

Postdoctoral fellow position available under SARChI Research Chair in Pathogenic Yeasts

Job description

A postdoctoral position is available in the Pathogenic Yeast Research Group at the Department of Microbial, Biochemical and Food Biotechnology at the University of the Free State (UFS), South Africa. This position will fall under the auspices of the NRF SARChI Research Chair in Pathogenic Yeast, held by Prof Carolina Pohl. The fellowship is open to all South African and foreign nationals, who graduated with a PhD degree in a relevant discipline within the last five years. Applicants must be able to relocate to the UFS for the duration of the fellowship.

Desired skills and experience

Candidates with PhDs in Microbiology, Zoology or related fields are encouraged to apply. The successful candidate will be required to conduct innovative research on the potential role of pathogenic fungal infection in Alzheimer's disease using zebrafish larvae as a model.

This project will investigate a possible fungal infection etiology of Alzheimer's disease (AD) with the long term goal being to find possible infective causes for AD that can be translated to effective treatment options. The objective of this proposed research is to study the role of non-lethal fungal infection in causing neurological symptoms and AD-like brain markers in zebrafish larvae. The central hypothesis is that inflammation caused by fungal infection can result in AD-like neurological symptoms in zebrafish larvae. The rationale is that identification of the role of fungal infection in development of AD, will lead to options to treat the underlying cause of neuro-inflammation. The central hypothesis will be tested by initially pursuing two specific aims: 1) Establish zebrafish larvae as model for non-lethal brain fungal infection with observable AD-like behavioural effects; 2) Detect AD-markers in brains of infected fish.

Tasks

- Register and reside as postdoctoral research fellow at the UFS and participate in relevant activities of the School of Postgraduate Studies and the Directorate of Research
- Do innovative research on pathogenic yeasts around themes of virulence and drug resistance;

- Author/co-author at least three (3) publication outputs per year in the form of DHET–accredited scholarly journal articles or books/chapters in books;
- Assist in postgraduate supervision;

About the employer

The UFS (www.ufs.ac.za) is one of the oldest universities in South Africa with 28 000 students on its main campus in Bloemfontein. It encourages student exchange with universities world-wide and has an office for international affairs (<http://supportservices.ufs.ac.za/content.aspx?DCODE=460>) that assists foreign students. Bloemfontein is a medium sized South African city (population 650 000) centrally located in the middle of South Africa with easy access to different parts of South Africa and southern Africa. The city offers a safe and vibrant student community surrounded by a wide range of attractions, including nature reserves, parks and wild-life sanctuaries and also has a Planetarium and Observatory for stargazing.

How do you want candidates to apply?

To apply, please email the following documentation by

30 November 2019 to Prof CH Pohl: PohlCH@ufs.ac.za

- Motivation letter, including a 1-2 page outline of relevant expertise and experience;
- Full CV including a list of research publications, conference papers and other scholarly output;
- Full transcripts of academic record and copy of doctoral degree certificate;
- Copy of ID document (or copy of passport in the case of foreign applicants);
- Contact details of two academic referees who have taught/supervised the candidate

Enquiries

Prof CH Pohl: PohlCH@ufs.ac.za