

CAPRISA CENTRE FOR THE AIDS PROGRAMME OF RESEARCH IN SOUTH AFRICA

Newsletter

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Lessons from Africa: Health diplomacy in HIV prevention

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THE LANCET

International Health Lecture 2025

Lessons from Africa: health diplomacy in HIV prevention

he 2025 Academy of Medical Sciences & The Lancet International Health Lecture, was delivered by CAPRISA co-founder and John C Martin Chair in Global Health, Quarraisha Abdool Karim, in London in November, with an accompanying publication in the Lancet journal (embed link here). Entitled 'Lessons from Africa: health diplomacy in HIV prevention' Abdool Karim began with a brief description of the current global polycrises and in particular the threats posed by epidemics and pandemics. The importance of global partnerships and collaborations as illustrated by the unprecedented progress made in responding to the HIV pandemic from the fear and anxiety and inevitable deaths in the early 1980s through activism, science and global solidarity to the current state of the pandemic, served as the backdrop to her reflections on the over two decades contributions made by CAPRISA in HIV/ Tuberculosis and more recent Covid-19 pandemic.

The centrality of high quality scientific evidence for shaping global policy, the leadership role being played by scientists in sub-Saharan Africa in addressing global challenges and the importance of national and global investments in

research infrastructure and the next generation of science leaders to address current challenges but also pivot to new challenges such as Covid-19 and build resilience in a complex and volatile geopolitical context was underscored.

The CAPRISA research agenda since inception has focused on the two biggest HIV challenges in sub-Saharan Africa: reducing deaths from HIVtuberculosis co-infection and preventing new HIV infections in young women. South Africa with <1% of the global population is home to about 20% of people living with HIV. The use of surveillance data to monitor evolving trends and understand transmission dynamics; basic sciences with clinical data to enhance understanding of risk factors and clinical trials has generated an unsurpassed depth of understanding of clade C pathogenesis that has resulted in evidence on, amongst others, timing of ART provision in HIV-Tuberculosis co-infected patients: key drivers of new HIV infections in sub-Saharan Africa ie age-sex disparate relationships; proof of concept of pre-exposure prophylaxis that has shaped global, regional and national pol-

CAPRISA scientists play a key role in key decision making bodies and have contributed the scientific evidence to the 2016 UN declaration on ending AIDS as a public health threat; provide advice to WHO; UNAIDS; Africa CDC and the South African government. Their policy advice extends beyond HIV to the role of science in accelerating progress in



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achieving the Sustainable Development Goals through the UN 10 member technical Facilitation Mechanism; the International Decade of Science for Sustainable Development various other Fora that promote the use of science to benefit all of humanity. The importance of the research being undertaken in partnership with communities for co-ownership and co-knowledge creation and in close proximity of rural, peri-urban, and urban public sector health facilities has facilitated rapid translation of policy to practice seamlessly blending scientific rigor with real-world relevance and feasibility. She also emphasized that science communication needed to go beyond high impact peer reviewed publications to ongoing communication with the public through multiple media platforms. With rapid amplification of mis- and dis-information through social media platforms, the influence of trustworthy scientific evidence is even more critical.

Abdool Karim also highlighted the importance of locally led research and the importance of synergistic partnerships in tackling complex challenges and recognized the numerous donors and many collaborators who have partnered with CAPRISA over the years. While much progress has been made in responding to HIV and TB, much remains to be done. The challenges posed by Covid-19 and the sudden funding cuts have both highlighted opportunities for new partnerships and national investments in research capacity building as well as the need for solidarity given our interconnectedness and shared vulnerabilities. Shifting blame and responsibility to others is not a solution. Science does not offer quick solutions and we need to continue to balance curiosity research with more mission driven research. In conclusion, Abdool Karim emphasized that impactful knowledge generation was grounded in local priorities, informed by global collaboration, and driven by a mission to serve humanity.

For further reading: Abdool Karim, Q. Lessons from Africa: health diplomacy in HIV prevention. The Lancet. https://doi.org/10.1016/S0140-6736(25)01976-2





Professor Quarraisha Abdool Karim, Chair of Neurological Science at the University of Liverpool Professor Tom Solomon and former Acting Director-General of the World Health Organization Doctor Anders Nordström. Pic Credit: The Academy of Medical Sciences.



he 8th Galien Forum Africa took place in Dakar, Senegal in October under the theme "Health Sovereignty: An Imperative for Africa." Among the Forum's aims are to establish a common understanding of the concept of health sovereignty in the African context and to foster regional and international exchanges and

to share experiences, innovations and best practices in the production, distribution and management of healthcare resources. According to the Forum, several African initiatives are making progress towards health sovereignty. Among these are the Institute Pasteur in Dakar. It is currently developing the Madiba Project, an mRNA vaccine production unit designed to strengthen the continent's vaccine autonomy. Discussions at the Forum focused on funding, research, local drug production, public health policy and innovation in the continent's health autonomy.





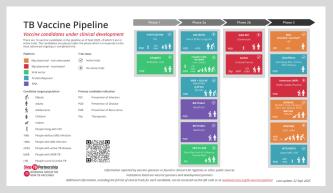
Preventing TB: Vaccines and TPT

APRISA Deputy Director Professor Kogieleum Naidoo attended the Annual Workshop on Advanced Clinical Care (AWACC) in Durban in October. Also in attendance was Doctor Busi Ntsalaze, a CAPRISA research clinician based at CAPRISA's eThekwini Clinical Research Site (ECRS). Prof. Naidoo's presentation: "Preventing TB: Vaccines & TPT," focused on current and emerging strategies to prevent drug-sensitive and drug-resistant TB, with particular emphasis on high-risk populations, including people living with HIV, children, and household contacts. She outlined recent WHO and South African updates on TB preventive therapy (TPT), highlighting shorter regimens and novel approaches for MDR-TB prevention, and shared insights on key clinical trials and vaccine development efforts, such as the M72/AS01E phase 3 trial, that are shaping the evolving landscape of TB prevention. - Letitia Shanmugam





Pic credit: Dr. Busi Ntsalaze



The 3rd CAPRISA-FEMIN Workshop marked the continuum of the ongoing collaboration between the European and CAPRISA basic science researchers, clinicians and epidemiologists, postdoctoral and PhD fellows. The Female Mucosal Immunology Network (FEMIN) was conceived by Nobel Prize Laureate of Science, and Emeritus Professor Françoise Barre Sinoussi from the Pasteur Institute in France, along with Professors Quarraisha Abdool Karim and Dr Elisabeth Menu of IN-SERM, both esteemed figures in HIV Prevention Science.

The collaborative scientific updates explored a central theme around HIV prevention and risk included: i. Identifying immune correlates of protection and risk in the female genital tract pre- and post-HIV infection, ii. How genital inflammation and vaginal microbiome shape Chlamydia Trachomatis risk, iii. Elucidating the dynamic interplay between mucosal immunity, microbiota, and CVS anti-HIV-1 activity to inform predictive modelling of HIV susceptibility in adolescent girls and young women, and iv. Investigating breastmilk HIV compartmentalization and ART resistance in breastfeeding mothers to prevent vertical transmission. The event showcased advancements in basic research such as spatial transcriptomic profiling of immune cell targets for HIV in cervicovaginal tissues from CAPRISA cohorts and the vagina on chip models for understanding the first events in HIV infection. Trial updates for three novel and landmark clinical trials including the live bio-therapeutic product (LBP) of Lactobacillus species which were isolated from South African and American participants, the CAP012 SAMBA trial

and the PedMab trials that both tested broadly neutralizing antibodies (bNAbs) for HIV prevention in women and babies respectively were showcased.

We further touched base on North-South collaborations to secure bilateral funding for furthering the science given the current geopolitical landscape. Robust scientific discussions focused on five key themes: vaginal microbiome, HIV and maternal and baby health, mucosal immunology, STIs, and the future of bNAbs for HIV prevention. - Desh Archary

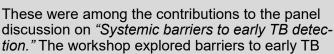




CAPRISA part of G20 build-up



Professor Kogie Naidoo participated in the G20 pre-meeting workshop; "Reaching the unreached: Towards closing the Tuberculosis detection gap in South Africa" in November.





detection, innovative diagnostic approaches, and strategies to reach high-risk populations, aiming to secure renewed commitment to close the TB detection gap and accelerate progress toward ending TB in South Africa. - Letitia Shanmugam

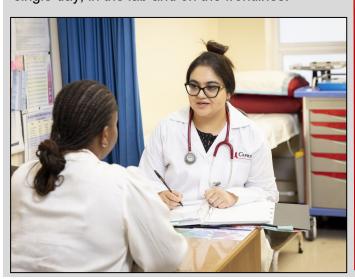
APRISA's Head of HIV Pathogenesis Doctor Sharana Mahomed shared her personal reflections for World Aids Day in a "Behind" the Paper" feature published in Biomedical Research. It took readers into Mahomed's thoughts around the scientific progress made in HIV/Aids, her journey with broadly neutralizing antibodies (bNAbs) and the road ahead. Mahomed's candid and nuanced reflections follows her bNAb review: "Clinical trials of broadly neutralizing monoclonal antibodies in people living with HIV - a review" (AIDS Research and Therapy, 2025). Mahomed writes, "This World AIDS Day, I stand optimistic that by investing in immune-based strategies like bNAbs, strengthening clinical partnerships in Africa and beyond, and unwaveringly committing to equity, we can transform the dream of a world without AIDS into a reality. The road is long, but with science and solidarity, we are well on our way... That hope is what drives me, every single day, in the lab and on the frontlines."



n conversation this month, World Aids Day 2025 came under the spotlight. We speak to epidemiologist and Director at the Centre for the AIDS Programme of Research in South Africa, Professor Sal-

im Abdool Karim. He says while Lenacapavir has been a shot in the arm for the global AIDS response, ensuring that the most vulnerable groups are able to access it, remains a challenge. The theme for World AIDS Day 2025 led by the World Health Organisation and UNAIDS was "Overcoming disruption, transforming the AIDS response". South Africa used the national theme "Renewed Efforts and Sustainable Commitments to End AIDS".

The Unconventional Scientist uncovers what makes our scientists tick and challenges them on some of the burning questions facing science. Available on our website and social media platforms.







A selection of scientific papers published in 2025

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*Continued from previous newsletter

For the complete list of publications see here: https://www.caprisa.org/Publication/1/1









