Data Analyst
Full-time
Neurodevelopment research group
Faculty of Health Sciences
Department of Paediatrics and Child Health

If you meet the requirements below; we invite you to apply for one of two **full-time** (37.5 hours per week), **1-year** *(Appointment for further years dependent on available funding and will require a secondary interview process)* T1 fixed-term contract positions as a **Data Analyst** in the neurodevelopment research group in the Department of Paediatrics and Child Health at University of Cape Town. The main purpose of this role is to provide support to the neurodevelopment research group Data Manager in data quality control, cleaning, and maintenance of data integrity across multiple research projects. 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), Prof. Kirsty Donald.

Start Date: Immediate.

Requirements for the job

- Master's degree in data science, epidemiology, public health, psychology, statistics, computer science, or other relevant discipline
- At least 2 years of clinical data management experience.
- Codes fluently in R, Python and/or SQL (or equivalent data analysis software)
- Research and statistical analysis experience, including experience in data cleaning and transformation
- Experience in managing open-source digital platforms, such as RedCap
- Experience working with longitudinal datasets and cross-sectional data
- Excellent written and oral communication skills in English
- Ability to multi-task and work under pressure
- Attention to detail and creative problem-solving skills

The following will be advantageous

- Experience working in a collaborative research environment with paediatric clinical datasets
- Experience with research publications in relevant and refereed journals
- Experience managing neuroimaging data (e.g., magnetic resonance imaging, electroencephalography)
- Experience managing biospecimen data (e.g., lab results)
- Experience in a clinical research setting

Responsibilities

Data management

- Maintain project databases and ensure procedures are compliant with data privacy and security (e.g. POPIA, HIPPA, GDPR compliance) and that the Data Transfer Agreements (DTA) are executed timeously
- Regular planning and implementation meetings with collaborators, site Project Managers and Data Managers

- Ensure that data from all sites are timeously migrated and uploaded to the umbrella consortium's databases

Datasets and reporting

- Compiling datasets as needed for investigators and students
- Compiling operational reports as needed for sites Project Managers and Data Managers
- Compiling operational reports as needed for Principal Investigators

Data quality control

- Clean and prepare data for analysis and upload to databases, ensuring accuracy and completeness of data
- Identification of variables that are not aligned properly across databases
- Ensure that duplicates, reassigned numbers, etc. are monitored
- Identify missing data and follow up with sites data collection team to fill in data gaps
- Identify if mistakes are being made by a particular site
- Ensure continuity in data collection and formatting between the different project sites
- Problem-solve any data issues that may arise with data collection

Collaboration and Management support

- Support data management activities across the Neurodevelopmental Research Group by providing:
    - ad hoc training sessions,
    - attending cross-project meetings, and
    - assisting with drafting of data management standard operating procedures and protocols.

The annual cost of employment is between R342 783 – R784 833 (based on years of experience)

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

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

- Cover letter,
- 2 referee reports, and
- Curriculum Vitae (CV)
- Copy of Highest qualification

Please ensure the position title and reference number are indicated in the subject line.

An application which does not comply with the above requirements will be regarded as incomplete.

Only shortlisted candidates will be contacted and may be required to undergo an assessment.

Email Queries: Zayaan.GoolamNabi@uct.ac.za

Reference number: DataAnalyst26

Closing date: 28 February 2026

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.

Appendix

Study 1: *The* ***Genetic Characterization of ADHD in Kenyan and South African Populations*** *('Akili'):* 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 analyzing 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. To date the study has recruited about 500 participants at our Cape Town site.

Study 2: ***Socioemotional Prediction in Adverse Contexts with EEG. EEG Predicting Language Outcomes over Regions & Environments*** *(SPACE EXPLORE)*. 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. The study has recruited up to 350 mother-child dyads. The design is longitudinal; mothers were recruited in late pregnancy (28-36 weeks gestation), in 2024, with their infants being followed up until 3 years of age. Visits will occur at birth, 3, 6, 12, 18, 24 and 36 months of age. The children are currently between the ages of 6 and 12 months.

Study 3: ***A Multi-Scale Approach To Characterizing Developing Executive Functions*** *("Khula")*. This project is a multi-site, multi-modal longitudinal birth-cohort study (EEG, MRI, behavioral assessments and microbiome profiling) designed to characterize the emergence of executive functions (EFs) over the first 1,000 days of life. We recruited 400 mother–infant dyads—and are following them at 3, 6, 12, 18, 24, 36 and 48 months. The children are currently 36 months of age. Although most EF research has been conducted in high-income settings, the vast majority of the world's children live in low- and middle-income countries. By studying foundational brain development in these global-majority contexts, Khula will identify both universal and culture-specific influences on EF trajectories, recognizing that these skills develop within—and in adaptation to—each child's unique environmental context.

Study 4: ***Longitudinal Mapping of Brain-Face-Behavior Trajectories in Prenatal Alcohol Exposure from Birth through Adolescence***. 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.