



UNIVERSITY OF CAPE TOWN

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**Paediatric Neurosurgery Unit**  
**Division of Neurosurgery**  
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### **Advert for PhD in Neuroscience (NeuroPharmacokinetics)**

A PhD in Neuroscience project is being offered in the UCT Neuroscience Institute, Division of Neurosurgery.

#### **Scope of the research: NeuroPharmacokinetics**

We are looking for a PhD student in Neuropharmacokinetics. We are interested in exploring novel methods to examine PK/PD in the brain. Our work to date has utilised samples of ventricular cerebrospinal fluid and brain interstitial fluid using microdialysis to examine morphine (in brain trauma) and Rifampicin (in tuberculous meningitis). We aim to broaden this work and are open to novel projects that may be possible using the infrastructure created. Our collaborators are from the Dept of Pharmacology at UCT and the Netherlands (Erasmus University, Leiden University). Students will be supported by the NRF SARChI Chair for Clinical Neurosciences for their projects, travel, and engagement with international groups.

**Conditions of the award:** we are looking for a candidate who

1. Has completed an MSc in a biomedical domain within the last 5 years, with experience in laboratory processing of human biological samples. Preference will be given to candidates with a background in pharmacology.
2. Has not held full-time permanent academic or professional posts
3. Is mobile and able to work flexible hours - patient sample collection is unpredictable and often occurs after hours and can involve hourly work over the initial days of patient admission
4. Is able to travel for possible work training in Europe.
5. Is focussed, hardworking, flexible and can work independently.
6. Is a South African citizen or already holds a valid student visa for South Africa.

**The Fellow will be required to:**

1. Collect study samples during patient monitoring in the intensive care unit, conduct sample processing, learn about and conduct pharmacokinetic analysis
2. Collect necessary data for the study and the unit's registries and databases.
3. Contribute to maintaining the unit's biobanks.
4. Write up research for publication and present at local and international meetings

5. To comply with the University's approved policies, procedures and practises for the postgraduate sector.

**Tenure and value:**

The value of the bursary will be within the NRF's prescribed range, carries no fringe benefits and is for full time study. The project will run for 3-4 years depending on the level of postgraduate study and with the option to extend if applicable, the position is available from January 2021.

**Application procedure:**

Please send through a letter of application stating which project you are applying for, areas of expertise and research interests, a full CV, copies of academic transcripts, and the names of 2 referees to Professor Anthony Figaji (Anthony.Figaji@uct.ac.za). Eligible and complete applications will be considered by the Division of Neurosurgery.

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

Prof Figaji

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