

Postdoctoral researcher: Genomics/Metagenomics

About the project/team

An exciting opportunity is available for a postdoctoral researcher to join a research consortium focused on 'Harnessing natural product diversity to combat multidrug-resistant pathogens'. This SA-UK Antibiotic Accelerator project entails various approaches to accessing natural products, including the genomics and/or metagenomics route. The successful applicant will be based at the Applied Microbial and Health Biotechnology Institute (AMHBI), Cape Peninsula University of Technology, Bellville campus, South Africa, and will be working closely with researchers at Rhodes University (South Africa) and the University of Plymouth (UK). AMHBI hosts researchers with diverse backgrounds and research projects with a focus on exploring indigenous biodiversity for the development of bio-based products and/or processes. The successful applicant will be working with Dr Marilize Le Roes-Hill and will be playing a key role in the analysis and interpretation of genomic data (marine bacteria), as well as metagenomic and/or metatranscriptomic data (from marine environments).

Requirements

- A PhD degree in a relevant field (e.g., bioinformatics, computational biology, etc.)
- Undergraduate experience in Microbiology
- Experience with large scale data management and analysis
- Experience in utilising programs such as Python and R for data analysis, statistical analyses and visualisation of data
- Ability to work as part of a team or independently
- Willingness to learn new skills and take part in training programs
- Experience with bacterial genome analysis as well as metagenome analyses

Beneficial

- Experience with secondary metabolite production
- Experience with metatranscriptome analyses
- Familiarity with linking genome sequence data to metabolomics data
- Dry- or wet lab experience in Biotechnology or related research fields

This postdoctoral fellowship has an annual stipend of R300 000, with potential for renewal for a second year.

Application deadline: 14 August 2021

For more information, contact Dr Marilize Le Roes-Hill at leroesm@cput.ac.za