NeuroGAP Newsletter December 2024

GINGER:

GINGER at the 2024 World Congress on Psychiatric Genetics (WCPG), Singapore. The GINGER program recently participated in the 2024 World Congress on Psychiatric Genetics (WCPG) in Singapore. GINGER Team Members, Fellows, and alumni actively contributed to the congress, leading sessions, presenting research, and fostering collaboration.

Education Day Leadership: Dr. Lori Chibnik and GINGER Director Kristi Post led **Education Day**, a highlight of the congress that featured four dynamic talks including:

- Polygenic Disorders Primer
- Dr. Na Cai, Helmholtz Pioneer Campus, Germany
- Navigating Public Resources for Psychiatric Genetics Research: Strategies and Tools
- Led by GINGER alum Dr. Lerato Majara and PGC Africa Member Dr. Melek Chaouch
- Embracing Heterogeneity in Psychiatric Disorders
- Led by GINGER Fellow Dr. Raymond Odokonyero, Dr. Tao Li (Zhejiang University School of Medicine, China), and Dr. Ney Alley (University of Texas Rio Grande Valley, South Texas Alzheimer's Disease Research Center)
- Navigating NIMH Resources for Global Mental Health: Research Priorities, Grant Opportunities, and Submission Strategies
- Presented by NIMH Program Officer Jonathan Pevsner, PhD

Each session was attended by an average audience of 180 individuals, reflecting the widespread interest and impact of these educational efforts.

Dr. Raymond Odokonyero presenting during Education Day with Dr. Lori Chibnik



GINGER: 1-3 NeuroGenE: 4 NeuroDev: 5 NeuroGap-Psychosis: 6

CONTENTS

Presentations and Poster Sessions. GINGER Fellows and alumni also showcased their research through oral and poster presentations:

- Oral Presentations: Dr. Anita Arinda, Megan Campbell, Patricia Kipkemoi, and Dr. Lerato Majara (alum), Dr. Allan Kalungi (alum), Dr. Linnet Ongeri (alum).
- Poster Presentations: Dr. Mary Mufford, Dr. Raymond Odokonyero, Megan Campbell, and Dr. Allan Kalungi (alum).

These contributions highlighted the research being conducted by the GINGER community.

Awards: Megan Campbell received the Hugh Gurling Memorial award for her oral presentation and Dr. Lerato Majara received the Early Career Investigator Program award for the best oral presentation at WCPG.



(Dr. Lerato Majara, left, and Megan Campbell, right, at WCPG with their awards)



PGC Africa-GINGER Network Building. In collaboration with PGC Africa, the GINGER program co-hosted a networking dinner to bring together all African attendees at WCPG. This event fostered connections and collaboration among researchers working to address critical gaps in psychiatric genetics research on the African continent.



GINGER, NeuroGAP and PCG Africa members together at WCPG

GINGER - Ancestral Populations Network Meeting

GINGER team members and fellows participated in the Ancestral Populations Network meeting in Singapore following WCPG, giving multiple lightning talks and participating in group-networking and program discussions. Dr. Lori Chibnik led the early-career investigator working session at the APN meeting.





Dr. Mary Mufford (left) and Patricia Kipkemoi (right) presenting at the APN meeting

Grant submissions & Development: In October, the GINGER team, in collaboration with the APN and the PUMAS leadership, contributed to and successfully submitted the PUMAS 2 U01. GINGER also contributed to the APN Coordinating Center grant with Stanley Center Leadership. If funded, both of these grants would expand GINGER's capacity building efforts to not only include early-career researchers in PUMAS 2 but all those associated with the Ancestral Populations Network. GINGER also convened a meeting with potential collaborators for a D43 submission with Aga Khan University in Nairobi, Kenya, with the leadership of NeuroGAP Kenya PI Dr. Lukoye Atwoli, in an effort to provide capacity building support to Early Career Researchers working on PUMAS 2.0.

Boston meetings: In September 2024 Dr. Engida Girma, GINGER Fellow, traveled to Boston to receive the Underrepresented Scholars Award from the International Society for Traumatic Stress Studies. While in Boston he met with GINGER leadership.

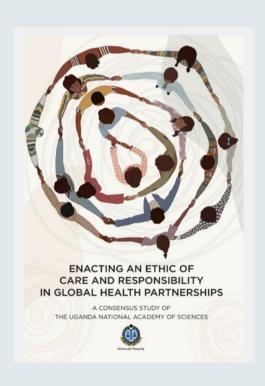


Dr. Engida Girma during award ceremony

NeuroGenE:

We are thrilled to welcome <u>William Hohnen-Ford</u> to the NeuroGenE research group as a Research Assistant. With a diverse academic background in Cognitive Science, Philosophy, and Policy, William brings valuable expertise in AI ethics, neuroscience, and mental health. His MSc thesis employed machine learning to analyze linguistic markers of well-being in psychedelic experiences. William will contribute to the Fogarty-funded project led by Professors Dorcas Kamuya and Ilina Singh, exploring the ethics of immortalized lymphoblastic cell line creation to inform policy and practice in Kenya.





We are delighted to highlight Prof. Eunice Kamaara, who recently served as a keynote speaker at the 2024 Uganda National Academy of Sciences (UNAS) Annual Scientific Conference in Kampala, Uganda. The conference, themed Realizing Equity in Global Health Partnerships, provided a platform to launch a consensus study report on equity in global health partnerships. Prof. Kamaara's expertise and insights greatly enriched discussions on advancing equity and fostering linkages between global health and international development. The report entitled Enacting an Ethic of Care and Responsibility in Global Health Partnerships was launched on the 11th of December 2024 in Washington, DC.

NEURODEV/AKILI:

NeuroDev SA: The NeuroDev team has continued providing South African participants with negative findings from the study. This process has been completed for those enrolled in the pilot phase and the return of findings for Wave 1 participants is expected to be finalized by the end of the year. Looking ahead, the team is preparing to return clinically actionable findings from the Wave 2 phase of the study in the near future.



Prof Donald's full UCT research group, including NeuroDev and Akili staff.

At the end of October, the biennial Congress of the Southern African Society for Human Genetics was held in Sun City, North West, South Africa. During the event, Zandre Bruwer presented a talk titled "Navigating the Return of Individual Genomic Research Results from the NeuroDev Study: Clinically Actionable Findings for Neurodevelopmental Disorders in South Africa."



The Akili SA team recently participated in a teambuilding activity where the group painted a picture that now displayed in the research groups offices.

Akili SA: The project titled Genetic Characterization of ADHD in South African & Kenyan Populations, colloquially known as Akili, is a five-year (2023 to 2027) large-scale genomics project that aims to collect genetic and health information from 6,000 participants between the ages of 6 - 17 years of age from Kenya and South Africa, with a particular focus on understanding the genetic underpinnings of attention deficit hyperactivity disorder (ADHD). The word "Akili" translates to "mind" in Swahili. To date, Akili has enrolled 178 participants in South Africa, and 130 in Kenya. Furthermore, Akili was welcomed as one of the newest members to join the NIMH-funded Ancestral Population Network (APN) and was officially introduced at the APNs most recent AGM in Singapore on 20th & 21st of October 2024.

Akili Kenya

In Kenya, the study team has recruited participants through The Aga Khan University Hospital, Nairobi, and the community within 2 Sub-Counties in Nairobi. In Aga Khan Hospital, we consented enrolled 5 participants. In the community, we held sensitisation meetings with local community leaders, and the community health promoters (CHPs). The CHPs mobilised participants who we screened for eligibility and scheduled for enrolment. We have enrolled a total of 130 participants. We anticipate starting school engagement next year.

NeuroGAP:

In October, the NGAP - Psychosis team, in collaboration with the APN and the PUMAS leadership, successfully submitted the PUMAS 2 U01. This project aims to expand psychosis genetics research in Kenya and South Africa. PUMAS 2 will fund NeuroGAP - Psychosis II which involves new data collection in 5,000 cases with serious mental illness and 5,000 controls from Nairobi, Kenya and Durban, South Africa. If funded, this project will allow the NGAP -P team to collect data on new topic areas such as climate change, resilience, coping, social determinants of health, and cognition (using TestMyBrain), continue capacity building efforts, and bring forth new community engagement initiatives.

We're excited to share the launch of a new study in Nairobi, Kenya led by Dr. Kristina Korte in partnership with Dr. Lukoye Atwoli at Aga Khan University to assess the adaptability and feasibility of using an app-based intervention called STAIR Coach. The app is based on STAIR, a proven, low-intensity intervention aimed at helping individuals manage the emotional and interpersonal challenges often associated with trauma. Given limited resources for trauma and PTSD treatment in Kenya, our team is assessing the use of low-cost mobile technology to expand access to evidence-based treatments, specifically STAIR Coach, to 30 participants with active PTSD symptoms. This study includes virtual engagements facilitated by mental health workers, qualitative interviews to provide app feedback and share experiences, and comprehensive follow-up of PTSD symptoms over six months. Preliminary results are promising, showing a positive impact of STAIR therapy on PTSD symptoms. We're thrilled to announce plans for a full-scale randomized controlled trial involving 180 participants in Kenya.



In October, our team traveled to Singapore for the World Congress of Psychiatric Genetics (WCPG) conference. Director of Global Research Operations, **Rocky Stroud** presented on trauma and PTSD research in Kenya and Uganda **(see photo)**, Dr. Manasi Sharma shared our qualitative work on cultural understandings of trauma exposures, and Hayden Mountcastle presented on exploring telomere length among cases and controls in Ethiopia.