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Postdoctoral Position in Quantitative Macrophage Phosphoproteomics

The Mycobacteriology research group at the Division of Molecular Biology and Human Genetics at Stellenbosch University is seeking a highly motivated and creative postdoctoral fellow to join our research team. We are a dynamic group that exploits cutting-edge technologies such as next-generation sequencing and mass spectrometry-based proteomics, combined with computational approaches, to advance our understanding of *Mycobacterium tuberculosis* evolution, pathogenesis, drug resistance and host-pathogen interactions.

Long term co-evolution of *M. tuberculosis* with its host has allowed this pathogen to evolve ingenious ways to subvert protective immune responses and to survive prolonged periods without being cleared by the host immune system. Large knowledge gaps still exist on the molecular mechanisms of the immune evasion strategies employed by *M. tuberculosis*. The focus of the research project is to elucidate aberrant cell signalling events in macrophages upon exposure to different clinical *M. tuberculosis* isolates by using a global quantitative phosphoproteomics approach. Detailed understanding of host-*M. tuberculosis* interactions is of utmost importance to reveal host signalling pathways that support *M. tuberculosis* survival in macrophages. This could lay the foundation for targeted host-directed immunotherapies that can act as natural "adjuvants" to current antimycobacterial regimens.

The fellowship is valued at R170 000. The initial appointment is for 1 year, with the option to renew for up to a total of 2 years. Renewal each year will be dependent on performance evaluation. The fellowship is compliant with the rules set by SARS and is exempt from taxation and includes no benefits.

Key Requirements:
1. A PhD degree (obtained within the last 2 years) in immunology, microbiology or related fields.
2. A track record of publications in immunology, microbiology or related fields.
3. Innovative spirit with the ability to work independently.
4. Excellent inter-personal and communication skills.
5. Excellent organizational and analytical skills.
6. Experience in TB immunology is essential and experience in mass spectrometry-based proteomics is preferred.

Responsibilities:
1. Plan, perform, record and interpret experiments independently.
2. Assist in day-to-day activities and provide student supervision and training.
3. Communicate research results to the group, collaborators, and the broader scientific community.
4. Contribute to the preparation of grant applications, reports and scientific publications.
5. Comply with the policies of Stellenbosch University.

To apply: please email a cover letter, CV and contact details of 3 referees to Dr Tiaan Heunis (heunistd@sun.ac.za). **Closing date for applications: 24 February 2017**. Shortlisted candidates will be contacted for interviews.

Medicine and Health Sciences
Geneeskunde en Gesondheidswetenskappe
EzoNyango nezeeNzululwazi kwezeMpilo

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