



Biopharming Research Unit
Department of Molecular and Cell Biology
University of Cape Town
Private Bag X3, Rondebosch, 7701,
South Africa

Post-doctoral Research Fellowship: Biopharming Research Unit

A post-doctoral research fellowship position is available in the Biopharming Research Unit (BRU) in the Department of Molecular and Cell Biology at UCT from January 2021. This is a fellowship awarded to the BRU through the Carnegie Developing Emerging Academic Leaders (DEAL) programme and is tenable for two years. The value of the Fellowship is R300 000 (tax free) per annum and carries no fringe benefits.

Project background

The main focus of the BRU is on the development of candidate vaccines and diagnostics in plants for animal and human health. The BRU currently has a PRF-funded project under the leadership of Dr Meyers involving the development of a mosquito-transmitted flavivirus (West Nile virus) vaccine in plants. The postdoctoral research fellow will be responsible for expanding this project to develop multivalent display particle vaccines against other flavivirus diseases, as well as generate reagents for surveillance of the relevant diseases. All products will be expressed in plants using *Agrobacterium*-mediated transient expression techniques, and those with potential will be purified and tested for their immunogenicity (vaccine candidates) and functionality (reagents).

PDRF requirements

The PDRF will be expected to become familiar with the project subject through reading published literature and will be encouraged to think up new ideas/approaches that could be implemented to strengthen the project. They will be required to carry out experimental work, analyse data and write up results for publication. The PDRF will take an active role in lab meetings, as well as share some lab running responsibilities. They will also be expected to co-supervise or mentor any junior postgraduate student (Hons or MSc) working on the same project as part of their professional development.

Specific skills required

- Experience in basic molecular biology techniques including DNA isolation and manipulation, PCR, protein expression and analysis
- Experience in transient expression of proteins in plants using *Agrobacterium*-mediated infiltration techniques
- Experience in protein purification

Conditions of the Post-doctoral Research Fellowship:

- Candidates must have obtained a PhD in Plant Molecular Biology, Biotechnology, Microbiology, Biochemistry or a related field within the last 5 years (or evidence of a PhD submitted and under examination).
- Candidates must not have previously held a full-time permanent professional or academic position.
- The successful incumbent will be required to comply with the University's approved policies, procedures and practises for the postdoctoral sector.

Application procedure:

Please send a letter of application stating areas of expertise and research interests, a full CV, copies of academic transcripts, and the names of two referees to Dr Ann Meyers (ann.meyers@uct.ac.za) by 27 November 2020. Only short-listed candidates will be contacted. The University of Cape Town reserves the right to disqualify ineligible, incomplete and/or inappropriate applications, change the conditions of award or to make no awards at all.