



**HOLISTIC DRUG DISCOVERY AND
DEVELOPMENT CENTRE (H3D)**
UNIVERSITY OF CAPE TOWN (UCT)



POSTDOCTORAL FELLOWSHIPS IN AMR DRUG DISCOVERY

Purpose: Two post-doctoral fellowships are being offered in the University of Cape Town's Holistic Drug Discovery and Development Centre (H3D). The fellowships will form part of the H3D-LifeArc Centre for Translational AMR Research (CTAR) and be based at the Institute of Infectious Disease and Molecular Medicine (IDM). This programme will be under the guidance of senior molecular and microbiologists within H3D, who will act as mentors and supervisors.

The research focus for these postdoctoral fellowships will be bacterial antimicrobial resistance drug discovery. Specifically, these positions will focus on mechanism of action deconvolution of novel compounds with Gram-negative and/or Gram-positive antibacterial activity, in addition to compound screening activities. Successful applicants will be required to work with ESKAPEE pathogens (*Enterococcus faecalis*, *Staphylococcus aureus*, *Klebsiella pneumoniae*, *Acinetobacter baumannii*, *Pseudomonas aeruginosa*, *Escherichia coli*, *Enterobacter spp*) as well as other locally relevant bacterial pathogens. Successful applicants will have access to a dynamic community of basic and translational scientists within the IDM in addition to the interdisciplinary team at H3D.

Project 1: "Investigating the mechanism of action of novel compounds and developing tools for *Acinetobacter baumannii* drug discovery"

Project 2: "Identification of novel compounds with antibacterial activity against priority ESKAPE pathogens using phenotypic and novel target-based phenotypic screening strategies"

Call for application: Applicants meeting the following criteria are invited to apply for these fellowships.

- The successful applicants must have a Ph.D. degree in Microbiology/Molecular biology/Biotechnology/Biochemistry.
- Candidates must have experience in basic and advanced techniques of Microbiology. Preference will be given to applicants with hands-on experience in microbial genetics or with antibiotic drug discovery experience.
- The successful applicants must be prepared to comply with the University's approved policies, procedures, and practices for the postdoctoral sector.

Conditions of Award (General): Following are the general conditions of the award:

- Postdoctoral research fellowships are only available to individuals who have achieved a doctoral degree within the past 5 years.
- Applicants must not previously have held full-time permanent professional or academic posts.
- Applicants are required to be in Cape Town at UCT for the duration of the research.
- No benefits or allowances are included in the value of the fellowship.

The value of the Fellowship: R350 000 – R390 000 (depending on funding, seniority, and experience).

Period: One year in the first instance, renewable for up to two further years, contingent on satisfactory progress and the availability of funds.

Application Process:

- To apply, please e-mail the documents below addressed to Dr. Nikki Cardoso **in a single pdf file** to Ms. Chanté Foentjies (chante.foentjies@uct.ac.za).
- A 1-page letter of application (stating areas of expertise, research interests, and experience)
- A CV containing a list of publications, a brief summary of research work as well as
- Names and contact details of two academics who have taught, supervised, or worked alongside the applicant,
- Copies of academic transcripts

Eligible and complete applications will be considered by Dr. Cardoso and a sub-committee. The successful applicants must ideally be available to commence with the Fellowship as soon as possible, at the latest 3rd November 2025. The closing date for applications is **29th August 2025**. *Shortlisting will take place shortly thereafter - If applicants do not hear back from the sub-committee, kindly assume your application was unsuccessful.*

Website: <http://www.h3d.uct.ac.za>

The University of Cape Town reserves the right to disqualify ineligible, incomplete, and/or inappropriate applications and the right to change the conditions of the award or to make no awards at all.