

NeuroGAP Newsletter

April 2025

NeuroGenE:

During the NeuroDev Annual General Meeting in February 2025, Dr Michael Wee from the NeuroGenE team took time to join the launch of the deliberative consultations for the NeuroDev ethics project (Investigating the ethics of immortalised lymphoblastic cell line creation to inform policy and practice in Kenya). These consultations bring together key stakeholders to reflect on the ethical and cultural considerations surrounding cell line generation in Kenya. Insights from these discussions will contribute to the development of policy guidance for future biobanking practices.



We are delighted to highlight that Dr Michael Wee has a new paper which deals with the topic of 'deep disagreements' in ethics--disagreements which do not seem resolvable by ordinary rational means: Concept-formation and deep disagreements in theoretical and practical reasoning. Wee, M. Synthese, vol. 25, art. No. 58 (2025). <https://link.springer.com/article/10.1007/s11229-024-04884-6>



Dr Michael Wee and Dr. Dorcas Kamyua

We are also delighted to highlight Prof. Erisa Mwaka one of our AEWG members has a new publication out from the NeuroGene-EMDIYA collaboration. Barriers to and enhancement of the utilization of digital mental health interventions in low-resource settings: Perceptions of young people in Uganda. Mwaka ES, Bazzeketa D, Mirembe J, Emoru RD, Twimukye A, Kivumbi A. DIGITAL HEALTH. 2025;11. <https://doi:10.1177/20552076251321698>

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Team members from all three sites (KEMRI Wellcome Trust, Aga Khan University, Broad Institute) came together in February for our NeuroDev Annual General Meeting as Kenya wraps up the project in a few months. For three days the Kilifi team hosted the group for presentations and analysis along with updates from the Akili study.



The NeuroDev team in Cape Town reached a significant milestone with the completion of all genetic result disclosures for participants from the pilot and Wave 1 phases of the study. A total of 55 families received insight into the cause of their child's neurodevelopmental condition. Additionally, 236 families were informed that no returnable genetic findings had been identified. These updates were met with appreciation, reflecting the value families placed on continued engagement and transparency throughout the study.

Analysis of Wave 2 data is currently progressing well. To date, 27 cases with returnable findings have been identified. The team has begun the process of contacting families to arrange for clinical confirmation which will enable the responsible and accurate return of results to families seeking answers regarding their child's neurodevelopmental concerns.

AKILI:

Advancing ADHD Research in Africa

Project Update: Genetic Characterization of ADHD in Kenyan and South African Populations

We are excited to announce that the Akili Project has officially launched! Our study, **The Genetic Characterization of ADHD in Kenyan and South African Populations**, is now underway, with progress already made at both our South African and Kenyan site's. To date, our South African site has successfully enrolled 374 participants, marking a significant step forward in our mission to better understand the genetic underpinnings of ADHD in African populations.

In April, we reached a major milestone by sending our first batch of 325 saliva samples to the Broad Institute for exome sequencing. This data will be instrumental in uncovering the genetic variants associated with ADHD in underrepresented populations.

Exciting News: NRF-Funded Neuroimaging Sub-study

We are thrilled to share that at our South African site, the project has received funding from the National Research Foundation (NRF) to launch a cutting-edge neuroimaging sub-study titled: "Understanding Brain Structural Development in Children with ADHD in a High-Risk Environment." This sub-study will utilize the Hyperfine portable low-field MRI system to collect brain scans from 450 Akili participants. These scans will provide invaluable insights into the structural and microstructural differences in the brains of children with and without ADHD, enriching the already extensive phenotypic dataset being gathered by the project.

Together, these efforts represent a significant leap forward in ADHD research across the continent, promising to shed light on both genotypic and phenotypic aspects of the disorder in high-risk contexts.

GINGER:

Congratulations to GINGER alum **Dr. Megan Campbell**, who recently earned her PhD in Psychiatric Genetics from the University of Cape Town in June 2024. Her thesis, titled *"The Genetic Architecture of the Corpus Callosum and its Relationship with Bipolar Disorder and Alcohol Consumption,"* explored important connections between brain structure, mental health, and substance use. Megan has since continued her academic journey as a Postdoctoral Researcher at the University of Cape Town, working within the Divisions of Child and Adolescent Health and Psychiatry and Mental Health. Congratulations Megan!



GINGER alumni Drs. Megan Campbell and Raymond Odokonyero, with their mentor Dr. Kim Hook, recent paper, "The Sociodemographic Influences of Substance Use and Psychosis in an African Cohort," has been accepted for publication in the Schizophrenia Research journal.

Dr. Mary Mufford has been appointed as a Lecturer in the Division of Human Genetics at the University of Witwatersrand (WITS) in Johannesburg, under the leadership of Prof. Zané Lombard. In this new faculty role, she will be expanding her research program in psychiatric genetics, with a continued focus on understanding the genetic underpinnings of mental health conditions in underrepresented African populations. This position marks an exciting next step in her academic journey, with new opportunities to grow collaborative networks, mentor emerging researchers, and contribute to capacity building in the region.

Dr. Mary Mufford has also been selected as one of the outstanding early-career researchers to join the Early Health Researchers Support Network, a prestigious initiative supported by the Bill & Melinda Gates Foundation. This two-year program brings together promising early-career academics from 16 South African universities' health sciences faculties, fostering a peer network focused on career development, mentorship, and collaboration.

SPECIAL ANNOUNCEMENTS:

Congratulations to NeuroDev's Alice Galvin who welcomed baby girl Olivia this past March with her husband Wes.

