



INVESTIGATOR: AMR BIOLOGY

(Payclass 10; 3-year contract)

Holistic Drug Discovery and Development (H3D) Centre

Faculty of Science

The Drug Discovery and Development Centre (H3D) at the University of Cape Town (UCT) is seeking an Investigator in Biosciences for a laboratory-based position focused on antimicrobial resistance (AMR). The primary job role will be to provide scientific and technical support as part of an interdisciplinary translational research team discovering and developing innovative, lifesaving medicines. Specifically, this position will focus on compound screening against gram-negative and gram-positive bacteria using phenotypic and target-based approaches as well as deconvoluting the mechanisms of action for phenotypic hits. The successful applicant will be required to work with ESKAPE pathogens (*Enterococcus faecalis*, *Staphylococcus aureus*, *Klebsiella pneumoniae*, *Acinetobacter baumannii*, *Pseudomonas aeruginosa*, *Enterobacter spp* pathogens). The Investigator will work within H3D's Biosciences group at the Institute of Infectious Diseases and Molecular Medicine (IDM). Thus, the successful applicant will have access to a dynamic community of basic and translational scientists within the Institute in addition to the interdisciplinary team at H3D.

Requirements for the job:

- A PhD in Microbiology, Molecular Biology, Biochemistry, Genetics, Cell Biology, or related field
- 2 years' post-PhD experience (postdoc/industry) in the area of bacteriology with a track record of achievements
- Established skills in microbiology including minimum inhibitory concentration (MIC) and related assays
- A good understanding of molecular biology including the principles underlying molecular cloning
- Excellent oral and written communication skills
- Effective team building and teamwork skills
- Relevant publication record

Advantages:

- Experience in molecular cloning of genes from ESKAPE pathogens.
- Experience in whole genome sequence analysis
- Experience deconvoluting the molecular targets and resistance mechanisms of compounds with phenotypic activity
- Experience setting up medium to high-throughput microbiological assays and/or biochemical assays in 96-well/384-well plate format
- Good understanding of the AMR drug discovery landscape
- Laboratory management and co-ordination experience
- Drug discovery experience

Responsibilities will include, but are not limited to the following:

- Independently running biochemical/phenotypic assays for compound library screening
- Molecular biology experiments, constructing various recombinant strains
- Independently running various microbiological assays such as time-kill kinetics, growth curves, MICs involving various mutant strains, rate of resistance determinations, etc.
- Sharing general lab-duties; working collaboratively with all team and lab members
- Proactively sharing technical expertise with H3D team members and the broader IDM/UCT community as needed.

The annual cost of employment, including benefits, is between R580 137 and R682 513

The successful applicant should ideally be available to commence as soon as possible, preferably by Nov 2023.

Please note that the appointment may be contingent on being certified fit to fulfill the inherent (medical and safety) requirements of the position.

For any further information, contact Dr Lauren Arendse (l.arendse@uct.ac.za)

To apply, please e-mail the below documents in a **single pdf file** to Ms Natasha Khan at recruitment06@uct.ac.za

- UCT Application Form (download at <http://forms.uct.ac.za/hr201.doc>)
- A letter of motivation
- Curriculum Vitae (CV)

Please ensure the title and reference number are indicated in the subject line.

An application which does not comply with the above requirements will be regarded as incomplete.

Only shortlisted candidates will be contacted and may be required to undergo a competency test.

Telephone: 021 650 3469

Website: www.h3d.uct.ac.za

Reference number: E230346

Closing date: 25 October 2023

"UCT is a designated employer and is committed to the pursuit of excellence, diversity, and redress in achieving its equity targets in accordance with the Employment Equity Plan of the University and its Employment Equity goals and targets. Preference will be given to candidates from the under-represented designated groups. Our Employment Equity Policy is available at www.uct.ac.za/downloads/uct.ac.za/about/policies/eepolicy.pdf. "

UCT reserves the right not to appoint.