

In pursuit of passion

ASSAf's initiative to kindle, foster and grow the next generation of young scientists has culminated this year in two significant highlights that augur well for the future of science in the country. The first ASSAf/DST/NRF Young Scientists' Conference in October this year exceeded all expectations and a process to establish a national young scientists' academy for South Africa has been initiated.

Spearheading ASSAf's drive for the establishment of a national young scientists' academy in South Africa is Bernard Slippers. Professor at the University of Pretoria and driven by passion to excel in science, Slippers has a track record that few would not envy.

Science for Society caught up with him to find out what calibre of young scientist would ensure a bright future for South African scholarship.



Energetic, enthusiastic and, by his own admittance, totally in love with his work, Bernard Slippers is a role model that can be regarded as an example for the next and future generations.

Not only has he won numerous national and international awards for his research, but he has also authored and co-authored more than sixty articles for peer-reviewed journals. He has also contributed four chapters to books and was the co-editor of *Studies in Mycology; 100 Years of Fungal Biodiversity in southern Africa*.

Currently Associate Professor in the Department of Genetics, Forestry and Agricultural Biotechnology Institute (FABI), University of Pretoria, Slippers was elected as a member of the Executive Committee of the Global Young Academy established in February this year in Germany.

As the "voice of young scientists around the world," the Global Young Academy aims to empower and mobilise young scientists to address issues of particular importance to early career scientists.

In September, Slippers received the prestigious National Research Foundation (NRF) President's Award. The recipient of the President's Award must be 35 years or younger, have completed a doctorate degree or equivalent qualification no more than five years previously, and must be someone who is considered likely to become a future leader in his/her discipline based on his/her published work or research outputs.

About his involvement in establishing a national young scientists' academy for South Africa, Slippers says: "I am passionate about seeing the establishment of a Young Academy of Science of South Africa to contribute towards the development of the next generation of scientists in the country, to help transform the science field and engage with science and societal matters from the perspective of

the next generation". His involvement with ASSAf, the Academy of Sciences for the Developing World (TWAS) and the InterAcademy Panel (IAP) over the past year has emphasised for him the excitement and power it holds when top scientists from diverse backgrounds get together to work towards the improvement of science, society and the world.

Slippers, born and bred in Namibia, attributes his passion for science to his childhood. At least his passion for biology was born through his fascination with the adaptations and specialisations of biological species he encountered on family outings, school camps, and around the cities where he lived as the child of teaching parents. "I always felt surrounded by unspoilt natural beauty everywhere we went. I was blessed to have parents and grandparents that instilled a love for nature in me." He remembers his grandmother's rock garden with its collection of plants from around Namibia. School camps introduced him to the wonders of adapted plants and animals of the desert. Further entrenching this were his father and grandfather's love of photographing the natural wonders of the country. "When I eventually discovered even more intricate and beautiful aspects of the biological world through science, the love and curiosity about how it worked was already deeply engrained," he says.

In high school, biology was always one of his favourite subjects and he had a natural interest in the subject. Teamed with maths, science, history and language subjects, and in some cases some supplementary subjects after school (including electronics, computers, etc) his future was set.

Although he initially wanted to go into the medical field he ended up as a researcher in the dynamic world of the biological sciences. "Today, I don't want to do anything else", he says.

Not having been exposed earlier to the kind of career that he currently follows, Slippers says it is a pity that not more schoolchildren can be exposed to a wider variety of careers at school level already.

Slippers treasures several defining moments in his career. "It is difficult to highlight one", he says, "things tend to link to each other and build on each other. Deciding to take a course in mycology, my first paper, receiving my PhD, and an international award for it, receiving a NRF P-rating?"

He is quick to point out that Prof Mike Wingfield, Director of FABI, has always been his mentor throughout his scientific career. It was a conversation with him that landed him in a mycology course. "And it was that course that ended up changing my life, because that ended in a PhD in that field and all the wonderful exploration that followed after that." There have been many other mentors and 'heros'. "People such as Pedro Crous with whom I had the opportunity to interact frequently, others such as John Avise whom I have only met briefly, and people, such as Jared Diamond, who I just wish I could meet." Friends and colleagues also daily shape his world and thinking. According to him it is a blessing to work in a diverse, dynamic and cross-disciplinary environment. "One of the wonderful aspects of science is the diverse group of people whom one gets to meet, collaborates with and sometimes becomes friends with, from all around the world."

Of a 'personal best' there is no chance. For young scientist, Slippers, life is still too diverse.

"Life in the biological sciences truly is filled with highlights almost on a daily basis. There is so much to explore and to still discover! There is constant excitement as one discovers new things or realises for the first time how something in nature works", he says.

"My first paper in a top journal in the field from my MSc was very exciting. I am still proud of the four papers that eventually emerged from my MSc and are still cited well. One of the papers from my PhD has also been cited more than 70 times, which is a highlight. But perhaps most enjoyable has been some opinion papers and reviews in top journals

in the field, which hopefully help to shape some of the general direction and thinking in the field, and a book that is currently in preparation on the Sirex woodwasp," he adds.

Apart from his professional life, Slippers has interests ranging from music, art to sport. His wife, Jana, and he are the parents to two girls, Yvonne (7) and Mia (5), as well as house parents to almost 280 students at one of the University's mens' residences.

Slippers has high and several hopes for the future. "I would like to see FABI and the University continue to grow as leading research centres in the world. The explosion in certain

technologies, especially around genomics, is currently transforming the biological sciences. I would like to contribute to the growth in this field, and see these technologies also transform the fields that I work in, namely ecology and evolution of forestry pests and disease and their parasites and mutualists."

Then too there is the exciting prospect of an academy for young scientists in South Africa to foster the next generation of young scholars. All with a common goal – the pursuit of their passion.

