

Postdoctoral Fellowship in Epidemiological Modelling & Analysis

The South African Centre for Epidemiological Modelling and Analysis (SACEMA) is a national research centre established under the Centre of Excellence programme of the Department of Science and Innovation and the National Research Foundation and based at Stellenbosch University. SACEMA specialises in modelling and analysis to improve health in South Africa and across the African continent. Trained in mathematics, biology, physics, statistics, and epidemiology, our researchers bridge disciplines to understand disease dynamics and improve real-world outcomes.

SACEMA is inviting applications from quantitatively skilled candidates to apply for a Postdoctoral Fellowship in Epidemiological Modelling and Analysis. The fellow will be part of a collaborative study between SACEMA and CIDER at the University of Cape Town, working on modelling strategies to eliminate hepatitis B and C in South Africa. The prospective fellow will be based at SACEMA in Stellenbosch and will work in collaboration with Dr Cari van Schalkwyk and other members of the SACEMA team, as well as with Prof Leigh Johnson (University of Cape Town, CIDER).

Scope of Research:

This project will extend MicroCOSM (Microsimulation for the Control of South African Morbidity and Mortality) to include transmission of hepatitis B and C. We will calibrate the model to a wide variety of surveillance, survey, and programme data, and estimate the elimination potential of current and proposed hepatitis B and C prevention and treatment strategies.

Requirements:

- A PhD degree in a quantitative aspect of public health, epidemiology, statistics, or dynamical modelling, granted in the past 5 years
- Strong quantitative background, with demonstrated ability to programme in C++ and R
- Demonstrated ability to lead research, as well as strong communication and writing skills.

Commencement of duties: The position is available immediately.

Term of appointment: 1 year (renewable, contingent on performance and the availability of funds)

Stipend: R350 000 per annum, payable in monthly instalments

Closing date: 14 April 2023

Enquiries: Dr Cari van Schalkwyk, carivs@sun.ac.za

Send a letter of application (cover letter), accompanied by a comprehensive curriculum vitae, including list of publications, copies of manuscripts that are submitted or in press, and the names and contact details of at least two referees, to: postdocs@sacema.org

Note: Applicants should request their referees to forward confidential reports directly to the same address.

Submission of the application materials in response to this request will be the first of a three-stage application and selection process. Only candidates under further consideration will advance to each subsequent stage. The second stage will include an assessment of selected applicants' problem-solving ability. The third stage will include an in-person interview.

Postdoctoral fellows are not appointed as employees, and as their fellowships are awarded tax-free, they are not eligible for employee benefits. The University reserves the right NOT to make an appointment if suitable candidates do not apply.