



AFRICAN BRAIN CHILD

Postdoctoral Fellowship (2024) African Brain Child: TBM Metabolome

Purpose:

Tuberculous meningitis (TBM) is the most severe form of tuberculosis. The infection initiates secondary cerebral injury mechanisms that worsen outcome. Our understanding of these mechanisms is poor because studies of these mechanisms have relied on proxy measures, sampling from remote sites, and single-point-in-time methods, usually relying on spinal cerebrospinal fluid (CSF) samples. Recently, we developed a novel method that addresses these limitations, by accessing brain CSF and enabling the examination of dynamic metabolic changes in response to disease and intervention. This is particularly noteworthy in the developing brain, which has distinct vulnerabilities and strengths. This unique method enables us to perform, for the first time, high frequency serial sampling directly from the brain to interrogate the cerebral metabolome in humans.

Call for application:

The African Brain Child group was awarded a prestigious Wellcome Discovery grant to study TBM in children. We invite suitably qualified candidates to apply for a postdoctoral research fellowship with the African Brain Child research group to undertake research which will describe the change in metabolite profiles (targeted and untargeted) in response to treatment as well as clinical events.

Academic Criteria and Requirements:

Applicants should have graduated with a PhD degree in a relevant discipline including neuroscience, chemistry, biochemistry, biomedical science with a doctoral dissertation which focuses on metabolomics. Ability to present complex issues in a readable form for both academic and non-academic audiences. Excellent analytical and research skills including the use of quantitative and/or qualitative research techniques.

Competencies and skills in effective communication, publishing and scholarly knowledge dissemination.

Interest in developing a publication record.

Interest in graduate supervision at the postgraduate level.

Candidates must be available to start immediately.

Candidates must be available to reside in Cape Town and be actively present in the research group.

This fellowship is only available to individuals who have achieved the doctoral degree within the past 5 years.

Good interpersonal skills and a commitment to collegial modes of working.



University of Cape Town, Neuroscience Institute

Groote Schuur Hospital, J Block, F-Floor

Red Cross War Memorial Children's Hospital

ICH Building, 6th Floor, University of Cape Town

www.africanbrainchild.com | abc@uct.co.za | +27 (0)21 658 5335



Neuroscience
Institute



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Award Conditions:

Fellowships are open to South African and international candidates with a valid study permit.

Successful candidates for this fellowship must register for the position at UCT and the incumbent will be required to comply with the University's approved policies, procedures, and practises for the postdoctoral sector.

Postdoctoral research fellowships are only available to individuals who have achieved the doctoral degree within the past 5 years and have not previously held comprehensive professional or permanent academic positions.

Successful candidates will be expected to use the period exclusively for writing, to undertake the agreed research, as stipulated, as well as limited postgraduate and other assigned duties such as limited teaching and co-supervision and duties incidental thereto.

Fellows are required to attend and participate in all relevant research activities within ABC and the broader Neuroscience Institute.

Successful candidates will be required to enter into a Memorandum of Agreement with the Division of Neurosurgery, Department of Surgery.

Successful candidates will be expected to produce appropriate scholarly output or publish an appropriate number of papers (to be specified in the MoU with ABC).

Successful candidates are required to report on their progress at least 2 times in the year.

Value and Tenure:

The value of the Fellowship is fixed at R300 000 (three hundred thousand rands) per annum (no additional relocation costs are provided).

Holders may apply for funding for research visits / conference participation.

The Fellowship carries no benefits or allowances and is compliant with the SARS regulations.



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Application Requirements:

To apply, please e-mail the below documents in a **single pdf file** to Dr Jill Combrinck at J.combrinck@uct.ac.za

- A motivation letter which includes a detailed account of how the applicant is suited for the position, including evidence of research to date.
- A curriculum vita that must have a full list of publications/research outputs.
- Contactable details from three referees (one from PhD or previous post-doc supervisor).
- Copies of all academic transcripts and diplomas.
- One recent piece of written work.

Selection Process:

Eligible and complete applications will be considered by senior members of the African Brain Child research group.

The closing date for receipt of applications is 31 July 2024. Please note that late and/or incomplete applications will be disqualified. Only shortlisted candidates will be contacted and may be required to undergo a competency test. ABC reserves the right to make no appointments/awards at all; to cancel the award if the conditions are not met, and to effect changes to the conditions of the award.

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



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