

Strengthening capacity for health innovation in Africa



H3D
FOUNDATION

The H3D Foundation logo features the letters "H3D" in a large, bold, sans-serif font. The "H" is green, the "3" is brown, and the "D" is brown. Below "H3D", the word "FOUNDATION" is written in a smaller, red, sans-serif font. The entire logo is set against a white background that is partially obscured by a large, irregular cluster of small, colorful human figures, suggesting a diverse community or population.

H3D-Foundation (H3D-F) and the **International Federation of Pharmaceutical Manufacturers and Associations (IFPMA)** announced a three-year partnership to strengthen capacity for health innovation in Africa. The two organizations will combine forces to focus on driving capacity strengthening for drug discovery and development in Africa, by scaling existing programs initiated by the **Holistic Drug Discovery and Development (H3D) Centre** at the University of Cape Town and identifying new development opportunities for young and mid-career scientists in the region.



At the partnership launch event on 28 September, titled “**Strengthening Capacity for Health Innovation in Africa**,” broader perspectives were provided by renowned local and international experts on innovation in Africa. The event was moderated by **Kerry Cullinan**, Africa Editor at **Health Policy Watch**, and discussed how H3D’s innovation and capacity building efforts can be uplifted and strengthened through collaboration with inter- and multi-disciplinary partners across all areas – government, academia, and private industry.



In his welcome remarks, **Colin Pillai**, CEO, CP+ Associates and CEO, **Pharmacometrics Africa**, described the collective African pride when H3D released the news about their discovery of the antimalarial molecule, MMV390048. He used this as a reminder that discovering new drugs and translating these into therapies is a costly and slow process, and highlighted the importance of investing in sustainable capacity strengthening by supporting organizations like the H3D-F.



Providing introductory remarks, **Greg Perry**, Assistant Director General, IFPMA, emphasized that the IFPMA and H3D-F partnership is part of a wider ambition that seeks to encourage, support, and leverage local innovation in Africa and, more broadly, the development of an African innovation ecosystem. He also underscored IFPMA’s appreciation for the work done by the H3D-F for the African continent, adding that Africa’s future lies in its innovation, its science, its entrepreneurship, and its youth.



In his opening address, **Francis Collins**, Director, US National Institutes of Health, stated that H3D is indicative of a wave of scientific innovation emerging in Africa, driven by a generation of young, entrepreneurial, and globally competitive scientists. He considered this to be a model for innovative research that is changing expectations of what people believe is possible on the continent. Building an integrated African research platform will advance translational science capacity and infrastructure that leads to improved therapeutic development and outcomes. Collins argued that the timing of the partnership between H3D-F and IFPMA was right on target for several reasons:

- African academic institutions forging partnerships with the pharmaceutical industry, philanthropic organizations, and governments can act as catalysts of progress, overcoming the lack of commercial incentive and other factors responsible for the mixed history of low private sector R&D investment in therapeutics for endemic diseases in Africa.
- If allocated wisely, the expected large influx of pharma support for clinical research and trial funding on the continent over the next years can represent a ripe opportunity to strengthen clinical and translational research networks in Africa.

- These can build on other network initiatives, such as Human Health and Heredity in Africa (H3 Africa), jointly funded by the NIH and the Wellcome Trust, that supports a trans-African collaborative network of 30 countries and enables high-quality genomics research on the continent.
- A sustainable African biomedical research enterprise is a benefit to the whole global health community and will require cross-disciplinary teams, leveraging both industry and academic technology platforms and expertise for the development of vaccines, antibodies, and drugs for NCDs and cardiometabolic diseases.

Ending his statement, Collins argued that the H3D-F and IFPMA partnership creates an opportunity to work together to realize a future where African institutions are the primary sources of research solutions to the health problems in the region.



Trevor Mundel, President of Global Health, Bill and Melinda Gates Foundation (BMGF), continued the call for more collaborations and partnerships between industry, government, and academia to strengthen health innovation in Africa. He drew attention to the current COVID-19 vaccine inequity crisis as well as long-standing health inequities in the delivery of safe, effective, and quality medical products. Whilst the BMGF supports pharmaceutical sciences in Africa through workforce and capacity skillset development and strengthened long-term infrastructure and regulatory systems, he argued that there was still much to be done. To provide inspiration for the H3D-F and IFPMA partnership's intent to build a vibrant drug discovery ecosystem in Africa, he cited two partnership models exemplifying the benefits of collaborations between researchers, funders, mentors, and collaborators from different sectors and different geographies:

- The Tuberculosis Drug Accelerator (TBDA), a ground-breaking partnership between six pharmaceutical companies, a biotech, 14 research institutes, and a product development partner that proves a new paradigm for drug discovery is possible by avoiding redundancy, maximizing efficiency, and overcoming competitive barriers.
- The Malaria Drug Accelerator (MalDA) launched in 2017 by the Medicines for Malaria Venture (MMV) and BMGF as a consortium of academic and industry partners to accelerate the discovery of novel antimalarial targets and delivery of early leads.

Mundel also underscored H3D's tremendous capacity to leverage external expertise and collaborate in multidisciplinary and multisector partnerships that make progress against neglected diseases and increase Africa's capacity to be a global player in pharmaceutical R&D.



Kelly Chibale, Founder and Director, H3D, explained that the H3D was created to meet unmet medical needs in Africa; to use science for development; and to create jobs and an absorptive capacity to identify, attract, develop, nurture, and retain talent on the African continent. Gaps, including lack of knowledge on drug discovery processes and lack of infrastructure, were initially filled via partnerships with MMV and the South-African government, which provided three ingredients for H3D success – technology, infrastructure, and talent. It is also important to share not only the benefits, but also the risks and to leverage funding. For instance, in H3D, funding from BMGF, MMV, and Novartis was leveraged on 1:1 basis from the South African government. Chibale referred to lack of early-stage drug development scientists, infrastructure, and product procurement barriers in most African countries as main gaps to achieve H3D's vision to become an African-wide drug discovery and innovation center. The H3D-F will enable and unlock the potential for sustainable drug discovery and development across Africa.



Glaudina Loots, Director of Health Innovation, South African Department of Science and Technology, gave a presentation on the importance of partnerships with government in capacity building through the case of the H3D-F, reflecting on how Kelly Chibale travelled to consult with international experts, brought malaria drug development knowledge to South Africa, and, within six years, managed to do most of the work in-house. She described how the set-up of H3D as a drug discovery partner, opened up the need to build a network of complementary programs and platforms of excellence including active pharmaceutical ingredients (API) clusters, manufacturing processes and health diagnostics – in order to build a health innovation ecosystem in South Africa. She echoed the call from other speakers that Africa needs partnerships to become more self-reliant, build local industry, create regulatory systems, and nurture its talent to support an innovative ecosystem. Loots' messages provided concrete examples of the importance of government partnerships.

During the panel discussion on building innovation in Africa, speakers shared examples of H3D's innovative work.



David Barros-Aguirre, VP and Head of the Global Health Pharma R&D Unit, GSK, referred to GSK's participation in the MalDA and TBDA platforms that Trevor Mundel had described. He enthused that their partnership with H3D emphasized H3D's unique commitment and pride in developing antimalarial drugs with super engaged, talented, and professional scientists, and concluded by stating that H3D is changing the rhythm and speed of research in Africa.



Belinda Bhoodoo, Africa Engagement Committee, IFPMA, said Africa does not lack intellectual capacity, but infrastructure and funding. Partnerships like the one between H3D-F and IFPMA will strengthen the continent's capacity and build the infrastructure to become prepared for the next pandemic.



Patrice Matchaba, President, Novartis US Foundation, stated that the H3D-F has ensured that there is the intellectual capital to generate R&D throughout the whole ecosystem in Africa, from drug development to treatment access. He described how Novartis worked with H3D to provide seed capital to set up the capabilities for drug discovery and the performance of phase I clinical trials by exchanging researchers to upskill the next generation of scientists. The next step is to develop translational medicine capabilities in high-need areas including the development of regulatory ecosystems to support the innovative environments. The speed at which new drugs gets to patients also needs to be increased.



Jutta Reinhard-Rupp, Head, Merck Global Health Institute, described Merck's focus on diseases that affect young children and vulnerable populations, particularly new antimalarials. Merck worked with Kelly Chibale early on with MMV in a five-year collaboration for drug discovery that leveraged funding (receiving matching funding from the German government) and trained students. As part of this program, three PhD students from less-resourced countries in Africa are conducting research in the Cape Town labs and pick up skills. She ended by sharing her optimism and excitement about drug discovery in Africa.

PRESS RELEASE

African research foundation partners with international pharmaceutical industry to strengthen capacity for health innovation in Africa

EVENT PAGE WITH SPEAKER BIOS

[Strengthening capacity for health innovation in Africa: Launch of the H3D-F and IFPMA partnership - IFPMA](#)

REWATCH

[THE LIVE EVENT](#)

