

Career Orientation Program at FABI

by

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As part of the Life Orientation Curriculum at our school, we had to participate in a two week career orientation program at a company of our choice. I am interested in Science and was therefore very happy when I was given the opportunity to do my career orientation from 9-20 May 2011 at FABI. I was a bit nervous and did not know what to expect. I thought I will have to adhere to a strict schedule in a tense atmosphere. As I started, I soon realized that although FABI is a very well organized institute with extremely concentrated and professional employees, the atmosphere is relaxed and welcoming. Many researchers and especially my mentor tutors, Alisa Postma and Osmond Mlonyeni, put in a great effort to make my stay as informative and practical as possible.

Right from the start I felt comfortable, which provided wonderful start to my program.

Part of my time was spent at the Biocontrol Centre at the Experimental Farm. Here I worked in the quarantine facility with a tiny wasp, *Selitrichodes* that will hopefully control the *Leptocybe* wasp, which is a pest on *Eucalyptus* trees. I also worked in a sterile facility with the *Sirex* woodwasp. Hardus Hatting explained the entire lifecycle of this unique insect to me. It is fascinating how the lifecycles of *Sirex noctilio*, the fungus *Amylostereum areolatum* and the nematode, *Deladenus siricidicola* are all interlinked. I learned how the nematode is reared and released to control the *Sirex* woodwasp.



Alisa Postma then introduced me to different molecular techniques. This was definitely the highlight of my program. I learned how to extract DNA from the *A. areolatum* fungus. This process involves patience and a very steady hand! Using many buffers and lysates one is able to finally extract and analyze the DNA. Under the watchful eye of Osmond Mlonyeni, I learned how to use PCR to amplify a specific strain of genomic DNA of the nematode *D. siricidicola*.

All of this work was conducted in state of the art laboratories and the researchers were generous and trusting enough to let me use their expensive

equipment. Not only were these processes extremely interesting and informative, but they also were a lot of fun and I looked forward to what lies ahead every day.

My career orientation program at FABI was better than I could have imagined. My stay in FABI coincided with the annual TPCP meeting. I attended a couple of the talks and was amazed at the variety of topics that were covered. It gave me a very good insight of all the research that is being done at FABI and what scientists do. I also gained a broad view of what scientists do and learned much about forest entomology and agricultural biotechnology. I now have an idea of what life after school is like.



I would like to thank Prof Bernard Slippers for giving me the opportunity to do my career orientation program at FABI. I would also like to thank all the researchers that sacrificed some of their valuable time to make my stay at FABI worth every minute. In my opinion everyone working in FABI can count themselves lucky that they are a part of such a great institute!