RESEARCH ASSISTANT X5 (Full-time)
(Payclass 06; T1-fixed term contract)
Neurodevelopmental Research Group Department of Paediatrics and Child Health
FACULTY OF HEALTH SCIENCES

If you meet the requirements below; we invite you to apply for one of these **full-time** (37.5 hours per week), **1-year** (Appointment for further years; dependent on available funding) T1 fixed-term contract positions as a **Research Assistant** in the Department of Paediatrics and Child Health at University of Cape Town. The main purpose of this position is to assist in the collection of data related to one of the three studies listed below. The role involves working closely with the research team, healthcare professionals, and study participants to ensure accurate and timely collection of data while adhering to ethical guidelines and protocols. This appointment will be held in the Department of Paediatrics and Child Health in the Faculty of Health Science at the University of Cape Town, under the leadership of the principal investigator (PI) of the research study, Prof. Kirsty Donald.

Start Date: Immediate.

Study 1: *The Genetic Characterization of ADHD in Kenyan and South African Populations ('Akili')*: This project is funded by the National Institute of Mental Health (NIMH). Using a collaborative, case-control, multi-site approach, this study will recruit and deeply phenotype a cohort of 6,000 children ages 6-17 years living in Nairobi, Kenya, and Cape Town, South Africa, across a four-year period starting 2024. Two-thirds (4,000) of the children will meet diagnostic criteria for Attention-Deficit / Hyperactivity Disorder (ADHD). The 2,000 control children will be age- and ancestry- matched to cases. All participants (cases and controls) will be behaviorally and cognitively characterized using gold standard tools. DNA will be collected through saliva samples. This project will perform a detailed genetic characterization of all 6,000 children enrolled in the study, by analysing exome sequencing and array-based genotyping data to discover genes associated with ADHD. Additionally, this study will also investigate the heterogeneity in the genetic architecture of ADHD by examining how the rare and common variant architectures of ADHD changes in relation to case differences in several cognitive, behavioral, and medical outcomes.

Study 2: *Socioemotional Prediction in Adverse Contexts with EEG. EEG Predicting Language Outcomes over Regions & Environments (SPACE EXPLORE).* This project is funded by the Bill Melinda Gates Foundation (BMGF). The specific aim of this project is the identification and validation of a scalable EEG hardware and software that can be used to derive predictive EEG markers of neurodevelopment. We will use these novel markers to predict later child language and cognition as well as identify suitable potential intervention targets across multiple Low- or Middle- Income Country (LMIC) geographies. Participants will be recruited from sites in South Africa, Ghana and United States. The study will recruit up to 1150 mother-child dyads (750 in Ghana, 350 in South Africa, and 50 in the USA). The design is longitudinal; mothers will be recruited in late pregnancy (28-36 weeks gestation), in 2024, with their infants being followed up until 2 years of age. Visits will occur at birth, 3, 6, 12, 18 and 24 months of age.

Study 3: *Longitudinal Mapping of Brain-Face-Behavior Trajectories in Prenatal Alcohol Exposure from Birth through Adolescence.* Funded by the NIH-NIAAA (National Institute on Alcohol Abuse and Alcoholism), this project investigates how prenatal alcohol exposure (PAE) influences brain development from birth to early adolescence. Using data from the Drakenstein Child Health Study, this longitudinal study has followed a cohort of 240 PAE-exposed children, with brain scans conducted at neonatal, 2-3 years, and 6 years of age. The project's next phase includes an assessment at 11–12 years of age. This study has three main objectives include; 1) Building a model to understand how PAE affects brain development from early childhood to adolescence. 2) Using 2D and 3D facial images to explore how specific facial features relate to brain changes over time. 3) Examining how other factors—such as HIV exposure, maternal smoking, and nutrition—affect brain and behavioral outcomes. In summary, by mapping the brain, face, and behavior trajectories in this unique cohort, the study aims to provide critical insights into the effects of PAE and other influences on child development.

Requirements for the job:

- Undergraduate qualification in Psychology or related discipline.
- At least 1 year experience in working with children and their caregivers.
- At least 6-months experience in collecting data for clinical research
- Demonstrated understanding and/or experience with psychometric or qualitative assessment tools specific to pediatric research, such as developmental screening tools, standardized behavioural, cognitive or psychosocial assessments.
- Excellent interpersonal and communication skills (both written and oral)
- Fluent in English and one of the following languages: isiXhosa or Afrikaans
- Strong attention to detail and ability to work both independently and collaboratively within a team.
- Demonstrated understanding of being mindful of cultural differences and adapting communication and administration methods to respect diverse participants.
- Demonstrated understanding of empathy, patience, and sensitivity to the needs and emotions of both children and caregivers.
- Ability to follow standardized protocols and procedures for questionnaire administration to maintain consistency and validity in data collection.
- Ability to address unexpected situations or challenges that may arise during the administration of questionnaires. Flexibility to adapt methods if necessary without compromising the integrity of the study, and flexibility in scheduling assessments to accommodate families' needs.

The following will be advantageous:

- Postgraduate qualification in Psychology, Neuropsychology or related discipline.
- Proficiency in using data collection tools or software (i.e. REDCap).
- GCP (Good Clinical Practice or equivalent), certificate

Responsibilities

Administrative Support

- Managing participant schedules, ensuring timely administration of questionnaires, and keeping track of completed surveys.
- Collaborate with the research team to support various aspects of the study, such as preparing materials,

scheduling appointments, and coordinating with clinical staff.

Data Collection and Participant Recruitment:

- Conduct data collection procedures according to the study protocols, depending on the study this could include:
    - Conducting EEGs and brain scans
    - Administering standardized behavioural, cognitive or psychosocial questionnaires.
    - Collection of saliva and/or stool samples
- Precision in administering the questionnaire to avoid errors or missing data. Ensuring all questions are answered properly and data is accurately recorded.
- Creating a comfortable environment for participants to encourage open and honest responses. Being empathetic and sensitive to participants' needs or concerns is crucial.
- Accurately recording responses and managing data in a systematic way to ensure its integrity.
- Clearly explain the purpose of the study and the questionnaire to participants. Clear communication helps in obtaining informed consent and ensuring participants understand the questions.
- Assist in the recruitment and screening of eligible participants for the study, ensuring adherence to inclusion and exclusion criteria.
- Accurately enter and maintain collected data in databases or electronic systems. Organize and manage data in compliance with confidentiality and regulatory requirements.
- Perform quality checks on collected data to ensure accuracy and completeness. Identify and report any discrepancies or issues to the research team.
- Ensure adherence to ethical guidelines, regulatory requirements, and institutional policies throughout the research process. Maintain documentation of all procedures and obtained consents.
- Communicate effectively with study participants, healthcare professionals, and other team members. Assist in the preparation of reports, presentations, and documentation as needed.

Training and Development:

- Stay updated on relevant research methodologies, protocols, and procedures. Participate in training sessions and contribute to the improvement of data collection processes.

The annual cost of employment is between R169 517 - R312 098.

To apply, please e-mail the below documents in a **single pdf file** to researchassist@vula.uct.ac.za

. UCT Application Form (download at http://forms.uct.ac.za/hr201.doc)

- Cover letter,
- 2 referee reports, and
- Curriculum Vitae (CV)

Please ensure your full name is indicated in the email subject line. An application which does not comply with the above requirements will be regarded as incomplete.
Shortlisted candidates may be required to undergo an assessment. Only shortlisted candidates will be contacted. If you have not heard back by the 28th February 2025, kindly consider your application unsuccessful.

Website: *neuroscience.uct.ac.za*
Reference number: E241222
Closing date: 07 January 2025

"UCT is a designated employer and is committed to the pursuit of excellence, diversity and redress in achieving its equity targets in accordance with the Employment Equity Plan of the University and its Employment Equity goals and targets. Preference will be given to candidates from the under-represented designated groups. Our Employment Equity Policy is available at https://hr.uct.ac.za/policies/employment-equity"

UCT reserves the right not to appoint.