



MSc/PhD project 2022 Maize pathogen microbiomics

This is a call for Applications for a funded MSc or PhD project in the MPPI research group of Prof Dave Berger in the Grain Research Programme, Forestry and Agricultural Biotechnology Institute (FABI) at the University of Pretoria.

Description: The Molecular Plant-Pathogen Interactions (MPPI) research group has an on-going research project on grey leaf spot (GLS) disease of maize caused by the fungal pathogen *Cercospora zeina*. Industry-linked funding has been secured for the running costs for a three year project which will investigate the fungal microbiome of the maize-GLS pathosystem. The project aims to address a controversial topic about the biology of the disease using innovative molecular approaches.

Funding for an MSc or PhD bursary was not included in the funding, therefore we aim to identify an excellent candidate whom we will assist to apply for an Industry bursary by the deadline of 30 September 2021.

Required Qualifications: For MSc applicants: Honours degree. For PhD applicants: MSc degree. The degrees should be awarded in Plant Pathology, Biotechnology, Genetics, Microbiology, Biochemistry, Bioinformatics or a related field.

Preferred experience: Research outputs that show a high level of proficiency in laboratory research in molecular biology and fungal plant pathology. Experience in seed pathology and microbiome research is highly desirable for this project.

Project leaders:

- Prof Dave Berger is leader of the MPPI research group, Plant and Soil Sciences Department, FABI, University of Pretoria. <http://tinyurl.com/FABI-MPPI>
- Prof Cobus Visagie is a member of the Applied Mycology Group and Grain Research Programme at FABI and the Department of Biochemistry, Genetics and Microbiology at UP <https://www.fabinet.up.ac.za/index.php/people-profile?profile=1364>. He is a mycologist with a particular interest in taxonomically robust ecological and biodiversity studies.

Applicants should apply by 27 August 2021, so that we can identify a suitable candidate to assist with the Bursary application which is due by 30 September 2021. Applicants that already have a Bursary for 2021 and that can start immediately will also be considered. Please apply by forwarding a complete CV including certified academic record with contact details of three referees (including phone numbers and email addresses) to Prof. Dave Berger (dave.berger@fab.up.ac.za). Applicants should provide a cover letter with motivation of their suitability for this project, current commitments, laboratory research experience and verifiable publication outputs. Please note that unsuccessful applicants will not be contacted.

