

27 May 2020

World Economic Forum honours young UCT women scientists

University of Cape Town's (UCT) women scientists, Dr Sarah Fawcett and Professor Salome Maswime, have been hand-picked for the prestigious Young Scientists programme. Every year, the World Economic Forum selects an elite group of researchers under the age of 40 to participate in the programme.

Fawcett, a senior lecturer in the Department of Oceanography, and Maswime, head of Global Surgery, will be joining young scientists from across the globe on a three-year journey of growth and impact. The young scientists have been selected on the basis of their contribution to advancing the frontiers of science in the areas of health, sustainability, inclusiveness and equity.

In 2015, Fawcett was appointed as a lecturer in UCT's Department of Oceanography. Since then, Fawcett has spent the four years establishing a strong and diverse research group and raising funds to build a new marine biogeochemistry lab at UCT, which is in its final stages of completion.

Fawcett's research seeks to understand the connections between the components of Earth's climate system, as well as the impacts of human activities on marine environments. Since stable isotopes provide a powerful tool for investigating these links, having access to a method for analysing nitrogen isotopes in water and small organic samples – called the denitrifier method – is central to her lab.

The denitrifier method is the global standard for measuring nitrate isotopes and nitrogen isotopes in unconventional samples and is widely applied across disciplines. However, it is not currently available in Africa, meaning that Fawcett's lab will be a first for the continent.

Fawcett emphasises that the goal of this new laboratory is to facilitate high-quality, highimpact research and train the next generation of African scientists. "I am committed to shifting the center of gravity with regards to perceived scientific excellence by conducting research of significant relevance to Africa in an African laboratory using increasingly highresolution and innovative techniques that also push the frontiers of global knowledge," she explains.

She says being part of this programme holds promise for gaining deeper and broader insight into global interventions for overcoming the barriers to sustained transformation, but also to contribute meaningfully to ongoing conversations around this. "My ultimate goal is to catalyse sustainable transformation in a white- and male-dominated field and support the development of women scientific leaders and role-models. I am hopeful that my time as a Young Scientist will contribute to this effort."

Maswime's research ensures that all African mothers and their babies survive childbirth.

"My key research area is caesarean sections and interventions to reduce maternal mortality in African women. This is also a key part of global surgery, as caesarean sections are the leading surgical operation in the world," says Maswime.

Her other research area is stillbirths: understanding their placental causes and the foetal inflammatory response related to infections like HIV. Notably, she is also currently coprincipal investigator on a national study looking at COVID-19 in pregnancy.

She also engages with policy makers, investors, non-governmental organisations and communities to find ways of improving surgical outcomes.

She says it's a huge recognition to be acknowledged by a global institution with this stature.

"I have a particular passion for finding African scientific solutions for the challenges we face, and I think being part of this community will give me an opportunity to engage with a range of policymakers, stakeholders and important leaders in Africa, and across the world."



Dr Sarah Fawcett.

Photo: Supplied



Professor Salome Maswime.

Photo: Je'nine May/UCT

ENDS

Issued by: UCT Communication and Marketing Department

Ridovhona Mbulaheni

Ridovhona Mbulaheni Media Liaison Assistant Communication and Marketing Department University of Cape Town Rondebosch Tel: (021) 650 2333 Cell: (064) 905 3807 Email: ridovhona.mbulaheni@uct.ac.za Website: www.uct.ac.za