



AFRICAN BRAIN CHILD

**Purpose: Advert for Postgraduate Student in Clinical Neurosciences**

We are offering a Masters or PhD research project in Clinical Neurosciences for a suitably qualified candidate, hosted in the Division of Neurosurgery at UCT.

**Call for Application:**

The proposed project, is based on mechanisms and therapies of acute brain injury (trauma as well as infection such as bacterial and tuberculous meningitis). Various forms of invasive and non-invasive monitors to assess brain function and intracranial dynamics are in development. This project focuses on developing pilot data on a number of brain monitoring modalities including but not limited to inter-hemispheric transfer time, advanced brain imaging, and eye tracking technology. The project will require data collection and computational analysis in collaboration with the Massachusetts Institute of Technology (MIT). The student will be expected to conduct monitoring in patients, to contribute to developing the monitor and analysis software, and conduct analyses. Training opportunities at MIT will be available to hardworking, committed students.

**Conditions:**

The successful incumbent will be required to register for full-time study and must comply with the University's approved policies, procedures, and practices 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).

**Value and tenure:**

Funding for this project is available for one MSc or PhD student as per UCT prescribed finding limits. Funding carries no fringe benefits and is available for full time study.

**Academic criteria:**

Students from backgrounds including mathematics and physics, engineering, computational science are encouraged to apply. We aim for projects to be as translational as possible. Applicants should be South African citizens or already hold a valid student visa for South Africa.

**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 referees. Eligible and complete applications will be considered by a selection committee within the Paediatric Neurosurgery Unit.

**Closing date for applications:**

All positions are available to commence study as soon as possible or by the latest January 2024.

**Contact details for submission of applications and for enquiries:**

Please send all applications to Dr Jill Combrinck at [j.combrinck@uct.ac.za](mailto:j.combrinck@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.*



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