



UNIVERSITY OF CAPE TOWN



Paediatric Neurosurgery Unit
Division of Neurosurgery
Room 617, Institute for Child Health
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South Africa
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Purpose: Advert for PhD Student in Neurosciences: Brain injury in children with tuberculous meningitis

We are offering a PhD research project in Clinical Neurosciences, hosted in the Division of Neurosurgery at UCT, under the supervision of Associate Professor Rohlwink.

Call for Application:

Tuberculous meningitis (TBM) is associated with high rates of mortality and morbidity in children but is a challenge to diagnose due to its non-specific presentation. Highly sensitive blood-based biomarkers of brain injury could aid in improved patient outcome. Although promising in cerebrospinal fluid, biomarker kits have lacked sensitivity in blood. In this study we will test a new blood-based kit with 1000-fold greater sensitivity for several biomarkers, which predicts injury severity and outcome in patients with traumatic brain injury. We will also examine the association of metabolomic and genetic markers of neuroexcitotoxicity and differential inflammatory profiles with outcome to identify novel potential treatment targets to mitigate brain injury and improve outcome. The project will also investigate the organic basis of brain injury and the functional consequences thereof using advanced brain imaging techniques in association with neurocognitive assessments.

Conditions: The successful incumbent will be required to register for full-time study and must comply with the University's approved policies, procedures and practises for the postgraduate sector. Successful candidates may not hold scholarships and salaried/full-time employment concurrently but will be permitted to take up part-time employment (specified maximum hours per week). The candidate will be required to work flexible hours and should have reliable independent transport.

Value and tenure: Running costs will be funded through the PI's funding and the African Brain Child Initiative, stipend support is not currently available, however, we will assist the candidate in finding funding. For committed students there will be opportunities and support for travelling and engaging with international groups.

Academic criteria: Students from biomedical sciences are encouraged to apply. This is a translational study involving a mixture of laboratory and hospital bedside work. Applicants should be South African citizens or already hold a valid student visa for South Africa, only candidates with a Master's degree in biomedical science or related field are eligible to apply.

Application requirements and selection process: Please send through a letter of application stating your areas of expertise and research interests as well as a full CV, copies of academic transcripts, and the names of 2 contactable referees. Eligible and complete applications will be considered by a selection committee within the Paediatric Neurosurgery Unit.

Closing date for applications: This position is available to commence as soon as possible.

Contact details for submission of applications and for enquiries: Please send all applications to Miss Devin Van de Laar at dr.vandelaar@uct.ac.za.

The University of Cape Town reserves the right to disqualify ineligible, incomplete and/or inappropriate applications.
The University of Cape Town reserves the right to change the conditions of award or to make no awards at all.