



MAY - AUGUST 2025

Sub-Saharan Africa Consortium for Advanced Biostatistics (SSACAB) II Newsletter.

Workshops & Training (Dakar / Machine Learning)

SUSAN Conference (Ethiopia)

DELTAS Scientific Meeting (Cape Town)

Newsletter May to August 2025

In total, so far, SSACAB 2 has recruited 62 fellows in Universities across Africa! This a significant milestone.

niversity of Abomey-Calavi (SSACAB) has enrolled eight fellows consisting of: three MSc fellows; two PhD fellows and one postdoctoral fellow; one MSc fellow at a collaborating institution (ISTM Kinshasa) and one PhD fellow also at a collaborating institution (ISTM Kinshasa)

University of Pretoria (UP) (SSACAB) has enrolled seven fellows: two MSc fellows enrolled at UP, one MSc fellow at a collaborating institution (University of Malawi), two PhD fellows enrolled at UP. one PhD fellow enrolled at a collaborating institution (University of Malawi), and one post-doctoral fellow to start at UP.

Moi University (SSACAB) six fellows consisting of: two MSc fellows; three PhD fellows and one post-doctoral fellow

University of KwaZulu-Natal (SSACAB) has enrolled eight fellows consisting of: two MSc fellows at UKZN; two MSc fellows at a collaborating institution (KCMUCo); two PhD fellow at UKZN and one PhD fellow at a collaborating institution (KCMUCo) and one post-doctoral fellow at UKZN

KEMRI Wellcome Trust Research Programme (SSACAB) has six fellows consisting of: three MSc fellows; two PhD fellow and one post-doctoral fellow

University of Witwatersrand (SSACAB) has enrolled twenty seven fellows consisting of three MSc fellows at Wits; three MSc fellows at a collaborating institution (University of Namibia); four MSc fellows at a collaborating institution Makerere University: five MSc fellows at a collaborating institution University of Malawi and five MSc fellows at a collaborating institution University of Nairobi; five PhD fellows at Wits; one PhD fellow joint appointment at Utrecht and Wits and one post-doctoral fellows at Wits



Conferences and Thematic areas

SSACAB in collaboration with the African Population and Health Research Center (APHRC), through its West Africa Regional Office (WARO), convened a Regional Training Workshop on Advanced Biostatistics. The workshop was held from 22 to 25 September 2025 in Dakar, Senegal and was delivered by experienced APHRC experts and international facilitators in both English and French. This training responded to the growing demand for

advanced analytical capacity in West and Central Africa to generate robust, policyrelevant evidence for public health and development. By deepening participants' mastery of advanced biostatistical methods, the workshop contributed to SSACAB and APHRC's shared mission of strengthening regional capacity, fostering collaboration, and promoting evidence-informed policymaking.



Ethiopia

he 19th Biennial Conference of the Sub-Saharan African Network (SUSAN) of the International Biometric Society took place from 3 to 8 September 2025, marking a significant milestone in the advancement of biometric research, collaboration, and innovation across the region. Leading scholars, researchers, and practitioners from across Africa and beyond came together to share cutting-edge insights, foster collaboration, and shape the future of biometrics on the continent.

We extend our appreciation to the outstanding delegates who took the time to attend, contribute, and enrich the conference experience.

A highlight of the event was a powerful address by Professor Tobias Chirwa, who emphasised the critical need for cross-institutional collaboration to advance the discipline of biostatistics throughout the region. He underscored the importance of standardising course materials and fostering partnerships to strengthen both capacity and consistency in training, with the goal of influencing public health policy. Professor Chirwa also expressed his appreciation to the SSACAB Principal Investigators for their unwavering commitment to achieving the programme's objectives and for their dedication to supporting the growth of biostatistics in Sub-Saharan Africa.

In attendance were key figures including Principal Investigators, Technical Advisory Members, Fellows, and our Programme Manager, further highlighting the depth of expertise and collaboration that defined this event. Special acnowledgment went to: Professor Tobias Chirwa, Professor Samuel Manda, Professor Henry Mwambi. Professor Ann Mwangi, Professor Eustasius Musenge, Professor Innocent Maposa, Dr Tsirizani Kaombe, Professor Ziv Shkedy, Dr Nonhlanhla Yende-Zuma.

Professor Misrak Gezmu. Dr Okechinyere Achilonu, Professor Thomas Achia. Professor Marc Henrion. Dr Souand Tahi. Dr Jesca Batidzirai. Dr Mohanad Mohammed. Dr Halima Twabi. Caroline Vika. Geoffrey Singini, Daphne Agwang, Brian Masafu, Sarah Ogutu, Anteneh T Yalew, and Daniel Thoya.

Their commitment to advancing the field of biometrics did not go unnoticed. We look forward to witnessing the continued growth and impact of this vibrant network in the years to come.





DELTAS Scientific meeting (Cape Town)

The DELTAS Africa Scientific Meeting was productive and inspiring, bringing together researchers, scientists, and collaborators from across the globe. It provided a valuable platform for exchanging innovative ideas, showcasing groundbreaking research, and exploring solutions to some of Africa's most pressing health and development challenges. The meeting highlighted the power of interdisciplinary collaboration and the importance of building research capacity on the continent. It was a testament to what can be achieved when brilliant minds unite with a shared purpose, advancing science, strengthening health systems, and shaping a healthier future for Africa and beyond.





Introducing SSACAB postdoctoral fellows

Kevin Wamae is a bioinformatics researcher with over seven years of experience in pathogen genomic epidemiology.

He holds a PhD in Bioinformatics from The Open University (UK) and has worked in Kenya, and across Africa on malaria and cholera genomic surveillance. Currently a Post-doctoral Fellow at the KEMRI-Wellcome Trust Research Programme in Kilifi, he applies genomics to understand and control infectious diseases. His work integrates machinelearning methods with genomic and epidemiological data to strengthen outbreak detection and public health response. Kevin has published extensively, mentored early-career scientists, and contributed to national malaria and cholera surveillance strategies. He plans to expand genomic surveillance platforms in Kenya and link it with climate data and policy to improve preparedness for emerging infectious diseases.

Achievements 5 minutes with SSACAB

We have launched the "5 Minutes with SSACAB" series!



e were proud to feature Bongiwe Khumalo, one of the standout student participants in the Public Engagement with Science initiative, in a recent episode of "5 Minutes with SSACAB." In a compelling interview conducted by Caroline Vika, Bongiwe shared her enthusiasm about returning to her community to pass on the knowledge she gained. She offered thoughtful reflections on what biostatistics meant to her and how the initiative had shaped her perspective as a young learner.

In the short but powerful clip, Bongiwe spoke

about the importance of knowledge in shaping society and explained how opportunities like this initiative inspiring young people across Africa where to find their place in science and understand the impact they could have in the future. That episode formed part of our "5 Minutes with SSACAB" series, which featured inspiring voices from across Africa and beyond, offering brief, insightful perspectives on pressing health and science issues impacting the continent.

Another highlight of the series featured Professor Innocent Maposa, a respected academic and key SSACAB collaborator from Stellenbosch University's Faculty of Medicine and Health Sciences, Division of Epidemiology & Biostatistics, Global Health. In his interview, also conducted by Caroline Vika, Prof. Maposa shared his insights on the transformative power of academic collaboration, the role of knowledge in building society, and how partnerships like SSACAB's had driven meaningful change in higher education and public health across the region.

Watch the episodes now: https://www.ssacab.co.za/5MinuteswithSSACAB.aspx



Public Engagement with Science

Public Engagement with Science monthly meetings:

30 May 2025



s part of our monthly training series aimed at equipping our Masters, PhD, and Post-doctoral fellows with the tools to effectively engage the public in their research, another impactful Public Engagement with Science (PES) meeting was held on 30 May 2025. We were honoured to host Professor Christofides Nicola, Associate Professor at the School of Public Health, University of the Witwatersrand, as our guest speaker. Professor Christofides delivered an insightful and thoughtprovoking presentation on the critical role of Community and Public Engagement (CPE) in research.

She emphasised that both primary and secondary data can be powerful in addressing pressing social and healthrelated challenges, highlighting that the impact of data lies in how it is applied to drive real-world improvements.

Key Points from Professor Christofides' Presentation:

- Building Trust: Engaging with communities helps establish and maintain trust between researchers and the public.
- **Improved research design**: Community input ensures research is relevant and better tailored to real-world needs.
- Enhanced research outcomes: Involving stakeholders increases the quality and applicability of results.
- Better recruitment and retention: Engagement helps encourage participation and sustained involvement in research studies.
- Combating misinformation: Open communication reduces scepticism and counters false claims about research.

Professor Christofides also clarified the broad definition of "community," which includes not only community members but also policymakers, programme implementers, and other key stakeholders.

A central theme of her message was that trust is not built overnight—it demands ongoing, intentional interaction from the outset to the conclusion of a project. This reinforces the understanding that **community** engagement is a continuous, ethical obligation, not a one-off activity.

We thank Professor Christofides for her valuable contribution and look forward to seeing how our fellows apply these principles in their own work.



20 June 2025

n 20 June 2025, we hosted another insightful session as part of our Public Engagement with Science (PES) series. We had the privilege of welcoming Dr. Sobane Konosoang, Chief Research Specialist at the **Human Sciences** Research Council (HSRC). In her engaging presentation, Dr. Sobane described Public Engagement with Science as intentional. meaningful interactions that create opportunities for mutual learning between scientists and the public. She highlighted that such engagement not only facilitates knowledge exchange but also plays a crucial role in **building** trust between researchers and the communities they work with.

Dr. Sobane emphasised that PES includes a variety of approaches aimed at generating mutual benefit for both scientists and society. One particularly effective method, she noted, is the use of workshops. According to her, workshops provide a valuable platform to conceptualise, identify, document, and meaningfully address local problems and their solutions.

A key takeaway from her talk was the importance of holistic presence during community engagement. Dr. Sobane urged scientists to engage not just intellectually,

but also emotionally and physically—"with your body, mind, and soul." She further underlined the significance of cultural sensitivity, pointing out that how one dresses and communicates with the community can influence the success and authenticity of the engagement.

The session offered deep insights into the principles and practices of meaningful community involvement and left attendees with renewed commitment to fostering inclusive, respectful, and impactful public engagement in their scientific work.



s part of our monthly training series designed to equip our Master's, PhD, and Post-doctoral fellows with the skills to effectively engage the public in their

research, we held another impactful Public Engagement with Science (PES) session on 31 July 2025.

We were honoured to host Noni Mumba, Head of Engagement at the **KEMRI Welcome Trust Research** Programme (KWTRP). During her talk, Noni emphasised the importance of involving the community directly in research studies. She cited the powerful slogan by Rahman et al. (2022): "Nothing about us without us." Noni also shared her insights on the distinctions between Community Engagement,

Public Engagement, and Policy **Engagement**. She explained that while communities form part of the broader population known as "the public," it is possible—and often necessary—to identify and engage with specific publics, such as local high schools, tertiary institutions, healthcare providers, NGOs, and others.

She further highlighted that meaningful interaction with policymakers throughout a research project often gives rise to important **policy** engagement activities.

26 August 2025

n 20 June 2025, we hosted another valuable session as part of our Public Engagement with Science (PES) series. We had the privilege of welcoming Professor Marina Joubert, head of the Public Engagement Lab at the Centre for Research on Evaluation, Science and Technology (CREST), Stellenbosch University, South Africa. In her presentation, Prof. Joubert emphasized that science communication serves as an umbrella term encompassing

community, public, and policy engagement. Echoing Bucchi and Trench (2021), she highlighted that "science is the social conversation around science," stressing the importance of connecting science and society and bridging the gap between the two.

Prof. Joubert also referenced the National Co-ordinating Centre for Public Engagement's definition of public engagement as "the myriad of ways in which



the activity and benefits of higher education and research can be shared with the public." She underscored that this is inherently a twoway process — involving interaction and listening with the goal of generating mutual benefit.

Publications

Adéoti, O.M., Diop, A. and Glèlè Kakaï, R., 2025. Bayesian inference and impact of parameter prior specification in flexible multilevel nonlinear models in the context of infectious disease modeling. Mathematical Biosciences and Engineering, 22(4), pp.897-919.

Anteneh, L.M., Hounkonnou, M.N. and Glèlè Kakaï, R., 2025. A stochastic continuous-time Markov chain approach for modeling the dynamics of cholera transmission: Exploring the probability of disease persistence or extinction. Mathematics, 13, p.1018.

Mabasa, V., Seheri, M.L. and Magwira, C.A. (2025) 'Expression of salivary hepcidin and its inducer, interleukin 6 as well as type I interferons are significantly elevated in infants with poor oral rotavirus vaccine take in South Africa', Frontiers in Immunology, (16) 1517893, pp. 1–8. https://www.frontiersin. org/journals/immunology/articles/10.3389/fimmu.2025.1517893/full

Ogutu, S., Mohammed, M. and Mwambi, H. (2025) 'Deep learning models for the analysis of highdimensional survival data with time-varying covariates while handling missing data', Discover Artificial Intelligence, (5)176. https://link.springer.com/article/10.1007/s44163-025-00429-z

Twabi, H.S., Manda, S.O.M. (2025). Methods Using Propensity Scores to Estimate Causal Effects in Observational Longitudinal Studies. In: Kazembe, L.N., Kaombe, T.M. (eds) Statistical Modelling for Evidence-Based Public Health. Emerging Topics in Statistics and Biostatistics. Springer, Cham.

https://doi.org/10.1007/978-3-031-97281-2_13 Methods Using Propensity Scores to Estimate Causal Effects in Observational Longitudinal Studies | SpringerLink

Wamae, K., Magudha, J., Kakungu, A., Aricha, S., Langat, D., Kinyanjui, S., Mokaya, J., Thomson, N.R., Agoti, C. & Githinji, G., 2025. Cholera in Kenya: a scoping review of current research, evidence gaps and future directions. bioRxiv. https://doi.org/10.1101/2025.09.16.25335755.

Please feel free to see what else we have been involved in, on our website: SSACAB > Home





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