

## Connections across the globe....

**Dr Adam West**, and his PhD student, **Rebecca Karpul**, from the Department of Biological Sciences, recently joined 30 other South African scientists on a week long visit to the International Institute of Applied Systems Analysis (IIASA) in Vienna, as part of the new South African Systems Analysis Centre (SASAC) initiative, funded by the NRF. SASAC is designed to develop the next generation of systems analysis thinkers in South Africa.

The South African group represented a wide-range of disciplines including technology, social development, energy, water, pollution, ecology/ evolution and environmental management. The trip focussed on building links and collaborations with IIASA scientists to further develop a multi-disciplinary, systems analysis and policy-relevant approach in SA. A productive and stimulating visit that forged many new collaborations.



*The UCT contingent. From left: Adam West (Biological Sciences), Nien-Tsu Tuan (Construction Economics and Management), Masiwa Rusare (Construction Economics and Management), Rebecca Karpul (Biological Sciences), Keegan Steyn (Department of Information Systems)*

## Major Antarctic Expedition—Oceanography's Sarah Fawcett to head off into the blue



The newly created Swiss Polar Institute (SPI) recently announced an international scientific Antarctic expedition to study the Earth's poles and extreme environments. The expedition will comprise 55 researchers from 30 countries, working on 22 research projects, while circumnavigating Antarctica. **Dr Sarah Fawcett** (pictured left) from the Department of Oceanography will be the Principal Investigator of the only African-led project that has been selected to participate. The project team also includes scientists from Cape Peninsula University of Technology, Nelson Mandela Metropolitan University, Rhodes University, the Department of Environmental

Affairs, and SAEON, as well as collaborators from Princeton University and the University of Texas in the USA, and the University of Szczecin in Poland. Sarah and her team's research while on the expedition will focus on profiling the Southern Ocean's microbial community.

The future of the Earth's poles is critical. In the coming decades, major international negotiations will focus on the polar regions, which are bearing the brunt of global warming. The newly created Swiss Polar Institute (SPI), based at the Swiss Federal Institute of Technology in Lausanne, is an interdisciplinary center devoted to researching the Earth's poles and other extreme environments. The *Antarctic Circumnavigation Expedition (ACE)* which will take place at the end of December 2016, on board the *Akademik Treshnikov*, a Russian ship dedicated to scientific research, will be the first scientific expedition to fully sail around the southernmost continent. The purpose of this expedition, with key logistical support from Ferring Pharmaceuticals, will be to measure and quantify the impact of climate change and pollution in the Southern Ocean.

In addition to Sarah and her team, there are 7 other South African scientists, including UCT's **Professor Peter Ryan**, who will be participating in ACE as co-investigators and collaborators. Their research interests range from marine technology to microplastic pollution in the ocean. **Associate Professor Isabelle Ansoorge** from UCT is involved in the ACE organizational and scientific steering committee.