



University of Cape Town Lung Institute ALLERGY AND IMMUNOLOGY UNIT

POST-DOCTORAL RESEARCHER

The **Allergy and Immunology Unit (AIU)**, based at the University of Cape Town Lung Institute (www.lunginstitute.co.za), requires applications for a **POST-DOCTORAL RESEARCHER*** specialising in Aerobiology and DNA Metabarcoding to join the SA CARES project.

This multidisciplinary research project aims to study respiratory health outcomes in vulnerable South African communities in response to climate change and environmental exposures, particular pollen and pollutants. The postdoctoral researcher will be primarily responsible for aerobiology (within the larger SAPNET project), DNA metabarcoding, and project management tasks across key study sites, including in the Northwest, Limpopo and Western Cape provinces of SA.

Requirements:

- A PhD in Aerobiology, Environmental Science, Molecular Biology, Ecology, or a closely related field.
- Proven experience with DNA barcoding and metabarcoding techniques, particularly related to plant or fungal species.
- Proficiency with analytical pathways for plant DNA barcoding and experience with bioinformatics tools is strongly preferred.
- Familiarity with climate health research and environmental monitoring, with a preference for candidates with experience working in diverse field settings.
- Strong project management skills, including experience coordinating field-based data collection.
- Excellent communication skills, with a demonstrated ability to work in a multidisciplinary team.

Key Responsibilities include (but not limited to):

- Conduct pollen monitoring and sampling in diverse environments and climate zones across seven South African communities.
- Perform DNA metabarcoding, focusing on plant and fungal aeroallergens, and manage associated laboratory workflows.
- Analyze DNA barcoding data, contributing to the development of models linking environmental exposures to respiratory health outcomes.
- Assist in project management, including coordinating field activities, data collection schedules, and collaboration with local fieldworkers.
- Contribute to data analysis, report generation, and manuscript preparation for high-impact publications.

Value & Tenure of Fellowship:

The value of this Postdoctoral Research Fellowship will be dependent on experience post PhD.

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.

To apply, interested applicants are requested to submit the following to uctli.recruitment@uct.ac.za :

- a cover letter detailing your interest in the position and relevant experience
- a current CV, including a list of publications
- contact information of three professional references

Deadline to apply: 20 December 2024

Only shortlisted candidates will be contacted. Should you not receive a response within 30 days of the closing date, please consider your application unsuccessful.

***Please Note: This Position is not on UCT Conditions of Service.**