

# NeuroGAP Newsletter

## September 2023

### GINGER:

- The GINGER program is beginning its fourth year of Virtual Classrooms with the Cohort II Research Fellows. This year will include completion of Illumina funded genetic skills coursework, such as GWAS genetic correlation and heritability, as well as a number of professional development panels.
- GINGER has continued filming virtual coursework for use in virtual classrooms. Pictured here is Dr. Ran Cui, a postdoc in the Ben Neale/Mark Daly lab, who recently recorded a module on Fine Mapping.
- GINGER Senior Fellow and Dr. Lerato Majara has joined the Broad Institute as a member of Dr. Alicia Martin's lab. We're excited to have her here in Boston!
- GINGER is looking forward to welcoming fellows in Montreal, Canada for the World Congress of Psychiatric Genetics in October 2023. Please stay tuned for updates following the conference!



Dr. Ran Cui recording a module on Fine Mapping

### CONTENTS

## NeuroGAP-Psychosis:

- Data generation is now complete for the NeuroGAP-Psychosis samples. More than 41,000 samples were successfully processed using the Blended Genome Exome (BGE), which combines sequencing a low-pass whole genome (2-4x coverage) and a deep whole exome (~40x coverage). Many Broadies and current and past GINGER fellows are part of the team determining the QC process for these samples, which will enable future analyses.
- We are very excited that GINGER Senior Fellow Dr. Lerato Majara has joined the Broad Institute as a postdoc (pictured with Anne Stevenson below). In addition to continued collaborations with Prof. Dan Stein and the University of Cape Town, Lerato will now be part of Dr. Alicia Martin's lab working on genetic analysis for mental health disorders in underrepresented populations, including NeuroGAP-Psychosis.



Dr. Lerato Ajara and Anne Stevenson

- Dr. Marine Beltran, a psychiatry registrar from Walter Sisulu University in South Africa who was part of the NeuroGAP-Psychosis phenotype working group, has had a poster accepted to the International Society for Traumatic Stress Studies (ISTSS) conference. Marine will travel to Los Angeles in November to present her poster on trauma exposure and language in the South African sample of the NeuroGAP-Psychosis study.

- Dr. Dickens Akena is excited to share that he at the Makerere team just launched recruitment for a supplement grant connected to the Ancestral Populations Network/PUMAS study where they will be recontacting many of the participants from the original NeuroGAP-Psychosis study.
- Akena will also be the discussant for an Ancestral Populations Network symposium at the World Congress of Psychiatric Genetics (WCPG) conference on Oct. 5th. The symposium will focus on building equitable research partnerships and harnessing diversity across phenotypes and genotypes to promote discovery.



Dr. Dickens Akena and Julius Okura talk with a potential participant at Butabika Hospital in Kampala, Uganda. Sept. 2023

## NeuroDev:

- NeuroDev SA site closed to participant enrollment on 30th June. The NeuroDev SA recruited a total of 1286 families (this comprised a total of 889 cases, 499 trios, 387 dyads, 64 affected siblings & 392 controls.). In addition, several abstracts to present NeuroDev data have been submitted by both past and current SA NeuroDev team members to the 5th International Developmental Pediatrics Association (IDPA) Congress to be held in Johannesburg, South Africa on 28th November – 01 December 2023.
- NeuroDev Nairobi has finished recruiting through schools for the year in alignment with the Ministry of Education’s requirements since no research activity is allowed in schools in the last quarter of the year (it being a national examinations season in the school). We have so far enrolled a total of 113 participants as follows: 5 single cases, 28 dyads, 16 trios, 1 quad. This makes a total of 54 cases (50 cases + 4 affected siblings), 43 mothers and 16 fathers. Enrollment of controls to commence the first week of October.



Patricia Kipkemoi, alongside other researchers from KEMRI, AKU and other organizations, presented at the first Mombasa County Scientific Congress, led by the Mombasa County health research team, on the 3rd and 4th of August. The conference brought together healthcare workers, health researchers, policymakers and various stakeholders involved in health research in Mombasa County. Patricia spoke on the environmental risk factors associated with autism on the Kenyan Coast using data from the Autism Study and the ongoing NeuroDev Kenya study.

## NeuroGenE:

- We would like to extend our congratulations to the Prof Violet Naanyu et al for publishing the following article:  
Naanyu, V., Kamaara, E., Kirui, A., Koros, H., Lagat, D., Ilina, S., Kwobah, E. K., & Atwoli, L. (2023). **Views of providers and clients on feedback and benefit sharing in studies using biological materials in Eldoret Kenya.** The Global Health Network Collections. <https://tghncollections.pubpub.org/pub/uk0on75e>
- The AEWG grant has come to an end, and the group decided at its last meeting in May, 2023, to maintain AEWG as an informal network. The AEWG members will meet in the last quarter of 2023 to clarify issues on AEWG Review of Statement of Purpose and composition.
- Stay tuned – NeuroGene will be advertising a postdoctoral researcher position shortly, to continue our Global Mental Health Ethics research, focusing on the ethics of genomics research and interventions for neurodevelopmental disorders in low- and middle- income countries.