



Post Doctoral Fellowship 2024



Institute for Microbial Biotechnology and Metagenomics University of the Western Cape

The DSI/NRF SARCHI Research Chair in Microbial Genomics, hosted at the IMBM, UWC, employs recent advances in (meta)genomics and genetic engineering for the identification and characterization of microbial genes or biosynthetic pathways to produce natural and novel high-value biochemicals for potential industrial assimilation.

Applications from suitable candidates are invited for a **Postdoctoral Fellowship** to advance one of the selected technologies i.e. to diversify the range of ornithine lipids we can offer to industry partners for application in numerous product lines. The position will be for one year, which may be renewable for a further year (two years total) based on satisfactory performance and the availability of funds. The fellowship award will be R320,000 (tax free) per annum, funded by the DSI/NRF SARCHI research chair.

Project Description

We have patented two inventions relating to the recombinant production of ornithine lipid (OL) biosurfactants in multiple microorganisms. These have been assessed and are continuously developed for application in cosmetic formulations, wastewater treatment and for various agricultural applications. The structure of OLs can be modified enzymatically, either through alteration of the head group or the fatty acid tail. Each modification results in congeners with distinct properties and we envisage that this will widen the potential application of these molecules. We are particularly interested in assessing the role of these molecules in modulating metabolism and immunity as they have the potential to be therapeutic targets for the treatment of various human diseases.

Eligibility:

- A PhD in Microbiology, Biochemistry or a related discipline, that was awarded within the past 5 years
- The candidates must have demonstrated experience in molecular biology and biochemistry techniques, experience in analytical chemistry (such as HPLC, LC/GC-MS, etc.) will be an added advantage
- South African citizenship
- Not have held NRF Post Doctoral funding previously

Application Submission:

The candidate will be under the supervision of Prof. Marla Trindade. Applicants are to submit their CV, university transcripts and covering letter to ituffin@uwc.ac.za. Shortlisted applicants, meeting the minimum criteria and on a competitive basis, will be contacted for an interview.



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We reserve the right not to make an appointment for this post.
The vacancies will remain open until filled, or withdrawn.

A place of quality,
a place to grow, from hope
to action through knowledge