

Job Title: Research Officer (Lecturer) (MASHA)

RESEARCH OFFICER

T2 (36 Month Contract)

Modelling and Simulation Hub, Africa (MASHA) Department of Statistical Sciences

FACULTY OF SCIENCE

The Modelling and Simulation Hub, Africa (MASHA) in the Department of Statistical Sciences invites applications to fill one post as a full-time Research Officer on a 36-month contract starting as soon as possible. MASHA's research focus is the development and application of mathematical modelling and computer simulation to predict the dynamics and control of infectious diseases to evaluate the impact of policies aimed at reducing morbidity and mortality. Based in the Faculty of Science, MASHA's research is closely integrated with other disciplines resulting in policy-driven and impactful scientific research.

We are looking for a motivated Mathematical Modeller for the position of Research Officer, to support the development and application of dynamic mechanistic mathematical disease models including malaria and other vector-borne disease models in southern Africa.

Requirements for the job:

- MSc in mathematical modelling of disease, mathematics, statistics, computer science, public health or other related fields
- At least 3 years' relevant research experience in the development and application of mathematical models to address applied health questions
- A good publication track record
- Strong quantitative, analytical and programming skills (preferably in at least one of R, C++, or Python)
- Demonstrated expertise in the areas of mathematical disease modelling, epidemiology and public health
- Ability to work in an interdisciplinary environment
- Well-developed and professional interpersonal and communication skills
- Effective time-management skills and the ability to organize, prioritize and multi task
- Ability to work independently and as part of a team

Advantageous:

- PhD in mathematical modelling of disease or other related fields
- Experience in working with national and international policymakers
- Experience in grant writing and securing funding
- Experience in supervision of postgraduate students and teaching
- Exposure to health economics for policy

Responsibilities:

- Work closely with the MASHA team on disease-related research projects
- Develop and apply mathematical models to support policy making
- Lead and support meetings and workshops with clients
- Supervise and/or mentor at most two postgraduate students at MASHA
- Manuscript and report writing
- Draft funding applications
- Be part of research projects from the design phase to the publication phase.
- The candidate is expected to enroll in a PhD program within the first year of appointment.

The annual cost of employment, including benefits (where applicable), will be between R675,000 and R900,000

Please click the "apply" button to create a candidate profile and submit your application

Please complete/attach the following to your profile before submitting your application:

- Cover letter describing experience in relation to the requirements of the job
- Curriculum Vitae (CV)
- **Proof of doctoral program registration, if applicable**
- Names and contact details of three referees.

Please ensure that the CV contains sufficient detail to demonstrate competence in each job requirement.

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.

Any enquiries around the application process to be addressed to Ms Abigail Dixon at abigail.dixon@uct.ac.za or 021 650 1673

Website: www.masha.uct.ac.za

Closing date: 25 April 2025

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 <https://uct.ac.za/media/9482>.

UCT reserves the right not to appoint.