10 Years of Ideas in Motion: Co-Creating Africa's Future'

Tuesday, 9 June 2026 | 09:00 to 16:00

Venue: Maths Institute (Woodstock Road Oxford, OX2 6GG)

Time	Session
08:00 – 09:00	Registration (Nametags & Bingo) & Breakfast
09:00 – 09:40	Immersive Welcome Space AfOx Impact Gallery showcasing student profiles and Art of Impact Wall
09:40 – 10:00	Opening & Announcements Speaker: Ruth Nanjala [Students Facilitator, AfOx]
10:00 – 10:20	Looking back & looking ahead History of the Scholars and fellows Program and the vision for the future. Speakers: Sepiso Mwamelo [Head of Education and Training Programmes, AfOx] and Hams Bashir [Research Collaboration Manager, AfOx]

Time	Session
10:20 – 11:20	Keynote Conversation: 'The Future of African Innovation' Speaker: Gloria Wawira [Acting CEO National Youth Council of Kenya] Moderator: Anne Makena [CEO, Research Alpha, Co- Founder and Special Advisor AfOx, Honorary Fellow, Somerville College, University of Oxford]
11:20 – 11:30	Interactive Networking Challenge Coordinator: Ali Shioui
11:30 – 11:40	Group Photo
11:40 – 12:00	Transition to break out rooms
12:00 – 13:00	Research & Innovation Showcase (Rooms L1, L4, L5) Mini-TED demos at 3 rotating stations featuring scholars, fellows & alumni innovations. (People's Choice Voting after all presentations)
13:00 – 14:00	Lunch & Exhibitions African cuisine stations, Posters, Art of Impact, and the AfOx library.
14:00 – 15:00	AfOx Fellows Debate: Motion: This House believes that African governments should prioritise traditional healing systems over modern medical innovation. Proposing <ul style="list-style-type: none"> • John O. Akanni • Jane Ndlovu • Emile Sunjo Opposing <ul style="list-style-type: none"> • Oluwole Daramola • Josephine Llale • Louisa Nnenna Onuoha Co-chairs <ul style="list-style-type: none"> • Terembe Cheronu • Prince Forghab Secretary <ul style="list-style-type: none"> • Ainembabazi Buhamizo
15:00 – 15:10	AfOx scholars, alumni and fellows' showcase
15:10 – 15:20	Closing reflections Speaker: Sepiso Mwamelo [Head of Education and Training Programmes, AfOx]
15:20 – 16:00	Poster Presentations and Art of Impact Wall Art of Impact lead: Valerie Amani [Artist and DPhil in Fine Art, University of Oxford]

Day 2

AfOx 10 years Anniversary Celebration: 'Celebrating a Decade Facilitating Africa-Oxford Collaborations'

Wednesday, 10 June 2026 | 09:00 to 17:00

Venue: Maths Institute (Woodstock Road Oxford, OX2 6GG)

Time	Session
08:00 – 09:00	Registration & Breakfast
09:00 – 09:10	Opening & Announcements
09:10 – 09:20	Welcome on behalf of the University of Oxford Prof Alex Betts
09:20 – 09:30	Showcase: AfOx at 10 Video
09:30 – 09:50	AfOx story 1: 'The grant that changed everything' Arjune Sen and Gift Ngwende
09:50 – 10:30	Keynote Address: 'Global Health impact: past, present, and future' John Nkengasong
10:30 – 11:00	Group Photo and Coffee Break
11:00 – 11:20	AfOx story 2: 'Spreading Possibilities' Mercy Masanga and Chukwuemeka Nwangele
11:20 – 11:40	Guest Lecture: 'Research - what is it good for?' Anne Makena
11:40 – 12:30	Panel Session: 'Research for Impact' Chair: Sepiso Mwamelo Panel: Anne Makena, Evelyn Gitau, Adrian Bukenya and Jimmy Volmink

Time	Session
12:30 – 14:00	Lunch & Poster Session
14:00 – 14:20	'Ripples of Change' Salome Bukachi
14:20 – 15:00	AfOx story 3: 'Equity as Remedy: Structural Change or Another 'Band-Aid?' Caesar Atuire
15:00 – 15:30	AfOx story 4: My B-Phage Journey: from Science to Startup Naadira Vanker
15:30 – 16:00	Coffee and Health Break
16:00 – 16:45	Prize presentations Top three presentations from the leadership symposium on the 9th of June
16:45 – 17:00	Wrap Up Kevin Marsh and Anne Makena
18:30 – 20:30	Evening Reception Oxford University Museum of Natural History (Parks Rd, Oxford OX1 3PW)



Day 3

AfOx Scholar, Alumni and Fellow-led side events and meetings

Thursday, 11 June 2026 | 09:00 to 16:00

Venues: Somerville College, St Anne's College and Saïd Business School

Time	Session
09:30 – 10:00	Arrival & Breakfast Somerville College, St Anne's College and Saïd Business School
10:00 – 12:00	6-side events in parallel sessions across Oxford aligned with AfOx thematic areas; <ul style="list-style-type: none"> • Healthy People • Green Futures • Integrated Societies • Innovation for Prosperity
12:00 – 12:50	Lunch
13:00 – 16:00	Parallel Alumni & Fellow Annual General Meetings Fellow AGM: (Margaret Thatcher Hall) Alumni AGM (Flora Anderson Hall)
16:00 – 18:00	Gala Dinner Preparation

AfOx 10th Anniversary & Graduation Gala: 'A Decade of Impact'

Thursday, 11 June 2026 | 18:00 to 23:00

Venue: Cosy Club, Oxford (20 Cornmarket St, Oxford OX1 3EY)

Time	Session
18:00 – 18:30	Networking, drinks & music by DJ Keem
18:40 – 19:30	Welcome speech & flag ceremony
19:30 – 21:00	Multi course dinner & Cultural fusion performances <ul style="list-style-type: none"> • Poem by Vuyo • Spoken word by Wambui • Live Musical Performance by Isaac & Awuor
21:00 – 21:10	Cake cutting ceremony
21:10 – 21:20	Speeches <ul style="list-style-type: none"> • Scholars' representative • Fellows' representative
21:20 – 22:00	Awards Celebration <ul style="list-style-type: none"> • Oral presenters' certificates • Fun humor Awards • Scholar, alumni, fellow best pitch • Networking challenge award
22:00 – 23:59	Dance, music and celebration/Photography at the 360-video booth

Abstracts from the scholars



Sarah Mugoli Balekage

Binti Voice Initiative is an advocacy platform that was established in February 2025 to educate people from around the world about the impact of war on young women in Congo and empower them for positive change, focusing on survivor leadership. Following

a successful fundraising of medical funds supporting survivors of gender-based violence in May 2025, Binti Voice Initiative expanded its capacity to become a non-profit to scale up its impact on the local and international level.

Endalkachew Hailu Guluma

This research project aims to discover how the Aari people of South Ethiopia view and identify with their land (fäč'ekə). The findings reveal that they believe that the gods Sabi and Bāri descended from the sky and created their land/fäč'ekə, and from an element of it, the first ancestor of every clan. There are sacred groves, giant trees, rocks, forests, animals, springs, and mountains from which the first ancestors were created and in which Sabi, Bāri, 'aka ancestral spirits, and s'oyəsi spirits reside and are worshipped. Godəmi, hereditary ritual specialists, and babitoyədə, family elders, have special connections to these and are their guardians. Wild animals in such places are considered kin and are ordered

by godəmis to protect them and to punish trespassers. Some animals and old trees are given agency, respected, and conserved. Aari people believe their spirits will return to this same land/fäč'ekə upon death and join the ancestors. The grace of gods and ancestors will stay with them and grant them blessed and prosperous lives if they keep the sacred places and trees. As this chapter will show, Aari people have an effective Indigenous environmental management system that is grounded on their traditional knowledges and values and that views the Land/fäč'ekə as a more-than-human animated world in which humans, plants, animals, spirits, gods, etc., reside in harmony, deeply interconnected.

Hana Abebe Gebreselassie

Due to limited access to newborn screening programs in most of the resource-limited settings, many congenital anomalies go undiagnosed and untreated, leading to adverse outcomes. This study aimed to develop and validate a newborn screening tool for congenital anomalies for use in resource-limited settings.

A Delphi approach was used to develop the screening tool, and then, validation was done by applying it to 1,160 neonates at a public hospital in Addis Ababa. Data were collected using Kobo Collect and then analysed using STATA version 16.

Males accounted for 673(58%) of the screened newborns. The mean age was 26.9±33 hours. Term newborns accounted

for 898(77.4%). The prevalence of congenital anomalies in our series was 5.7%, with the most involved body systems being the central nervous system (33.7%), genitourinary (18.5%), gastrointestinal (10%), and musculoskeletal (10%). The sensitivity and specificity of this tool were 86.4% and 97.8%, respectively. Furthermore, the positive and negative predictive values of the

Leila Ilupeju

Over the years, there has been a surge in urgent suspected skin cancer (USSC) referrals, resulting in an increasing demand for dermatology services. On the other hand, NHS hospitals are understaffed and struggle to deliver timely care that meets national cancer standards. This imbalance has resulted in long wait times and worsening health outcomes for patients with skin cancer. The tele-dermatology service at Chelsea and Westminster Hospital (CWH) introduced DERM, an artificial intelligence (AI) triaging tool to enhance the timely and appropriate management of patients referred through the USSC pathway. In this study I explore the implementation challenges of this technology to inform ongoing strategies to spread and scale up its use.

Aim: To explore the challenges to implementing and using DERM, a novel AI-based triaging tool, within the tele-dermatology service at CWH and inform ongoing strategies to scale its use within the Trust.

screening tool were 70.4% and 99.2%, respectively.

Congenital anomalies are not rare findings in our hospital. The neonatal screening tool, which was developed through this study, has commendable validity results in addition to being low-cost and easily implementable.

Methods: I used a mixed methods approach, collecting qualitative data through semi-structured interviews with staff involved in the implementation and use of DERM, supported by quantitative data from internal reports. I applied the NASSS (non-adoption, abandonment, spread, scale, and sustainability) framework to inform my evaluation approach. Qualitative data was coded and analysed through inductive thematic analysis guided by the NASSS framework domains.

Findings: The evaluation underscored key interacting influences to consider in scaling up the use of DERM. These included network connectivity, interoperability and integration of platforms, clinician trust, and patient acceptance. Other factors included leadership, governance and procurement frameworks, and public narratives on AI.

Conclusion: This evaluation highlighted key system-wide challenges to scaling up this service and technology. Drawing on these insights, I propose some guiding recommendations to increase the uptake of such AI technologies.

Cynthia Amaning Danquah

Discovery and Development of New Antimicrobials from Natural Sources: The case of Allium species.

The escalating burden of Antimicrobial Resistance (AMR) necessitates the exploration of novel therapeutics from natural sources. Research on Allium cepa and related species such as Allium sativum and Allium ascalonicum suggests significant antimicrobial potential, though translation into clinical applications remains limited.

This work narrates evidence from experimental and Ghanaian-based studies on selected Allium species, focusing on anti-infective activity, resistance-modifying effects, and synergistic interactions with conventional antibiotics.

Across studies, Allium species demonstrated broad-spectrum antimicrobial activity against Mycobacteria, Gram-positive and Gram-negative organisms, including resistant strains. Reported resistance-reversal effects and synergistic interactions highlight their potential role as adjuncts to existing therapies. These activities are largely attributed to sulfur-containing compounds, flavonoids, and related phytochemicals.

Conclusion: Collectively, the evidence suggests that Allium species represent a promising yet underutilized source of antimicrobial agents. However, variability in study design, extraction methods, and limited clinical data constrain translation. Future efforts would prioritize standardization, mechanistic studies, and clinical validation to advance Allium-derived compounds into therapeutic use.

Augustina Akonnor

Inclusive Innovation: Women Entrepreneurs, Digital Technology, and Climate Action in Ghana

As Ghana intensifies its climate action agenda, inclusive innovation emerges as a critical pathway for sustainable transformation. This study examines how women entrepreneurs in rural and peri-urban communities are harnessing digital tools and green technologies to advance climate adaptation and resilience. Focusing on sectors such as agriculture, clean energy, and circular economy ventures, the research

employs qualitative methods—including interviews and focus group discussions—to uncover how gender, technology, and entrepreneurship intersect to drive equitable climate solutions.

Beyond grassroots practices, the study evaluates policy frameworks on digital innovation, climate financing, and gender equity, assessing their effectiveness in enabling inclusive climate entrepreneurship. Findings highlight the transformative potential of tailored digital platforms, inclusive incubation programs, and gender-

sensitive climate funding schemes in positioning women and marginalized groups as central actors in Ghana's climate resilience strategy.

By bridging evidence with practice, the research proposes actionable policy recommendations: strengthening gender-responsive digital infrastructure, fostering public-private partnerships that prioritize

Onesmus Onyango

Nurses in resource-constrained care settings often face heavy workloads, but little is known about how they manage time to deliver care. This study examined nursing workflows and time use in high-mortality neonatal units in Kenya.

Using a time-and-motion shadowing approach, 1-2 nurses per 12-hour shift were observed across eight county hospitals. Activities were recorded using an Activity Log Sheet and analysed to classify tasks. A second phase assessed time spent on critical tasks, multitasking, and interruptions.

A total of 499 person-hours were observed across 51 shifts. Median patient load per

Mercy Kemboi

Prevalence of Plasmodium falciparum histidine-rich protein 2 and 3 (pfhrp2/3) gene deletions in malaria patients at surveillance hospitals in Kenya.

Malaria remains a significant public health burden in sub-Saharan Africa, accounting for nearly half of the estimated 282 million global cases reported in 2024. Clinical

inclusive green entrepreneurship, and embedding social inclusion metrics in climate adaptation funding. Ultimately, this work contributes to the global dialogue on how inclusive innovation-driven by women and enabled by technology, can accelerate Ghana's climate goals, while laying the foundation for a more just and sustainable climate transition.

shift was 38 (day) and 32 (night), with about 0.9 nursing hours per patient. We identified 1,891 task episodes across 36 tasks grouped into eight domains. Most time was spent on direct (37%) and indirect (23%) patient care. Nurses frequently multitasked, experienced interruptions, and spent limited time - often under 20 minutes - on critical tasks.

Nurses juggle clinical care with administrative and teaching roles under severe time constraints. Limited focus on complex tasks may compromise patient safety, highlighting the need to reassign non-clinical duties and improve staffing.

diagnostic approaches include microscopy, the gold standard, and rapid diagnostic tests (RDTs), preferred for ease of use and quick turn-around time. Most RDTs target the Plasmodium falciparum histidine-rich protein 2 (PfHRP2) which offers high sensitivity for detecting P. falciparum malaria compared to other targets such as Plasmodium lactate dehydrogenase. Unfortunately, the

increasing adoption of PfHRP2 based RDTs has led to increase in malaria parasites with deleted pfhrp2 and pfhrp3 genes, thus, producing false-negative results that undermine malaria treatment success and eventually elimination goals.

This study reports on the prevalence of pfhrp2/3 gene deletions in 29 malaria patients presenting at surveillance hospitals in western Kenya, coastal region (Mombasa and Lamu) and Isiolo county. Presence of P. falciparum was confirmed using quantitative PCR (qPCR) targeting the 18S rRNA gene. Following extraction of genomic DNA, pfhrp2 and pfhrp3 genes were amplified using a nested PCR targeting Exon 2, with second-round products resolved on 3% agarose gel electrophoresis. Controls included parasites with intact pfhrp2 and pfhrp3 genes, both or single gene deletions.

Millen Mapunda

Growth Monitoring and Promotion Utilisation Among Children Aged 24–59 Months Attending an Urban Health Centre in Malawi: Prevalence and Associated Factors.

Background: Growth Monitoring and Promotion (GMP) is a key child survival strategy for preventing undernutrition in children under five. However, utilisation among children aged 24–59 months in Malawi remains low, with limited evidence on associated factors. This study assessed the prevalence and determinants of GMP utilisation at Mzuzu Urban Health Centre.

Methods: A facility-based cross-sectional study was conducted from July to

September 2022 among 387 caregivers attending under-five clinics. Data were collected using interviewer-administered questionnaires and verified using health passports. Multivariable logistic regression identified factors associated with GMP utilisation.

Results: GMP utilisation was 39% (95% CI: 34–44%). Higher utilisation was associated with children aged 24–35 months (AOR=2.51; 95% CI: 1.55–4.05), caregiver age ≤ 35 years (AOR=2.78; 95% CI: 1.33–5.79), secondary education (AOR=1.77; 95% CI: 1.10–2.86), high GMP-related knowledge (AOR=2.01; 95% CI: 1.23–3.27), and receipt of nutrition counselling (AOR=2.90; 95% CI: 1.70–4.98).

Of 29 blood samples analysed, overall pfhrp2 and/or pfhrp3 gene deletions were 20.7% (n = 6), comprising three (10.3%) double deletions and three (10.3%) pfhrp3-only deletions. The three double deletions were from hospitals in resource-limited settings where RDT usage is probably high.

In conclusion, these findings suggest possible selection pressure from widespread HRP2-based RDT use. We therefore recommend strengthened molecular surveillance to define prevalence and geographic spread of pfhrp2 and pfhrp3 genes deletions, and targeted public-health actions to revise testing algorithms if deletions are confirmed in larger, representative samples. The small sample size limits generalizability of our findings and calls for larger, surveillance studies.

Conclusion: GMP utilisation was low despite high awareness. Strengthening caregiver education, growth-chart interpretation, and

Fernando Gimo Simango

In short, it is a programme ('project') with two pillars. One aims to translate research into impactful outcomes relevant to policy

Dr. Rachel Obonose Titus

Process Development of Standard Operating Procedures for the Management of Community Pharmacies During Periods of Public Health Emergencies

Abstract

Background: Community pharmacists (CPs) used their discretion in handling challenges to operations caused by the COVID-19 pandemic. The study aimed at developing standard operating procedures (SOPs) to fill this gap. Methods: Mixed data were collected from 21 in-depth interviews and 418 semi-structured questionnaire administration to CPs in Lagos, Osun and Oyo states, southwestern Nigeria, during the COVID-19 partial lockdowns. Thirteen SOPs were developed from the innovative strategies the CPs employed in managing

Samuel Senayon Olaoluwa

Extalgia: A Trajectory of Grief and Creativity of the Left-behind the Context of Migration.

This poster curates extalgia, an emergent migration theory that is attentive to the grief of the left-behind as predicated on the

routine nutrition counselling may improve utilisation in similar urban health settings in Malawi.

and transforming society. The other aims to empower people by providing them with the necessary knowledge and information.

operations. The SOPs were implemented for 2 weeks by 19 CPs in Ile-Ife providing feedback with an evaluation form. The refined SOPs were shared with members of the national chapter of the Association of Community Pharmacists in Nigeria through their WhatsApp Group via Google form. Results: Challenges CPs (97.6%) experienced included high logistics costs (84.5%), access to the pharmacy (57.5%), and involvement in expanded services. Across IDIs, many interviewees expressed need for SOPs and 88.6% were willing to support the SOPs adoption. Conclusion: Primary users' involvement in developing the SOPs enabled relevant and context-sensitive content. Pharmacy policymakers' engagement to explore adoption nationally is recommended.

dispersal of their loved ones to other lands. It is equally attentive to stayers' contours of creative reactions for transcendence. The poster, therefore, designs a trajectory of grief and creativity as a simultaneous reaction in the left-behind as informed by the effigy-carving practice among the Ogu of Nigeria

and Benin Republic in the wake of the death of a twin-child. The simultaneity of grief and creativity-- which is also extendable to the looting of artefacts and anatomical remains-- can be expressed in both literal and metaphoric ways, manifesting as new forms of journeys either in search of the dispersed or in other directions, as well as through processes of substitution and adoption. The simultaneity is also

John O. Akanni

Lassa fever remains a persistent and deadly viral disease in West Africa, contributing significantly to public health challenges due to its high morbidity, mortality, and frequent outbreaks. Despite the implementation of various control strategies, the disease continues to resurface, indicating the need for more effective and economically viable interventions. This study develops and analyzes an optimal control framework designed to mitigate the spread of Lassa fever while accounting for resource limitations. The model integrates five key control strategies: vector control, personal protection, quarantine of exposed individuals, public health education, and environmental disinfection. Using Pontryagin's Maximum Principle, the study derives necessary conditions for optimal control. To evaluate the economic and epidemiological effectiveness of each control strategy, tools such as efficiency

legible at the level of creative practices in music, writing, painting, carving, etc. Yet, the poster argues that there are limits to the aspirations of creative transcendence, which underscores the vulnerability of the left-behind. Therefore, it is imperative to reconfigure the migration circle to include the left-behind towards the establishment of systems of care for the left-behind.

analysis, Pareto optimization, Average Cost-Effectiveness Ratio (ACER), and Incremental Cost-Effectiveness Ratio (ICER) are employed. Simulation results indicate that while combining all five strategies yields the most significant reduction in disease transmission, it is not the most cost-effective solution. Instead, the optimal combination in terms of both impact and economic feasibility is vector control coupled with quarantine of exposed individuals. These findings highlight the importance of prioritizing interventions that offer the greatest health benefits at sustainable costs. Public health policymakers are encouraged to focus resources on this combined approach to reduce environmental contamination, interrupt transmission cycles, and lower the overall burden of Lassa fever in vulnerable populations.

Louisa Nnenna Onuoha

As a museum professional, my work includes community engagement and provenance projects. At the core of this is strategically decolonising museums methods of communication, operation and providing adequate and more accurate information on the collections of the museum. Lately, I have worked within this area and I have focused more on

encouraging local communities to come to the museum and join us in telling their stories themselves. In my presentation, I will like to share how I have been able to do this type of work at the Pitt Rivers Museum during my time as an Afox fellow and how I have continued working on some of the west African masks and textiles in their collection even afterwards.

Kelly Elimian

Development of an Executive Leadership Course in Health Security for Nigeria: A Scoping Review.

Background: The COVID-19 pandemic exposed major gaps in global health security (GHS) preparedness, particularly in leadership and workforce capacity. Despite the expansion of GHS training programmes across sub-Saharan Africa, executive-level leadership training remains limited. This study mapped the regional GHS training landscape to inform the development of a contextualised Executive Leadership Course in Health Security for Nigeria.

Methods: A scoping review was conducted using the Arksey and O'Malley framework and reported in line with PRISMA-ScR guidance. Peer-reviewed and grey literature sources were searched across Medline/ PubMed, Embase, Web of Science, CABI Global Health, Google Scholar, organisational websites, and reports from institutions including WHO and Africa CDC. Eligible records described training initiatives related to epidemic preparedness, emergency response, surveillance, leadership, One Health, and related GHS competencies.

Quantitative descriptive and thematic analyses were undertaken.

Results: Eighty-six GHS training initiatives were identified. Most programmes targeted frontline workers and mid-level professionals, while only one focused specifically on senior executive leadership. Common curriculum domains included emergency preparedness, epidemiology and surveillance, leadership and governance, risk communication, and laboratory systems. Hybrid and modular delivery approaches predominated, with mentorship, simulations, and field-based learning frequently utilised. Findings informed the development of a modular Executive Leadership Course integrating strategic leadership, crisis governance, multisectoral coordination, and digital health security.

Conclusion: Executive-level leadership training remains a major gap within the GHS training ecosystem in sub-Saharan Africa. The proposed course provides an evidence-informed and contextually relevant model for strengthening health security leadership capacity in Nigeria and across Africa.

Cynthia Dushime

Antimicrobial Resistance (AMR) is one of the greatest threats to health security. According to WHO it is estimated that AMR is directly responsible for 1.3 million deaths globally and contributes to nearly 5 million deaths. Gaps in prevention, access, and preparedness will continue to widen in the absence of concerted political action. The Health Diplomacy Alliance initiated Check

the Box a collaborative initiative to enhance the monitoring of political commitments on AMR and to advance coordinated action nationally and globally. This approach integrates policy advocacy across prevention, stewardship and surveillance while securing innovation and sustainable financing to fulfill and ensure practical progress.

Josephine Liale

Biophilic design (BD) is a way of bringing nature indoors or into the built environment. Including BD in construction improves air quality, reduces energy consumption and enhances thermal comfort. The integration of BD in construction is, however, still limited. This study uses a case study design to investigate stakeholders' perceptions about integrating biophilic design in construction. Thematic data analysis is used to analyze the data. The findings show that some of the barriers to integrating BD in construction include high cost, limited knowledge, and

lack of awareness of standards. These barriers could potentially be addressed by education and awareness, creative cost solutions and establishing a regulatory framework that includes the integration of BD in construction. This study contributes to the discussion about sustainability in buildings. Even though, the study is limited to South Africa, findings of the study can be used to make propositions about the integration of biophilic design in other developing countries.

Andisani Masindi

Beyond the 1%, from Good Intentions to Greater Impact.

South Africa has one of the most organised Corporate and Social Investment (CSI) systems globally. Under Broad-Based Black Economic Empowerment (B-BBEE) legislation, companies commit 1% of net profit after tax (NPAT) to Socio-Economic Development (SED). This formula has mobilised approximately R160 billion (\$8.4 billion) since 1998, with R13.1 billion (\$686

million) allocated in 2025 alone. Yet the country remains the most unequal in the world. While investment continues to grow, meaningful transformation has yet to follow.

The author has overseen a \$1 million CSI portfolio, managing budget allocation, partner selection, and compliance reporting, thereby gaining first-hand insight into the challenges that constrain corporate giving in South Africa. The core issue is that the CSI model was built for compliance rather than transformative impact.

Using the T-M-O innovation strategy framework (Ventresca & Seidel, 2023), this research argues that CSI is caught between compliance incentives and an underdeveloped market infrastructure for

Tongai G. Maponga

Introduction: Ambitious global targets aim to eliminate Hepatitis B as a public health threat by 2030, yet population-level data from African settings remain limited. We investigated HBV prevalence, exposure, vaccine-mediated immunity, and treatment eligibility in a rural KwaZulu-Natal, South Africa population.

Methods: Archived plasma samples from 2,200 individuals, stratified by age, sex, and HIV status, were screened for HBsAg, anti-HBc, and anti-HBs. HBsAg-positive samples underwent alanine transferase (ALT) and HBV DNA viral load testing. Demographic and clinical correlates of HBV biomarkers were evaluated, geographical distribution of HBsAg explored, and treatment eligibility assessed using World Health Organization criteria.

Sainabou Laye Ndure

The Human Genetics Awareness Association was founded to address the growing gap between advances in human genetics and public understanding of genetics in The Gambia and wider African communities. Despite increasing genomic research globally, genetics remains poorly understood in many communities, often leading to stigma, misinformation, and delayed healthcare engagement for individuals affected by genetic conditions.

impact. It proposes a Collaborative Impact Fund, a pooled, outcomes-based vehicle to shift corporate giving from transactional compliance towards systemic, measurable change.

Results: Weighted HBV infection prevalence was 10.4% (95% CI: 9.0–12.1), while 34.9% (95% CI: 32.4–37.5) showed evidence of prior exposure and clearance. Vaccine-mediated immunity was 8.9% (95% CI: 7.5–10.4) but was higher among those born after 1995, following vaccine implementation. More than 60% of HBsAg-positive individuals met treatment eligibility criteria.

Conclusion: HBV infection and exposure remain high in rural KwaZulu-Natal, while vaccine-mediated immunity is low. These findings highlight the urgent need to scale up vaccination, diagnosis, risk assessment, and treatment programmes to support South Africa's progress toward HBV elimination.

HuGAA was established as a community-focused initiative aimed at improving genetics literacy through public engagement, educational outreach, media discussions, and advocacy. Activities have included genetics awareness sessions, collaborations with healthcare professionals and researchers, student engagement initiatives, and media appearances focused on simplifying genetics for the public.

In March 2026, HuGAA launched the inaugural World Human Genetics Day in The Gambia, bringing together researchers, clinicians, students, and members of the public to promote dialogue on human genetics and health in Africa.

Joseph Mwaka

Mapping the Training Landscape for Ethical AI in Health Across Africa: A Scoping Review.

Background: Artificial intelligence is rapidly entering African health systems, yet effective governance depends on trained regulators, ethics committees, health technology assessors, and frontline clinicians capable of evaluating and overseeing these tools. Training initiatives supporting ethical AI use across African Union member states remain fragmented and poorly documented.

Objective: To systematically map, characterise, and synthesise evidence on training and capacity-building initiatives for ethical AI governance in health across Africa.

Methods: Following PRISMA-ScR guidelines and the JBI population–concept–context framework, we searched PubMed, Scopus, Web of Science, Embase, IEEE Xplore, SSRN,

Ainembabazi Buhamizo

My project seeks to vend high-quality and durable basic examination and diagnostic devices, with a particular focus on rural market settings. These products will be imported at a highly competitive cost, leveraging tax exemptions on medical supplies provided by the Uganda Revenue Authority (URA). I intend to utilise existing

This poster highlights the development of HuGAA, its public engagement activities, and the role of community-driven advocacy in improving genetics awareness and reducing stigma in underrepresented settings.

and African Journals Online, alongside grey literature from regional bodies, regulatory authorities, and ministries of health (January 2015–December 2025).

Preliminary Findings: Early results reveal significant heterogeneity in training approaches, with initiatives concentrated in a limited number of countries and predominantly targeting researchers rather than regulators or ethics committees. Notable gaps exist in francophone regions and among health technology assessment bodies.

Significance: This review provides the first continental evidence map of AI ethics training in health, identifying critical gaps and informing the development of a competency framework to strengthen African capacity for safe, accountable AI deployment.

Protocol registered: OSF (osf.io/d2rcm).

social media channels and established public health facility contacts to reach potential clients.

In addition, each product will be accompanied by a flyer or brochure containing clear information on home-based device handling, directions for use, reference

guides to support result interpretation, and emergency considerations, where applicable. My longer-term plan is to scale access by developing a reputable vending network with extensive and equitable national coverage, with particular emphasis on rural communities. Ultimately, I aim to integrate this initiative with a basic telemedicine platform that offers readily accessible, professional, evidence-based linkages to care, as well as emergency support.

David Ssevviiri

For a commutative unital ring R with fixed ideals I and J , we introduce and study I -prime R -modules and (I, J) -prime R -modules together with their duals I -coprime R -modules and (I, J) -coprime R -modules respectively. We employ category-theoretic techniques to reveal their structural properties. Our main results are versions of the Greenlees-May Duality and

Chonde Chipulu

IVDrate with Dr Chonde is a medical start-up focused on addressing the increasing burden of obesity and obesity-associated non-communicable diseases through an integrated and patient-centred approach. I combine medical expertise, aesthetic wellness services, and preventive healthcare strategies to provide safe, evidence-based, doctor-directed weight loss programmes within both community and corporate settings. Recognising obesity as a chronic multifactorial disease influenced by genetic, environmental, metabolic, behavioural, and psychological factors, the initiative seeks to improve long-term health outcomes through sustainable lifestyle interventions.

The overarching goal of this initiative is to increase household access to basic examination and diagnostic tools, particularly durable digital blood pressure monitors, glucometers, and glucometer test strips, at a subsidised cost. This will facilitate regular home-based check-ups and monitoring for individuals already engaged in care.

the Matlis-Greenlees-May Equivalence to the setting of these prime and coprime modules. This generalizes work on I -reduced modules and I -coreduced modules. We demonstrate that these “locally prime” modules serve as a tool for studying the classical “globally prime” modules, creating a bridge between local and global primality.

The practice has incorporated aesthetics and wellness services into corporate wellness days to promote health awareness, early screening, and preventive care among employees. In addition, partnerships with gyms and fitness centres have enabled patients to access medically supervised weight management programmes in accessible and supportive environments. These programmes include comprehensive health assessments, individualized treatment plans, nutritional counselling, exercise guidance, and ongoing clinical monitoring.

By integrating healthcare, wellness, and fitness sectors, the aim is to reduce the prevalence and complications of obesity-related diseases such as type 2 diabetes mellitus, hypertension, cardiovascular

disease, and metabolic syndrome. This model demonstrates how innovative private healthcare initiatives can contribute to global public health efforts targeting chronic disease prevention and healthier lifestyles.

Nyasha Manyeruke

For over three decades, Kano State in northern Nigeria has reported maternal mortality ratios exceeding 1,000 deaths per 100,000 live births, more than double the national average. To address critical evidence gaps, the Kano State Surveillance for Evidence and Policy (KASSEP) programme was established to systematically capture maternal deaths using the WHO Verbal Autopsy tool. While a public dashboard has improved access to surveillance outputs, the expanding scope of KASSEP created the need for locally embedded, open source analytical tools that support reproducible and policy relevant decision making.

As part of my AfOx Ubuntu project, I designed and deployed an open source R Shiny application to support fine scale spatial analysis of maternal deaths across Kano State’s local government areas. Retrospective (2023) and prospective (2024

to present) KASSEP datasets were cleaned and processed in R, with historical locations geocoded and integrated with open health facility data from GRID3 and population density surfaces.

The R shiny application enables direct visual interrogation of maternal death context in Kano State, allowing policy makers to explore spatial distribution, proximity to health facilities, and population context at local government area level. The R Shiny application is currently being integrated into the KASSEP dashboard to support evidence informed planning by policy makers in Kano State.

This work has been accepted for presentation at the African Digital Health Summit in June this year and demonstrates how open source R Shiny tools can strengthen evidence to policy translation in maternal health.

Thandeka Margaret Dube

Despite sustaining the primary healthcare needs of approximately 80% of people across many African countries, traditional medicinal health systems remain institutionally peripheral within national health governance. This paper examines how differing legal frameworks in Kenya and South Africa mediate the recognition,

governance, and sovereignty of these systems, arguing that formal recognition alone does not guarantee meaningful institutional integration. Drawing on postcolonial legal theory, political ecology, and legal pluralism, it demonstrates that regulatory processes frequently prioritise the commercial potential of medicinal plant

resources while offering limited protection for the knowledge holders and social institutions through which these resources are sustained.

Within this context, the paper positions biocultural protocols as critical instruments of community sovereignty. Where state frameworks reproduce inherited epistemic hierarchies by requiring Indigenous knowledge to be validated through biomedical standards, biocultural protocols

Trhas Tadesse Berhe

Pre-eclampsia remains a leading cause of maternal and neonatal morbidity and mortality in Ethiopia, with persistent delays in screening and referral hindering prevention efforts. This study explored community and health system barriers and facilitators influencing pre-eclampsia screening and referral to inform the development of a Community Dialogue Toolkit in Legetafo-Legedadi Town Administration, Oromia, Ethiopia.

A qualitative exploratory design guided by the Social Ecological Model was conducted from October to November 2025. Data were collected through ten focus group discussions and thirty-five key informant interviews involving pregnant women, family and community members, healthcare providers, and policymakers. Participants were purposively selected, and data were thematically analysed using ATLAS.ti 9.

offer communities a community-authored mechanism to assert authority over their knowledge systems, define the terms of research engagement, and operationalise rights enshrined in international frameworks including the Nagoya Protocol and ILO Convention 169. The paper concludes that without such instruments, processes of integration risk reproducing historical patterns of extraction under new regulatory forms.

Findings revealed multi-level barriers, including limited knowledge, socio-cultural beliefs, gender dynamics, and financial constraints, alongside health system gaps such as inconsistent screening and weak referral mechanisms. However, trust in health services, community support structures, and existing communication platforms emerged as key facilitators.

Pre-eclampsia care is shaped by interconnected socio-cultural and system-level factors. Strengthening community dialogue, improving early risk recognition, and integrating behaviour change communication are critical. These findings inform a context-specific toolkit to enhance timely screening and referral in Ethiopia.

Joseph Malinzi

A Predictive Model for a Two-Virus Cancer Therapy, Joseph Malinzi .

Department of Mathematics, Faculty of Science and Engineering, University of Eswatini, Private Bag 4, Kwaluseni, Eswatini

Abstract: How can we make cancer-fighting viruses more effective?

This poster presents a mathematical model of a combination cancer therapy using two engineered viruses: Vaccinia Virus (VV) and Vesicular Stomatitis Virus (VSV). These viruses are designed to seek out and destroy cancer cells. When used together, they produce a striking synergy. Our model, built from real experimental data, captures this interaction mathematically and reveals three key findings. First, the combination

clears tumours significantly faster than either virus alone. Second, the biological factors that matter most are how efficiently the viruses infect cancer cells and how many new virus particles each infected cell releases. Third, and perhaps most practically, the timing of virus delivery is critical: administering the viruses sequentially rather than simultaneously, within specific optimal windows of a few hours to a day, substantially improves treatment outcomes.

These results offer a foundation upon which more effective combination virotherapy protocols may be designed and experimentally validated.

*Joint work with: Raluca Eftimie, Anotida Madzvamuse, Rachid Ouifki, Amina Eladdadi and Helen Byrne.

Meron Teferi Taye

In East and West Africa, floods have become more frequent and devastating due to the increasing extreme weather conditions. These floods cause widespread disruption to communities and livelihoods disproportionately impacting those located in marginalized settings that are least equipped to manage the impacts of such extreme events. To strengthen resilience and livelihood sustainability in marginalized communities, understanding and characterizing floods and their impacts for the specific geographies is paramount. This study focused on comparing two cases studies, the Turkwel basin in Kenya and White Volta basin in Ghana. This study sought to understand the changes in rainfall

patterns, land surface conditions and water infrastructure management decisions that have implications for floods. The study used remote sensing data analysis and community perspective interviews to obtain a more accurate picture of the physical drivers and that of the community knowledge. The results show these two cases have context-specific and localized flood risk and vulnerability of marginalized communities. In Turkwel basin, the Lodwar town is the most impacted with communities living close to the rivers. In the White Volta basin damage to agricultural fields is common with crops being washed away by floods as the climatic situations changed from droughts to floods rapidly.

Phanankosi Moyo

Antimicrobial resistance (AMR) is a major global health threat that demands the discovery of new therapeutic agents. Natural product-based drug discovery has historically been among the most successful strategies for identifying clinically important drugs, including penicillin. Against this backdrop, we have collaboratively investigated African-derived natural products as sources of (i) novel antimicrobial agents and (ii) resistance-reversing compounds capable of restoring the efficacy of existing antibiotics compromised by AMR. Our work has led to the identification of natural products with notable activity against *Mycobacterium tuberculosis* H37RvMA,

Escherichia coli 2522, and *Staphylococcus aureus* DSM 346. In addition, we identified plant-derived natural products with quorum-sensing inhibitory activity against *Chromobacterium violaceum* ATCC 12472. We have also discovered promising efflux pump inhibitors and β -lactamase inhibitors with potential for development as antibiotic resistance-modifying agents. Collectively, these findings highlight the antimicrobial potential of African natural products and provide a strong foundation for further collaborative studies aimed at developing new anti-infective therapies and resistance-reversal strategies.

Ahmed Hamden

Personification is the act of giving human features, gestures, or actions to non-human forms. It may also be understood as a form of humanisation, or anthropomorphisation, in which signs, objects, animals, or abstract ideas are represented as if they could act like living beings. In ancient Egypt, personification was an important artistic and religious method. From an early date, Egyptian artists represented signs, symbols, and objects with human arms, legs, or gestures. Through this process, these

elements became more than decoration. They could appear as active figures within the scene, able to offer, protect, worship, support, or take part in ritual actions. This talk presents selected examples from my published research on personified forms in ancient Egyptian art. It will show how personification helped the ancient Egyptians express key ideas of life, protection, divine power, ritual action, and royal identity in both funerary and non-funerary contexts.

Jane Ndlovu

Title - **The Price of Safety: Tax Policy, Unpaid Care, and the Financial Barriers to Fleeing Femicide.**

In South Africa, and across similar Global South economies such as Kenya and Zambia, tax systems remain anchored in colonial-era assumptions of a male breadwinner supported by unpaid female care (for example, a stay-at-home mother caring for children). This study examines how the “formal equality” of income tax rules – treating all taxpayers identically – violates South Africa’s constitutional mandate for “substantive equality” under Section 9(2). This provision imposes a legal duty on the state to actively dismantle historical disadvantage. Applying formally “neutral” rules across persistent structural divides actively reproduces inequality. These disparities are starkly quantified: South African women earn on average 14% less than men, White employees earn 23% more than Black African employees, and Black African households hold just 5% of the wealth of White households.

Against this backdrop, unmarried Black African women head 44% of South African households and, as recognised in constitutional jurisprudence such as *Van Wyk*, bear the disproportionate burden of primary caregiving. For these women, participating in the formal labour market depends entirely on securing paid childcare, such as hiring a nanny or a childminder. Yet, tax law classifies these

essential costs as private consumption, denying any deduction. This structurally raises the effective cost of working and exacerbates a 38% unemployment rate within this demographic. Furthermore, this denial initiates a compounding cycle of statutory disadvantage: it forces women into survivalist secondary work (which is artificially overtaxed by rigid payroll annualisation) or necessitates heavily penalised emergency retirement withdrawals. This reality contrasts sharply with wealthy or married taxpayers who can leverage intergenerational wealth or unpaid spousal support to absorb care costs.

Crucially, this cascading fiscal drain depletes “exit capital”: the liquid financial resources required to flee abusive relationships. In a country grappling with a crisis of gender-based violence and femicide—where a woman is murdered approximately every three hours—constrained after-tax income severely limits exit options. This lack of liquidity triggers “churning” — a coercive cycle where economic destitution forces a woman to return to her abuser. By identifying tax policy as a structural determinant of gender-based violence and femicide, this study argues for recognising care costs as allowable deductions. This reform advances global tax justice and Sustainable Development Goals 5.4 and 10.4 (relating to valuing unpaid care work and advancing equitable tax policy), demonstrating that ignoring the uneven gendered burden of care effectively taxes a woman’s right to safety.

Nadia Hassan

About Leavr

Leavr is a student-to-student marketplace built for the University of Oxford community, designed to make the annual cycle of moving in and moving out as seamless as possible.

Every academic year, Oxford welcomes a new wave of students, many of them international, who arrive with little and need to furnish a home quickly. At the same time, thousands of departing students, particularly those completing one-year programmes, face the challenge of offloading household items they simply cannot take back home.

Leavr bridges that gap. By connecting students who are leaving with those who are arriving, the platform gives everyday items like furniture, kitchenware, bedding, bicycles, and more a second life within the same community. Sellers recover some of their costs, buyers access quality goods at fair prices, and fewer items end up in waste.

More than just a marketplace, Leavr is a practical solution rooted in the realities of student life at Oxford. It is community-led, sustainable by nature, and built on the simple idea that one student's ending can be another student's beginning.

Ngang Fru Delvis

Towards a Forced Displacement Scan: Predicting movements for anticipatory action in Africa.

Forced displacement remains a major development challenge in Africa. Anticipating population movements is critical for timely and effective humanitarian action. However, current response lacks an integrated predictive tool for forced displacement, leaving organisations to rely on fragmented data and reactive approaches rather than timely, anticipatory action. This paper presents a "Forced Displacement Scan" framework that leverages multi-source data (satellite imagery, climate indicators, market prices, social media connectivity, mobile phone call detail records, conflict event datasets, and community-based reporting) to predict migration movements before they occur. The framework integrates advanced

machine learning techniques, including deep learning models, with contextual and locally grounded analysis to detect early warning signals and identify displacement triggers. By analysing spatial and temporal patterns, the system estimates the likely scale, direction, and timing of population movements. These predictive insights enable humanitarian actors, governments, and local organisations to undertake anticipatory actions such as pre-positioning resources, strengthening service capacity, and mitigating risks to vulnerable populations. By shifting from reactive responses to proactive planning, the Forced Displacement Scan aims to enhance preparedness, improve coordination, and build more resilient systems for both displaced populations and host communities.

Key words: forced displacement, machine learning, anticipatory action.

Intissar Eddajraoui

I want to present the research findings from my dissertation. I did fieldwork in the coastal village of Imsouane in Morocco to look into the dialectics between state governance and informality. My dissertation showcases the ways in which non-inclusive urban planning and tourism investment can foster the loop of informality (although the whole point of the planning and investment is supposedly to eradicate it), and showcases

how non-democratic states can find themselves dependent on informality as a tool to maintain stability. This, I believe, applies to other countries in the continent and can spark important conversations about sustainable and inclusive urban development. The research is innovative and based on archival work, visual ethnography, and conversations on the ground. It is therefore perfect for a poster.

Tolulope Osayomi

Since 2022, Mpox has emerged as a zoonotic viral disease of global concern. Nigeria experienced the largest documented outbreak of the disease in Africa in 2017, with recurrent outbreaks continuing across the country thereafter. Recent scholarship has increasingly focused on the geographical distribution, hotspots, and determinants of Mpox transmission. However, limited attention has been paid to the evolving spatial patterns of the disease following the 2022 global outbreak, particularly the emergence of new hotspots and local drivers of transmission. Against this backdrop, this study undertakes a comprehensive spatial analysis of Mpox transmission in Nigeria using a classical geographically

weighted regression (GWR) approach to identify localised influences associated with its geographical distribution. The spatial distribution of Mpox was markedly uneven and revealed a pronounced south–north gradient, with Lagos emerging as a major hotspot. Twenty-six explanatory variables were reduced into six principal components, four of which were identified as significant local drivers: Environmental–Behavioural Factors, Economic Activity, Climate Stress, and Infrastructural Deficit. The findings suggest that Mpox transmission in Nigeria is shaped by a complex interplay of environmental, climatic, socio-economic, and infrastructural conditions.

Acho Fon Abongwa

Hantaviruses are a family of rodent-borne viruses with epidemic potential that cause outbreaks of Haemorrhagic Fever with Renal Syndrome (HFRS) and Hantavirus Pulmonary Syndrome (HPS). Hantaan virus (HTNV) is a major cause of HFRS and remains a public health threat in Asia. The live attenuated vaccines in use in Korea and China require multidose regimens, potentially limiting their use in rapid outbreak response. Neutralising antibody responses primarily target the viral surface glycoproteins. We developed a ChAdOx1 vaccine expressing the HTNV surface glycoprotein and evaluated its humoral immunogenicity in CD1 mice.

The study included six mice per group, vaccinated intramuscularly with 1x10¹⁰ vp of either ChAdOx1-HTNV or control

ChAdOx1-GFP, followed by homologous boosting on day 21. HTNV-specific IgG responses were quantified by ELISA and antibody activity was assessed using a lentiviral pseudotyped neutralization assay.

A single vaccination with ChAdOx1-HTNV-GnGc elicited HTNV-specific responses detectable by day 14. Following boosting, these responses peaked at day 42. Neutralizing antibodies were also detected by day 14 and further increased at day 21 indicating rapid induction of biologically relevant humoral responses. Unlike total IgG responses, boosting did not significantly enhance neutralizing activity.

Our findings support further development of the vaccine candidate for outbreak preparedness.

Talabi Rasheed Ayegbusi

Rising armed banditry and kidnapping in North-West Nigeria and the Maradi region of the Niger Republic have generated large-scale forced displacement, reshaping livelihoods, social relations, and prospects for peace. Existing scholarship and humanitarian responses have largely prioritised emergency protection and assistance, with limited attention to how displaced families and children adapt their livelihoods, negotiate social cohesion, and imagine more just futures amid protracted insecurity. This study addresses this gap by examining conflict-induced displacement among internally displaced persons, refugees, host communities, returnees, and those left behind in Katsina State, Nigeria, and Maradi Region, Niger Republic. Drawing on a mixed-methods approach, the study

analyses livelihood adaptation strategies, social cohesion, and resilience initiatives. Grounded in the push–pull framework, the aspirations–capabilities approach, and peacebuilding theory, the study argues that displaced populations are not passive recipients of aid but active agents who continuously rework livelihoods and social ties under constrained conditions. However, exclusionary policies and uneven assistance risk deepening tensions between displaced persons and host communities. By centring displaced voices, particularly those of families and children, the paper advances a justice-oriented perspective linking livelihoods, social cohesion, and sustainable peacebuilding in conflict-affected regions.

Africa Oxford Initiative 10th Anniversary

Speakers and Programme of Events

