

Postdoctoral fellowship in post-tuberculosis lung disease

Project title: The Post-Tuberculosis Lung Disease Spectrum in South Africa and Cambodia

Scope of Research: Post-tuberculosis lung disease (PTLD) is a debilitating condition which affects people with previous tuberculosis diagnoses. Currently there are no specific diagnostic standards and no evidence-based interventions, due to a lack of research, but affected individuals typically present with respiratory or cardio-respiratory signs and symptoms, as well as non-specific symptoms. Apart from the physical aspects of the condition, these individuals also suffer with mental health and socio-economic challenges. The Post-TB Care study, funded by the National Institute for Health and Care Research, with principal investigators Dr Brian Alwood (Stellenbosch University) and Dr Rein Houben (London School of Hygiene and Tropical Medicine), is recruiting a prospective cohort of South African and Cambodian patients with PTLD, comprehensively evaluating their physical, mental and socio-economic status, with 1-year follow-up. The study aims to inform diagnosis, develop minimally clinically important difference indicators, as well as explore exercise as a potential intervention strategy.

Hosts: Dr Brian Alwood and Dr Elizna Maasdorp, Stellenbosch University, Cape Town

Summary of fellowship:

The candidate will be based in Cape Town and join the PTBC research team, consisting of research staff (medical specialists, physiotherapists, qualitative researchers, program managers, research nurses and assistants, and a data analyst) in South Africa and Cambodia, and three PhD candidates. The candidate will analyse data and prepare manuscripts for publication, exploring and describing associations between lung function tests, exercise tests, clinical examination and respiratory questionnaires. This position does not involve any clinical or laboratory work. There are opportunities to publish first-author papers and to co-supervise MSc students.

Duties and Responsibilities:

- Data extraction and cleaning in a reproducible manner using a coding language like R or Python.
- Reproducible data analysis in a coding language like R or Python.
- Production and maintenance of operational scripts to track certain aspects of the research, like quality control or recruitment numbers.
- Manuscript preparation in collaboration with other researchers.

Knowledge, experience, skills and abilities:

- PhD (Preferably in Epidemiology, Biostatistics, or a related data-driven field, but candidates from other fields who can show evidence of data analysis skills will also be considered.)
- Proficiency in R or Python for data analysis (Stata users will also be considered).
- Ability to analyse epidemiological data, as evidenced by publications or projects in online code repositories like GitHub.
- Experience in formulating research questions and developing analysis strategies.
- Experience in human medical research context.
- Ability to work independently.
- Proven ability to communicate analysis results to other members of the team.
- Proficiency in academic writing.

Other information: Postdoctoral fellows are registered as research students and do not qualify for employee benefits. The fellowship is provided tax-free. This postdoctoral position is based in Cape Town, South Africa, and funded for one year, with the possibility for renewal.

Commencement date: As soon as possible

Closing date: xxxxxx

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