

HOW COULD COUNTRIES SUPPORT EMERGING SCIENTISTS IN DEVELOPING INTO EXCELLENT SCIENTISTS AND SUCCESSFUL ACADEMIC LEADERS?

Welcome to join us in this workshop where we will share experiences on how countries could support their emerging scientists in the best way during the transformative years where the young scientists get established as independent researchers and research leaders.

Workshop organisers

The South African Young Academy of sciences (SAYAS) and The Young Academy of Sweden (YAS).

Logistical Information

Date: 15 May 2018
Time: 14:30 for 15:00 – 16:30
Meeting Venue: University of Pretoria, Groenkloof Campus, Groenkloof Auditorium
Address: George Storrar Dr & Leyds St, Groenkloof, Pretoria

Programme

Opening/ Welcome remarks

Prof Kristian Pietras and Prof Philani Moyo.

Introduction on Young Academies of Science

Prof Kristian Pietras and Prof Philani Moyo.

Panel discussion: 'Supporting young scientists to thrive in the research system – challenges & opportunities'

Speakers: Dr Emmanuel Ojo, Prof Puleng Segalo, Prof Esther Akinlabi, Prof Eva Akesson and Ms Ann Fust.

Facilitator: Dr Katarina MacLeod.

Case studies on developing academic leadership skills

Case 1: 'Africa Science Leadership Programme (ASLP)' presented by Dr Alisa Phulukdaree.

Case 2: 'Networking program between members of the Swedish parliament and the young academy' presented by Prof Marie Wiberg.

Final words

Prof Kristian Pietras and Prof Philani Moyo.

Abstracts for case studies

Case study 1: Africa Science Leadership Programme (ASLP)

The Africa Science Leadership Programme (ASLP) is a new initiative of Future Africa as part of the University of Pretoria and the Global Young Academy, with the support of the Robert Bosch Stiftung. The programme grows mid-career African academics in the areas of thought leadership, team management and research development and enables them to contribute to the development of a new paradigm for science in African, focused on its contribution to solving the complex issues facing both Africa and the global community. Access ASLP website: <http://www.futureafrica.science/index.php/leadership-programmes/aslp>

Case study 2: networking programme between the young academy of Sweden and the national parliament

The networking program between the national parliament and YAS has been operating for five consecutive years. The purpose of the program is twofold: the participating politicians gain an understanding of research and science and what it is like to work as an emerging scientist, and the YAS members get introduced to how political decisions are prepared and made. Each year we match 8-10 member from the parliament (mostly from the committee for education and research) with YAS members. The program runs for a year and during this time the pairs make study visits at each other's workplaces where they shadow each other on an 'ordinary work day'. The program also includes visits to the parliament and the Government's offices. The program is much appreciated both by the politicians and scientists. Many participants over the years have witnessed on how they have gained a better understanding of a part of society which was previously unknown to them. For the YAS members the program is often the first close encounter with the political world and as such an important part of developing an academic leadership that goes beyond the University.

Biographies of speakers

Prof Eva Akesson is vice-chancellor of the University of Uppsala (Sweden) since 2012. She holds a professorship in chemical physics and the theme of her research has been studies of chemical reactions at femto meter scale using advanced spectrometric methods. Prof Akesson has a long career in research and teaching, with experience from several universities nationally and internationally. She has previously held several positions, including pro-rector, at the University of Lund (Sweden) where she was had a strong engagement in undergraduate education. Prof Akesson also has a longstanding commitment to internationalization and is e.g. chair of the Southern African – Nordic Center (SANORD) and is and also holds an honorary doctorate from the University of Edinburgh (UK).

Prof Esther Akinlabi is Vice Dean: Teaching and Learning and SAYAS member. She is based at University of Johannesburg's Faculty of Engineering and the Built Environment. Her research areas involve solid state welding – Friction stir welding and Laser Material Processing. Prof Akinlabi's research in laser additive manufacturing involves the production of titanium based functionally graded composites. She is registered with Engineering Council of South Africa (ECSA) and a member of South African Institution of Mechanical Engineering (SAIMEchE). Prof Akinlabi is also involved with the Engenius programme in collaboration with ECSA.

Ms Ann Fust is the Executive Director and Deputy Director General of the Swedish Research Council (SRC) since 2014. The SRC is the main governmental research funder which supports excellent research in all disciplines, including research infrastructure. Ms Fust has previously served as University Director at Uppsala University where she was part of the management team of the University. She also has experience from industry and from Uppsala University's holding company. Last year Ms Fust presented an inquiry to the Swedish Government on careers paths for young researchers, which has then formed the basis for political actions. Recently, she was elected to the board of Stockholm University of the Arts, Crafts and Design.

Dr Katarina MacLeod was elected member of YAS in 2016. After defending her PhD thesis in 2006 at the University of Lund Dr MacLeod is now associate professor in art history at Sodertorn University (Sweden). Her research centers around the science of art, feministic theories and critical cultural studies. In her research Dr MacLeod has focused on the impact of representation and has published on topics such femininity and girls in art; the domestic impulse in Swedish art at the turn of the 19th century and the 1960s and 1970s; narratives of Eastern European as periphery, and the production of cultural heritage value through representation. Amongst her recent publications is a monography on domesticity in 19th century Swedish art. Dr MacLeod regularly writes art critics for national newspapers and has previously lectured at the the University of Arts, Crafts and Design.

Prof Philani Moyo is one of the SAYAS Co-Chairs. He is Director of the Fort Hare Institute for Social and Economic Research (FHISER) at the University of Fort Hare. He holds a PhD in Social Sciences (Politics and International Studies) (University of Leeds, UK), an MA in Human and Sustainable Development (University of Leeds, UK), another MA in Social Policy and Development Studies (University of Fort Hare, South Africa) and a BA Honours (University of Zimbabwe).

Dr Emmanuel Ojo is a Lecturer & Course Coordinator (Economic & Management Sciences) at the University of Witwatersrand. He is actively involved in higher education research, though his ancillary research area is in Commerce Education. Issues, trends and challenges in the field of (South) African higher education that bothers on processes, engagements and its future within the global perspective interest him. He has researched on issues of internationalisation of higher education; explored the challenges and opportunities for new faculty in South African Higher Education; considered tertiary economics education (its teaching and implications on learning) as a field in higher education; and researched how advanced university students perceive the concept of corporate social responsibility. As a part of his involvement in the Global State of Young Scientist (GloSYS) workgroup within the Global Young Academy (GYA), he is part of the Project Team for the GloSYS Africa project which aims to investigate the state of young scientists within Africa which will feed back into the main GloSYS project, to continually inform decision makers regarding the career paths of early career researchers, globally.

Prof Kristian Pietras was elected member of YAS in 2013 and is the current chair of the academy. Prof Pietras is pursuing research on how cancer cells communicate with the surrounding tissues in order for the tumour to proliferate and spread. He defended his thesis in 2002 at the University of Uppsala and has since then worked both in the US and at the Karolinska Institute, before becoming a professor in molecular medicine at

the University of Lund (Sweden). Prof Pietras is member of the board of research for the national cancer foundation, a major national research funder, and is also regularly reviewing applications to the European Research Council (ERC). He also holds a number of patents related to his research.

Dr Alisa Phulukdaree is SAYAS Member and a National Research Foundation (NRF) Y2 rated researcher & lecturer in Physiology, Faculty of Health Sciences of the University of Pretoria. She obtained her PhD in April 2013 prior to which she obtained her Honours degree (*Cum Laude*) and Master's degree (*Summa Cum Laude*). She is a member of South African Society of Biochemistry and Molecular Biology, Physiology Society of South Africa and European Respiratory Society. She believes that academia provides the perfect platform for both teaching and research and it should be used to provide similar opportunities to all students especially those from less fortunate backgrounds which she can personally relate to.

Prof Puleng Segalo is a SAYAS member and Fulbright scholar currently holding the position of Head of Research and Graduate Studies in the College of Human Sciences at the University of South Africa. Her research work analyzes South African women's narratives of survival and resistance pre, during and post-apartheid, contrasting testimonies offered by women to the Truth and Reconciliation Commission (TRC), narratives spoken in interviews and focus groups, and embroidered stories that women stitch onto fabric to tell another tale of survival and resistance. In addition to being an NRF rated researcher, Prof Segalo has received recognition for her research work in the form of awards and invitations as a guest speaker at a number of national and international academic forums and popular media. In 2013 she was awarded the University of South Africa Principal Prize for Excellence in Research and in 2014 named the Distinguished Young Woman Scientist of the year by the National Department of Science and Technology.

Prof Marie Wiberg was elected member of YAS in 2013 and was for a number of years the spokesperson for research policy. After defending her PhD thesis in 2003 Dr Wiberg moved on to do research in the Netherlands and Canada and now holds a professorship in statistics at Umeå University (Sweden). Her research interests are psychometrics and in particular statistical methods for large-scale assessments and standardized achievement tests. She is currently involved in several research projects which focuses on developing new methods to compare different test versions and to compare the levels of knowledge for students in different countries.

Biographies of the young academies

One of the very first young academies established was *Die Junge Akademi* in Germany in 2000 and since then academies for emerging scientists have been initiated across the globe. Although the young academies vary in many ways there are some similar themes such as providing a unified voice for young scientists towards politicians and decision makers, engaging in outreach activities with children and teenagers and being interdisciplinary platforms for discussions between members. A common ground for establishing national young academies is the recognition that the creativity and perspective of young scientist should be encouraged. There is a large degree of international contacts and collaborations between young academies and the workshop presented today is one such example. Further information on National Young Academies of Science may be accessed from the Global Young Academy (GYA) at: <https://globalyoungacademy.net/>

The South African Young Academy of Sciences (SAYAS)

SAYAS was launched in September 2011, under the auspices of the Academy of Science of South Africa (ASSAf) in partnership with the Department of Science and Technology (DST). SAYAS was established out of the need for young scientists to contribute towards solutions to the important national, regional and global challenges facing society. The young academy represents the voice of young scientists in South Africa on national and international matters and provides a platform for young scientists to influence policy decisions. For additional information about SAYAS, see: www.sayas.org.za

The Young Academy of Sweden (YAS)

YAS is an independent interdisciplinary academy for a selection of the most prominent younger researchers in Sweden. Its operations rest on three pillars: interdisciplinarity, science policy and outreach. The Academy is an independent platform that provides younger researchers with a strong voice in the science policy debate and that promotes science and research to children. In the Academy young researchers meet across institutional and disciplinary borders to discuss research and research related topics. YAS was formed at the initiative of the Royal Swedish Academy of Sciences in 2011 and became an independent foundation two years later. The academy currently has 35 members. New members are elected annually based on two criteria; academic merits and interest to contribute to the activities of YAS. To ensure that the academy stays young at heart new members should not be more than ten years past PhD at the time of election. The membership period is then five years, with no possibility of re-election. For additional information about YAS, see: <http://www.sverigesungaakademi.se/en-GB/1.html>.