



Welcome to the Team iNeuron Summer Newsletter 2024!

We are thrilled to present our inaugural newsletter, celebrating our team's remarkable achievements, upcoming exciting events, and groundbreaking scientific advancements. We are proud to unveil our new team logo, prominently displayed at the top of the page. Please use this logo, along with the NFRF logo, when mentioning our team on social media, in seminars, and beyond!







Advisory Board for Lived Experience of Stroke, Epilepsy & Dementia (ABLE)

iNeuron Website has Launched!

We are excited to announce the launch of our new Team iNeuron website! This site serves as a resource for the public to learn more about our team. It is also a tool for networking within our team, since the intranet portion will serve as a private repository for team resources and documents. Researchers and ABLE members will be able to login to separate sections of the intranet section, where confidential, teamrelevant documents can be stored. Relevant documents can be sent to Kirsten Fleming for uploading, along with suggested edits. Explore the site to learn more about the team, our research, and the members involved! Click here

Lived Experience Team New Name: ABLE

Our team of individuals with lived experience proudly announces their new name: The Advisory Board for Lived Experience of Stroke, Epilepsy and Dementia (ABLE)! The acronym ABLE signifies that People with Lived Experience can actively contribute to scientific research as cocollaborators and educate others by sharing their unique insights and experiences. This name perfectly captures their commitment to active engagement within the iNeuron team. We are ABLE.

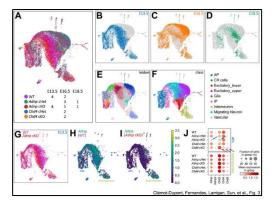






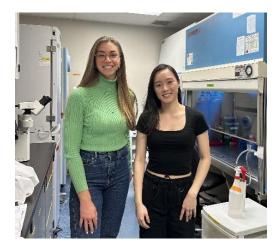
ABLE - General Involvement Opportunities

The Advisory Board for Lived Experience of Stroke, Epilepsy & Dementia (ABLE) is asking researchers and trainees to express their interest in receiving updates about the program. You will be offered engagement and education opportunities with the ABLE group. If you are interested in receiving these updates, please use the form <u>here</u>. For more information on the ABLE program, visit the website at https://teamineuron.com/research/#platform



The ChAHP chromatin remodelling complex regulates neurodevelopmental disorder risk genes to scale the production of neocortical layers

Dr. Pierre Mattar has released a new publication citing NFRF support that should be read! The study reveals that the ChAHP chromatin remodeling complex is required in neocortical progenitors for the generation of upper-layer neurons. Adnp and Chd4, components of this complex, are also required in postmitotic, differentiated, upper-layer cortical neurons to control gene expression, including risk genes for neurodevelopmental disorders. This study is important as it provides new insights into how a particular subset of cortical neurons are specified to acquire precise phenotypes.



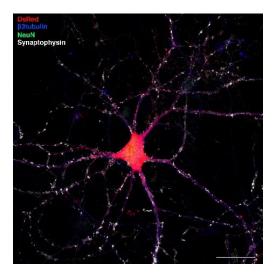
Trainee Exchange Winner

Our first NFRF-funded trainee, Yun-Yun Gao from Dr. Yang's lab, had the chance to visit to Dr. Drouin-Ouellet's lab in Montreal to learn about direct neuronal reprogramming. She gained expertise in procedures such as generating lentivirus particles with reprogramming factors, maintaining fibroblast and human iPSC-derived astrocyte cultures, and validating the reprogramming of astrocytes into neurons using various methodologies (i.e., IHC, confocal microscopy, and qPCR).

Create an opportunity for your trainee to visit another team iNeuron lab to acquire new skills! <u>iNeuron Trainee Exchange Form</u>







Direct neuronal reprogramming of NDUFS4 patient cells identifies the unfolded protein response as a novel general reprogramming hurdle

Take a moment to read Dr. Götz's new publication citing NFRF support! The study investigates how mitochondrial dysfunction affects direct neuronal reprogramming of iPSC-derived astrocytes from patients with NDUFS4 mutations, pinpointing the unfolded protein response as a major obstacle. Temporarily inhibiting this response significantly enhances reprogramming, suggesting new strategies to address challenges in converting human astrocytes to neurons.

Welcoming our new Advisory Board member: Dr. Lukoye Atwoli



- Professor of Psychiatry and Dean of the Aga Khan University Medical College, East Africa
- Deputy Director of the Brain and Mind Institute at AKU
- Psychiatry practitioner at the Aga Khan University Hospital
- Honorary Professor in the Department of Psychiatry and Mental Health at the University of Cape Town
- Chair of the Steering Committee of the Association of Academic Health Centers International (AAHCI)
- President: African College of Neuropsychopharmacology (AfCNP)
- Secretary-General of the African Association of Psychiatrists (AAP)
- International Fellow of the American Psychiatric Association (IFAPA), awarded one of the highest national honours in Kenya, the Moran of the Order of the Burning Spear (M.B.S.)

Check out Dr. Atwoli's full bio here!

To share exciting news in our future newsletters, please email your stories to kirsten.fleming@sri.utoronto.ca