

WE WELCOME HONOURS STUDENTS TO FABI

Contributions received from: Johan van der Linde, Gabriel de Ridder and Priyen Pillay

Each year FABI welcomes a group of honours students from the Departments within the Faculty of Natural and Agricultural Sciences. This year we also welcome one student who is registered with Bioinformatics. These students all do their project laboratory work in the FABI labs under the supervision of FABI research staff and the mentorship of FABI MSc and PhD students.

We are delighted to note that three of the eight Honours students in FABI came through the mentorship programme “pipeline” funded through the DST/NRF Centre of Excellence in Tree Health Biotechnology (CTHB) programme in 2007. We give some background on each of these honours students and some comments which they have contributed to this article.

Gideon Geldenhuys is a Bioinformatics student working on the root rot pathogen *Armillaria sp.* and is doing his honours degree under the supervision of Prof Brenda Wingfield.

Johan van der Linde joined the TPCP group and will be identifying the *Botryosphaeriaceae* causing wilt and canker of *Acacia mearnsii* in South Africa. He is working with Prof Jolanda Roux and will also be looking at possible gene flow between isolates from native *Acacia spp.* and *A. mearnsii* in forestry areas.

Erik Birkholtz joined the bacterial research group and will be filling in the gaps in the recently determined genome sequence of the eucalypt blight pathogen, *Pantoea ananatis*. He is working under the supervision of Professors Fanus Venter and Teresa Coutinho.

Jan Nagel is working on the *Botryosphaeriaceae* characterising a previously undescribed species in the group. He is supervised by Prof Brenda Wingfield and Dr Marieka Gryzenhout. He was one of the CTHB mentorship students in 2007.

Melanie van der Vaart will be working on a new bacterial disease of eucalypts in South America under the supervision of Professors Teresa Coutinho and Fanus Venter. She was also one of the CTHB mentorship students in 2007.

Gabriel de Ridder is using a multi-gene phylogeny to investigate the existence of cryptic species in the wilt pathogen *Ceratocystis albifundus*. He is working with Prof Jolanda Roux to characterize this important wilt pathogen of *Acacia mearnsii* which also occurs on numerous native tree hosts in southern and eastern Africa.

Darryl Herron is working with Dr Emma Steenkamp on the identification of a *Fusarium* species associated with pitch canker like symptoms in Colombia.

Priyen Pillay is working with Professors Brenda and Mike Wingfield on the characterization of a new species of *Ceratocystis*. To quote Priyen, “My research project entails the discovery of possibly a new *Ceratocystis* species of the fimbriata

group that is causing stress among Gamhar tree plantations in the East Kalimantan region of Indonesia. Vascular wilting is threatening the forestry industry in the far eastern countries that rely on this up-and-coming tree. My task is to identify the fungus causing this wilting and characterize it if it is new. DNA isolations, polymerase chain reactions and sequencing will reveal the identity of the fungus. Further microscope work will elucidate the morphology of the anamorphic and teleomorphic structures. The data obtained will then be analyzed, pooled and synthesized into an interesting and meaningful research product.”

Priyen had the following comments to make about Life at FABI. “If I had to describe life at FABI in one word, it would be “awesome”. The labs are great. I love the fountain in the middle of the courtyard. The people are great. It is true that everyone has up and down days but the atmosphere here just lifts one’s spirit up. Life at FABI encourages fulfilling work satisfaction and happiness which is what makes it great. SPOOF was too cool. The presentations were great, every one of them. It was great fun to loosen up a bit and see the other, lighter side of our lives. Darryl (aka. Percy) was too funny. I was in stitches. Prof Mike, all dressed up in the rapper’s gear was too cool to see. You’d never say that under all that he is a Professor of Plant Pathology of note. I think the humility within us all really shone brightly on that night.”

“I believe that the camaraderie at FABI is one of its strong points. It is tangible. People are always willing to help you if you require assistance. The close bonds that the scientists share make each and every day special. It makes one want to come to campus and do more to make a difference. We are a strong unit and should continue to derive wisdom from that strength”.

“The mentorship from FABI’s MSc and PhD students is great – there are many students throughout the Faculty who have helped me – too many to mention. They are helpful and handle a great number of responsibilities with ease. The wisdom and insight these students possess is awe-inspiring and drives us students to do even better”.

Johan and Gabriel added their comments: “It is a privilege to be able to do your honours year in an excellent establishment such as FABI. FABI has some of the best laboratory facilities in this country, a highly motivated, driven team and an international scene like never before. It is incredible to be able to share research and work on various projects with people from all over the world, all sharing one passion – SCIENCE. FABI, where **F**riendship, **A**mbition, **B**oldness (aka Mike Wingfield) and **I**nspiration come together in a group of excellence where all aspire to one goal, KEEPING TREES HEALTHY!”

See below photos of some of the Honours students in the Microbiology and Genetics Departments who are FABIans:



Johan van der Linde



Eric Birkholz



Melanie van der Vaart



Gabriel de Ridder



Priyen Pillay



Kerry-Anne
Pillay



Jan Nagel



Gideon Geldenhuys



Darryl Herron