

November 2016

Postdoctoral Fellowship

2017/2018

maize molecular pathology

A Postdoctoral Fellowship is available in the research group of Prof Dave Berger at the University of Pretoria, South Africa.

Required Qualification: PhD in Plant Molecular Biology/Biotechnology, Genetics, Microbiology, Biochemistry, Bioinformatics or related field.

Preferred: An excellent track record in plant molecular biology or fungal genetics. Knowledge of current models of the molecular basis of plant disease resistance and fungal pathogenicity. Good communication skills, a willingness to mentor postgraduate students and contribute to the improvement of maize, a staple diet for the people of Africa.

Description: The MPPI research group has an on-going research project on grey leaf spot disease (GLS) of maize. GLS is a threat to food security in sub-Saharan Africa. We have recently completed a genomics study of GLS (see Christie et al. (2016) Systems genetics reveals a transcriptional network associated with susceptibility in the maize-gray leaf spot pathosystem, The Plant Journal <u>http://onlinelibrary.wiley.com/doi/10.1111/tpj.13419/abstract</u>).

The aim of the postdoctoral position is to answer hypotheses derived from the genomics study to uncover the molecular basis of maize resistance to GLS and pathogenicity mechanisms of the fungus *Cercospora zeina*. The research is carried out with local partners, including the seed industry, and international collaborators in USA and Belgium.

Prof Dave Berger is leader of the Molecular Plant-Pathogen Interactions (MPPI) Lab, Plant and Soil Sciences Department, Forestry and Agricultural Biotechnology Institute (FABI), Genomics Research Institute (GRI) at the University of Pretoria, South Africa. <u>http://tinyurl.com/FABI-MPPI</u>

The position is available immediately (January 2017-) for two years and will remain open until a suitable candidate is found. Please apply by forwarding a complete CV with contact details of three referees (including phone numbers and email addresses) to Prof. Dave Berger (dave.berger@fabi.up.ac.za). Applicants should clearly describe their expertise and verifiable publication outputs relevant to this position. Please note that unsuccessful applicants will not be contacted.

