

FABULOUS FABI 20TH ANNIVERSARY SYMPOSIUM

FABI celebrated two decades of research excellence with a science symposium held on 24 and 25 January in the Aula Theatre on the Hatfield Campus of the University of Pretoria. More than 300 FABI alumni, academics, Government and forestry industry representatives, as well as many current FABI researchers, staff and students, attended the two-day celebration, themed “The Road to Research Excellence”.

After more than a year’s planning the event was a resounding success; combining science with art, culture and celebration. The symposium featured 39 presentations including speed presentations by six FABI postgraduate students. Some 60 foreign guests travelled from 15 countries across the globe to attend the celebration. This number also included some of the researchers from seven South African and 22 international universities and research institutes.



FABI Founding Director Prof Mike Wingfield with University of Pretoria Vice-chancellor Prof Cheryl de la Rey cutting the FABI-themed 20th anniversary cake.

Indicative of the very close ties FABI enjoys with the People’s Republic of China, a senior delegation from the Chinese Academy of Forestry as well as the Embassy of the People’s Republic of China in the Republic of South Africa attended the symposium. These included: Counsellor Lihong Hou, Secretary ZhongYang Wang and Secretary Yu Pang from the Embassy of the People’s Republic of China in the Republic of South Africa. The Chinese Academy of Forestry was represented by Prof YaoJian Xie, Director: China Eucalypt Research

Centre, Mr YanQuan Li, Vice President, Chinese Academy of Forestry and Ms YuJie Chen, Deputy Director of International Co-operation and Exchange Division.



To mark the event, FABI's founding Director Prof Mike Wingfield wrote a concise history of the Institute entitled "The Road to Research Excellence: The FABI Story". The event also saw the official welcome for Prof Bernard Slippers as the new Director of the Institute as from 1 January 2018.



Opening the symposium Prof. Mike Wingfield welcomed everyone and, in recounting the huge impact of FABI on research at the University of Pretoria and to industry, he said that the success of FABI lies in its flexibility as "FABI was an experiment and remains an experiment".

FABI has, in its 20 years existence prided itself on its research output and graduating postdoctoral students. This includes in excess of 1250 research articles, eight books, 105 book chapters, 260 MSc graduates, and 160 PhD graduates.

Prof Cheryl de la Rey, Vice-Chancellor and Principal of the University of Pretoria welcomed all delegates to the University of Pretoria. She stated that FABI was undoubtedly the most successful research institute on the campus and its success could be ascribed to investing in people and excellence.

Former UP Vice-Chancellor and Principle, Dr Johan van Zyl, in his address said that FABI was an idea and today we have in multiple what we had anticipated more than 20 years ago. “It grew beyond our dreams!”

Professor Jean Lubuma, Dean of the Faculty of Natural and Agricultural Sciences said that the Faculty viewed the institute as a model of how interdisciplinary research excellence can be achieved.

But FABI also changed many people’s lives. Numerous speakers, today respected researchers and professionals in their respective fields, described how studying at FABI changed their lives, gave them direction and inspired them. Most described it as a family rather than a group of researchers and this cohesion continues as could be seen by the large numbers of current FABIans nicknamed “black shirts” by virtue of their black FABI 20 shirts, who all worked tirelessly to make the symposium the resounding success that it was!



A musical interlude by MSc students in the UP Department of Music, Marcel Dednam (piano) and Derryn Griffiths (saxophone) entertained delegates with a range of musical pieces before lunchtime. The former Head of Department, Prof Wim Viljoen, introduced the duo.

FABI Director, Prof. Bernard Slippers, closed the day's presentations speaking on his vision for the Institute going forward and shared some of the exciting plans he has for FABI's next two decades.

A tree planting ceremony saw five trees - two wild mango (*Cordyla africana*) and three zambezi teak (*Baikiaea plurijuga*) - being planted by Prof. Cheryl de la Rey, Dr Irene Barnes on behalf of Dr Johan van Zyl, Prof Bernard Slippers, Prof Mike Wingfield and FABlan of the Year, Ms Andi Wilson.

A gala dinner celebration included a presentation by guest speaker Prof. Dr Ir. André Drenth, from the University of Queensland, Australia, and colourful performance of traditional songs and dances by the UP Avuwa Cultural Ensemble under the leadership of Mxolisi Duda. And what would a birthday be without a birthday cake? A spectacular FABI-themed birthday cake was cut to the sound of guests singing "Happy birthday" while Alexander Buck, Executive Director of the International Union of Forest Research Organizations (IUFRO) presented both Prof. Mike Wingfield and Bernard Slippers with a traditional Austrian Sacher Torte cake each.

The second day closed with a visit to FABI and the Institute's Biocontrol Facility to "see and meet the FABlans". An exhibition more than 80 works of tree and wood art was also organised by Prof Wilhelm de Beer in partnership with the University of Pretoria's Department of UP Arts. On display are works from the permanent collection of the University that depict trees, are made of wood or where wood has been used in the creation of the pieces. Works by FABlans Dr Alistair McTaggart, Dr Trudy Paap and Mr Nam Pham were also included.

The symposium was not just about celebrating 20 years of research excellence but also an opportunity for +many current FABlans, alumni and collaborators to interact and share memories, but also look to the future at possible new collaborations to drive FABI to greater heights in its next two decades.

Speakers at FABI 20:

Governmental Organisations:

Sustaining Research Growth and Excellence: Investing in the Future - Prof. Molapo Qhobela, Chief Executive Officer, National Research Foundation (NRF), South Africa

Science policy, budgets and PhD studies: Why they matter - Dr Ntsane Moleleki*, Senior Specialist: Policy Investigations, The National Advisory Council on Innovation (NACI), South Africa

Academia and Industry:

The 'too-much-talent effect' in fungi - Prof Duur Aanen, Associate Professor in Evolutionary Biology, Wageningen University, the Netherlands

The Chemistry of defensive symbiosis - the tale of two natural product discoveries! - Dr Christine Beemelmans, Junior Research Group Leader, Chemical Biology of Microbe-Host Interactions, Leibniz Institute for Natural Product Research and Infection Biology, Hans-Knöll-Institute (HKI), Germany

The making of a career; a chance meeting that has led to 20 years of research collaboration and friendship - Prof Treena Burgess*, Professor, School of Veterinary and Life Sciences, Murdoch University, Australia

Connecting the dots - The importance of global collaboration - Mr Alexander Buck, Executive Director, International Union of Forest Research Organizations (IUFRO), Vienna, Austria

FABI-China: Good friendships, great achievements and a bright future! - Prof ShuaiFei Chen*, Associate Professor, Research Leader of the Forest Protection Group, China Eucalypt Research Centre, Chinese Academy of Forestry, China; Extra-ordinary Lecturer, Forestry and Agricultural Biotechnology Institute (FABI), University of Pretoria

Applied plant pathology in the Genomics Era – Prof Jim Correll, Department of Plant Pathology, University of Arkansas, USA

No space, no money = foliar diseases - Prof. Pedro Crous*, Director: Westerdijk Fungal Biodiversity Institute, Utrecht, the Netherlands

Mycorrhizal fungi of Australian orchids – Prof. Celeste Linde*, Associate Professor: Ecology and Evolution, Research School of Biology, College of Science, The Australian National University, Canberra, Australia

Fabius defensoris : A taxonomic history - Mr Michael Peter, Executive Director, Forestry South Africa

Laurel wilt: An evolving pathosystem - Prof. Randy Ploetz, Professor of Plant Pathology, University of Florida, USA

Stepping out of the comfort zone; from an academic environment to business - Dr Oliver Preisig*, Executive Director, Inqaba Biotechnical Industries (Pty) Ltd., South Africa

Unravelling intricate multi-organism interactions in a global biodiversity hotspot - Dr Francois Roets*, Department of Conservation Ecology and Entomology, Stellenbosch University, South Africa

Adaptation and symbiosis – Using nature’s toolkit to excel in Science (and everything else) - Prof Diana Six, Professor of Forest Entomology/Pathology, WA Franke College of Forestry and Conservation, Department of Ecosystem and Conservation Sciences, The University of Montana, USA

Change | adjustment | resilience | endurance | convergence | future | innovation - Dr Lehan Stemmet*, Associate Dean: Faculty of Business and Information Technology, Manukau Institute of Technology, Auckland, New Zealand

Rotten roots to genes to genomes: Tackling the challenges of one of Europe’s most serious tree pathogens- Prof Jan Stenlid, Professor of Forest Pathology, Department of Forest Mycology and Plant Pathology; Swedish University of Agricultural Sciences, Uppsala, Sweden

Novel insights into symbiotic paths to sustainable insect fungiculture - Dr Michael Thomas-Poulsen, Associate Professor, Department of Biology, Section for Ecology and Evolution, University of Copenhagen, Denmark

The future of Science - An evolution of theory - Dr Len van Zyl*, Chief Executive Officer, ArrayXpress Inc., North Carolina, USA

The tough and rewarding journey of academic leadership - Prof Corli Witthuhn*, Vice-Rector: Research, University of the Free State, South Africa

Yellowhorn plantation intensification using biotechnology in China - Prof Xudong Zhou*, Head of Research and Development, FuturaGene Biotechnology (Shanghai) Company, Shanghai, China

FABI Researchers:

FABI: Looking forward - Prof Bernard Slippers*, Director: Forestry and Agricultural Biotechnology Institute (FABI), University of Pretoria

Welcome and introduction - Prof Brenda Wingfield, SARChI Chair in Fungal Genomics, Forestry and Agricultural Biotechnology Institute (FABI), University of Pretoria

Genomics of host and pathogen in the globally important grey leaf spot disease of maize - Prof. Dave Berger, Department of Plant and Soil Sciences, Forestry and Agricultural Biotechnology Institute (FABI), University of Pretoria

20 years of Mycology in FABI - Prof Wilhelm de Beer*, Associate Professor, Department of Microbiology and Plant Pathology, Forestry and Agricultural Biotechnology Institute (FABI), University of Pretoria

Pectobacterium brasiliensis: an emerging, economically important bacterial pathogen of potato plants - Prof Lucy Moleleki*, Associate Professor and Acting Head of Department: Department of Microbiology and Plant Pathology, University of Pretoria

Reading, editing and writing forest tree genomes - Prof Zander Myburg*, Chair in Forest Genomics and Biotechnology, Department of Genetics, Forestry and Agricultural Biotechnology Institute (FABI), University of Pretoria

FABI Student Speed Presentations:

Darryl Herron: Postgraduate confessions: A love affair with *Fusarium*

Joey Hulbert: Inspiring a new generation of plant health specialists in Africa

Danielle Roodt: Evolution and development of wood in the land plants

Osmond Mlonyeni: Characterising variation in the *Sirex-Amylostereum-Deladenus* symbioses

Andi Wilson: Sex: How the fungi do it

Tsakani Miyambo: Polygalacturonase: the "breakthrough" pathogenicity stars of *Phytophthora cinannamomi*

*FABI Alumni