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POSTDOCTORAL RESEARCH FELLOWSHIP IN ANTI-TUBERCULAR DRUG DISCOVERY

A postdoctoral research fellowship is being offered in the **Department of Biochemistry and Microbiology at Rhodes University, Grahamstown**. The successful applicant's research will focus on the identification and development of inhibitors of the ***Mycobacterium tuberculosis* DnaK-DnaJ-GrpE chaperone complex** using a combination of high-throughput, biochemical and/or whole-cell, phenotypic screens. Hit compounds stemming from the high-throughput screens will serve as chemical starting points for the development of more selective and potent inhibitors of the mycobacterial chaperone complex.

The fellowship is funded by the **GlaxoSmithKline (GSK) Tres Cantos Open Lab Foundation (TCOLF)** and the fellow will spend the initial part of the project working in collaboration with researchers at the TCOLF laboratories in Tres Cantos, Spain. The remainder of the fellowship period will be spent in the Department of Biochemistry and Microbiology at Rhodes University, under the supervision of Prof. Adrienne Edkins (<https://www.ru.ac.za/biobru/>) and Dr. Garth Abrahams.

Period: This is a **full-time position available for a period of one year, starting in January 2021**, with the possibility of renewal for a second year, contingent on satisfactory performance and availability of funding.

Remuneration: Remuneration is negotiable and will be limited to a maximum amount of €58, 400 per annum (inclusive of employer costs such as social security and insurance) depending on qualifications and experience. All international travel and accommodation at Tres Cantos will be covered by GSK TCOLF.

Responsibilities

- The research fellows responsibilities will include, but are not limited to the following: i) designing and performing biochemical, molecular, cell biology and microbiological experiments, ii) developing and performing biochemical and/or phenotypic assays for compound library screening, iii) processing and analysis of all scientific data generated, iv) preparation of manuscripts, presentations, and scientific reports, v) participating in the training and supervision of junior laboratory members; vi) sharing knowledge and technical expertise with lab members and the broader Rhodes University community vii) working collaboratively with fellow lab members and national and international colleagues and collaborators.

Requirements:

- Applicants must possess a **PhD degree in an appropriate Life Science** field (Biochemistry, Molecular Biology, Cell Biology, Biotechnology, Microbiology etc.)
- Applicants should have experience in the following areas: i) basic and advanced molecular biology techniques; ii) recombinant protein expression, purification and characterisation; iii) enzymology iv) biochemical and/or cellular assay development, optimisation and troubleshooting.
- Experience in the following areas is not required, but may be advantageous: i) developing and performing medium to high-throughput biochemical and/or whole cell screens (96-, 384- or 1536-well format), ii) structure-based drug design, (iii) experience in the culturing, handling and genetic manipulation of *Mycobacterium tuberculosis* or other bacterial pathogens at the Biosafety Level 3.

Application Process:

Applicants should submit a cover letter (summarising their areas of expertise, research interests and experience), a curriculum vitae (no more than 3 pages, including a list of publications, and the names and contact details of three references) as a single PDF file to Prof. Adrienne Edkins (a.edkins@ru.ac.za) by **Friday, 02nd October 2020**. Applications that do not comply with the listed requirements will be regarded as incomplete. Only shortlisted candidates will be contacted and should be prepared to be interviewed and present an online seminar describing their most recent research work. The successful applicant should be available to commence with the Fellowship at the beginning of the academic year in **January 2021**. The candidate should be a South African citizen or possess a valid residence, work or study visa.

All queries can be addressed to Prof. Adrienne Edkins (a.edkins@ru.ac.za) or Dr. Garth Abrahams (g.abrahams@ru.ac.za)

Website: <https://www.ru.ac.za/biobru/>

Twitter: https://twitter.com/bio_bru?lang=en