



## Postdoctoral Research Fellowship Vacancies

*Immunology, Proteomics, Genomics, Antimicrobial Resistance*

### Centre for Lung Infection and Immunity

#### Department of Medicine

URL (DoM): <http://web.uct.ac.za/depts/medicine/divisions/divisions.htm>  
URL (CLII): [http://www.lunginstitute.co.za/content/lung\\_infection.html](http://www.lunginstitute.co.za/content/lung_infection.html)



Applicants are invited to apply for a Postdoctoral Research Fellowship based at the Centre for Lung Infection and Immunity (CLII), Division of Pulmonology, Department of Medicine, University of Cape Town. The CLII conducts various TB and other respiratory disease-related research projects at numerous sites in Southern Africa. This includes several areas of research such as diagnostics, transmission, drug resistance, and immunology, that is conducted through a network of national and international collaborators. Additionally, CLII forms part of the Centre for the Study of Antimicrobial Resistance (CAMRA), an extramural research unit of the South African Medical Research Council, with the Director of CLII also holding the National Research Foundation SARChi chair in *Interrupting Antimicrobial Resistance* (SINARA). The Centre has an exemplary track record of high-quality research and publications and only candidates with a strong track record will be considered.

**Purpose:** Based on relevant experience, the successful candidate will be expected to contribute to projects within the core disciplines of the CLII:

- Immunology – TB immunopathogenesis studies with a specific focus on the human lung (including controlled human infection models using pulmonary-delivered BCG)
- Proteomics - novel biomarker discovery for the diagnosis of pulmonary and extra-pulmonary tuberculosis
- Genomics – application of next generation sequencing approaches (targeted sequencing, epigenetics) for diagnosis of multidrug resistant pathogens (TB and non-TB)
- Antimicrobial Resistance – identifying mechanisms of AMR development and ways to limit AMR amplification (e.g., role of adjunct inhaled antibiotic, immunotherapeutics, therapeutic drug monitoring etc.)

As the projects form part of CLII's Translational Biomedical Research portfolio, the successful candidate will have the opportunity to interface with product development and commercialisation, grant writing and project management.

**Academic Criteria:** Applicants must have completed a PhD degree in a foundational discipline relevant to the topic (e.g., PhD in Biochemistry, Chemistry, Microbiology, Immunology, Bioinformatics, or related field). The applicant should not have previously held any permanent professional or academic post (previous postdoctoral position at UCT or another academic institution is acceptable). Applicants should have a proven track record of scientific outputs (i.e., publication record in accredited international journals, and oral or poster presentations at recognised national or international conferences), interpersonal skills, and be able to effectively conduct research as part of a multi-disciplinary team. **Candidates should frame their CVs in the context of the core disciplines of the CLII (listed above) and highlight key laboratory techniques and evidence of research experience.** Meeting the following criteria would be desirable and count in the candidates' favour:

- Laboratory-based experience working with clinical samples (e.g., sputum, bronchoalveolar lavage, blood, urine, pleural fluid, CSF).
- Experience working with infectious pathogens (e.g., TB, SARS-CoV2) in BSL2 and 3 laboratory settings.

#### Conditions of Award:

1. Postdoctoral research fellowships are only available to individuals who have achieved their doctoral degree within the past 5 years.
2. The successful candidate may not have held any prior permanent academic or professional posts (previous postdoctoral position is acceptable).
3. No benefits or allowances are included in the value of the fellowship.
4. The successful candidate will be required to comply with the University's approved policies, procedures and practices for the postdoctoral sector.

5. There will be a skills assessment and tour of the research facility as a mandatory requirement of the interview process.

**Value & Tenure of Fellowship:**

The value of the Postdoctoral Research Fellowship will be between R 250 000 and R 350 000 tax free per annum (depending on experience post PhD) and meet the criteria as stipulated by the University of Cape Town and the South African Revenue Service. The Fellowship is tenable for 1 year, but renewable for a further 2-3 years, and is contingent on satisfactory progress and availability of funds. Applicants approaching the end of their post-doctoral tenure please make contact with the Unit Head to discuss options.

**Application Requirements:**

Applicants are required to submit their CV, cover letter, and contact details of two referees to Pat Wileman; email: [pat.wileman@uct.ac.za](mailto:pat.wileman@uct.ac.za) (Subject Line: CLII\_PD2026) by 15 January 2025. *Only shortlisted candidates will be contacted.*

**Selection Process:**

Eligible and complete applications will be considered by the Head of the Unit and an internal sub-committee. Shortlisted candidates will be contacted for an in-person or online interview. Once an interview has been scheduled, the candidates' referees 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.*