



# Post Doctoral Fellowship



**Institute for Microbial Biotechnology and Metagenomics**  
University of the Western Cape

Applications are invited for a **Postdoctoral Fellowship** to contribute to a cross-disciplinary project in the field of marine genomics, with a focus on peptide discovery. This position is funded by the **DSTI/NRF SARCHI Research Chair in Microbial Genomics** and the **EU H2020 BlueRemediomics** program.

The position will be for one year, which may be renewable for an additional year (24 months maximum) based on satisfactory performance and the availability of funds. The fellowship award will be R320,000 (tax free) per annum. The position is available from 1 March 2025.

## Project Description

This project aims to discover novel lanthipeptides, a class of ribosomally synthesized and post-translationally modified peptides, from marine invertebrate symbionts using genome- and bioactivity-guided approaches. Lanthipeptides exhibit diverse biological activities, making them potential candidates for new antibiotics and therapeutic agents. The fellow will employ heterologous expression, mass spectrometry, and peptide isolation to identify and characterize lanthipeptides. Bioactivity assays will be conducted to assess their antimicrobial properties and therapeutic potential. The discovery of new lanthipeptides with unique structures and potent antimicrobial activities could lead to the development of new drugs and high value, sustainable marine microbiome-based products. This research will contribute to the growing field of natural product discovery and provide insights into the biosynthetic pathways of lanthipeptides, offering potential therapeutic applications derived from South Africa's rich microbial biodiversity.

## 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 and Dr Nompumelelo Ikegwuoha. Applicants are to submit their CV, university transcripts and covering letter to [ituffin@uwc.ac.za](mailto: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.

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a place to grow, from hope  
to action through knowledge