

# University of Cape Town Lung Institute ALLERGY AND IMMUNOLOGY UNIT

## PHD STUDENT

The **Allergy and Immunology Unit** (AIU), based at the University of Cape Town Lung Institute (<u>www.lunginstitute.co.za</u>), invites applications for a funded **PhD position**\* to work on the aerobiology and DNA metabarcoding aspects of the SA CARES project.

This project investigates the impact of climate-driven aeroallergen exposures on respiratory health in under-resourced communities across South Africa. The successful candidate will gain hands-on experience in field-based pollen sampling, aerobiological data analysis, and project-related community engagement.

#### **Requirements:**

- A Master's degree in Aerobiology, Environmental Science, Molecular Biology, or a related field.
- Familiarity with DNA barcoding techniques, ideally with a focus on plant or fungal species.
- Strong analytical skills, with a willingness to learn new software tools for DNA and environmental data analysis.
- Interest in community-focused health research and climate change impacts.
- Excellent communication skills and an ability to work effectively in a diverse team.

#### Key Responsibilities include (but not limited to):

- Conduct fieldwork and collect aerobiological samples in diverse communities.
- Process and analyze DNA barcoding samples to identify plant and fungal aeroallergens.
- Collaborate with a multidisciplinary team, including postdoctoral researchers, community health workers, and data analysts.
- Contribute to data analysis, model building, and manuscript preparation.
- Attend project-related meetings, training workshops, and community engagement events.

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

- a statement of research interest (1 2 Pages) explaining your interest in this project and relevant experience
- a current CV, including academic achievements
- contact information of two academic or 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.