



20 July 2017

Calls for investment in skills and scientific entrepreneurship to create science jobs and infrastructure in Africa

Concern that many science graduates in Africa are either unemployed or not pursuing careers in science

Leading African researcher, Professor Kelly Chibale has called for a deep commitment to investing in world-class infrastructure and skills for scientists to succeed on the continent.

The founder and director of Africa's only integrated drug discovery and development centre, H3D, at the University of Cape Town (UCT) said scientific progress in Africa was hampered by a lack of world-class scientific infrastructure.

In a keynote address to the fifth "Science in Africa UnConference" hosted by international NGO, Planet Earth Institute (PEI) in London. Professor Chibale said there was a great need to 'fund talented African scientists based in Africa to succeed, rather than just survive', by providing world-class infrastructure. He said the continent is also facing a lack of scientific entrepreneurship and poorly developed scientific networks between different groups on the continent.

Professor Chibale argued that training of scientists in Africa will not succeed and be sustainable without coupling it to the creation of the relevant industry, which will serve the dual purpose of attracting the best talent from amongst the youth to pursue science and also provide actual science jobs and careers upon completion of their degrees.

"Many science graduates in Africa are unemployed and the situation is getting worse. Those who can successfully opt to find science jobs overseas do so.

"Continuing to emphasise postgraduate (Masters and Doctoral) training without coupling it to the creation of career opportunities would merely serve to worsen unemployment and make science even more unattractive as a career option," said Professor Chibale.

He said that for many PhD graduates in Africa, career opportunities and the necessary infrastructure required to put their training to work is lacking in their home countries or regions.

“These have collectively encouraged the brain drain as our most talented young scientists leave the continent. Continuing with the status quo of producing more Doctoral graduates will not help.”

Professor Chibale even went as far as suggesting that at this juncture, serious consideration should be given to diverting some funds away from Doctoral student training programmes in order to invest in scientific job creating ventures.

He further argued that the main problem in Africa is not a lack of scientists or too few scientists.

“Unfortunately, there has been a tendency to focus on a lack of scientists in Africa instead of focusing on highlighting and investing in those who are present on the continent. This is particularly those who have demonstrated entrepreneurship in science through contributing to job creation as well as an absorptive capacity to attract and retain talent from within Africa and beyond.”

But Professor Chibale said it was possible to buck the trend. “We need to proactively seek out and nurture existing pockets of excellence in Africa that are both scientifically outstanding as well as being entrepreneurial,” he told participants at the conference themed: “Big Ideas for Africa: Celebrating the Continent’s Science and Technology Pioneers”.

He said H3D exemplified what is possible. The Centre has developed exponentially since it opened in 2011 and includes a state-of-the-art Medicinal Chemistry lab launched in 2015 as well as a new state-of-the-art Drug Metabolism and Pharmacokinetics (DMPK) lab, developed last year. The world-class infrastructure had catalyzed growth and helped H3D to work more effectively on research, including on a single-dose cure for malaria, which kills more than 1,200 people a day. The centre’s research on malaria has generated widespread global interest. The centre has partnered with a range of leading national and international partners in the pharmaceutical industry, government and donors to achieve its goals.

The Centre did not only want to train postgraduate students and postdoctoral fellows, but to create jobs as well, said Professor Chibale. The Centre has grown from a staff of five postdoctoral fellows in 2011 to a total of 58 staff members, most of them scientists.

Students are exposed to H3D projects that are structured as they would be in the biotech and pharmaceutical industries.

“Masters and Doctoral research students are immersed in a dual environment while interacting with H3D scientists. In a unique model, career options are often created in situ,” explained Professor Chibale.

The university is also situated in close proximity to the African patient population.

“We currently focus on communicable diseases that are relevant to African populations,” said Professor Chibale. The Centre is working on innovative solutions to combat various diseases prevalent in Africa, such as tuberculosis (TB), malaria and drug resistant infections of bacterial origin that are not responding to existing antibiotics.

The PEI is an international NGO and charity, working for the scientific independence of Africa. It is chaired by Lord Paul Boateng, the former UK High Commissioner to South Africa. The aim of the conference is to celebrate the individuals, research groups, commercial organisations and academic institutions driving scientific and technological advancement in and for the continent in fields as diverse as public health and agribusiness to space science, energy and water.

For more information or for an interview with Professor Kelly Chibale, please contact Kim Cloete at +27 82 4150736 or cloetek@yahoo.co.uk

ABOUT H3D

H3D is Africa's first integrated drug discovery and development centre. The Centre was founded at the University of Cape Town (UCT) in 2010 and officially launched in April 2011 and pioneers world-class drug discovery in Africa. It is located at three sites across two campuses at UCT. Its mission is to discover and develop innovative, life-saving medicines for African patients and to train scientists to be world experts. H3D embraces partnerships and is committed to excellence in interdisciplinary, translational science.

ENDS

Issued by: UCT Communication and Marketing Department

Thami Nkwanyane

Media Liaison and Monitoring Officer
Communication and Marketing Department
University of Cape Town
Rondebosch
Tel: +27 (21) 650 5672
Fax: +27 (21) 650 3780
Cell: +27 (72) 563 9500
Email: thami.nkwanyane@uct.ac.za
Website: www.uct.ac.za