The Krembil Centre for Neuroinformatics Virtual Open House

Details:

Date: Monday June 21, 2021 Time: 10:00 to 5:00pm WebEx link - Meeting ID: 161 851 1409 PW: KCNI0621 Gathertown link (login at 12 noon) - PW: KCNI

The Itinerary:

10:00 am - Opening Remarks

- Dr. Aristotle Voineskos VP, Research, CAMH (confirmed)
- Sean Hill Scientific Director, Krembil Centre for Neuroinformatics, CAMH

10:30 am - Computational Genomics

- Dr. Shreejoy Tripathy, Independent Scientist, KCNI
- Dr. Sonny Chen, Post-Doctoral Fellow. Understanding cellular diversity in the brain using single-cell transcriptomics
- Micaela Consens, Undergraduate Student. Robust cellular associations with Alzheimer's disease within neuronal subtryes
- Sabel Kerrebijn, M.Sc Student. *Exploring the cellular correlates of changes in cortical thickness*
- Derek Howard, Research Methods Specialist. Making intracellular electrophysiology datasets open and accessible

11:00 am - Brain Circuit Modelling

- Dr. Etay Hay, Independent Scientist, CAMH
- Frank Mazza, M.Sc Student. *EEG biomarkers of reduced brain microcircuit inhibition in depression*
- Sana Rosanally, M.Sc Student. Linking brain microcircuit changes to EEG in Schizophrenia

11:30 am – Whole Brain Modelling

- * Dr. John Griffiths, Independent Scientist, CAMH
- Dr. Davide Momi, Post-Doc Fellow. Modelling EEG large-scale brain network dynamics following an external perturbation with single-pulse TMS
- Sorenza Bastiaens, Ph.D Student. Neural mass models of large-scale brain dynamics with a focus on alpha oscillations
- S. Hussain Ather, Ph.D Student. *Toward a spectral theory of large scale brain networks*
- Taha Morshedzadeh, Undergraduate Student. Modelling brain activity during sleep using neural fields and EEG

12:00 to 1:00 pm - BREAK

Come chat with the KCNI PIs & trainees in our virtual space via Gathertown (PW: KCNI)

1:05 pm – Cognitive Network Modelling

- * Dr. Andreea Diaconescu, Independent Scientist, CAMH
- Gabrielle Allohverdi & Colleen Charlton, Research Analysts. Disruption in perceptual learning under ketamine and its relevance for clinical high risk psychosis
- Dr. Povilas Karvelis, Post-Doc Fellow. Neurocomputational modelling of suicidality

1:35 pm – Whole Person Modelling

- Dr. Daniel Felsky, Independent Scientist, CAMH
- Dr. Peter Zhukovsky, Post-Doc Fellow. The similarity of neural signatures of major depressive disorder, anxiety disorders, and stress-related disorders: impact of polygenic risk
- Earvin Tio, M.Sc Student . Testing a polygenic score for microglial activation in three separate cohort studies.
- Dr. Mohamed Abdelhack, Post-Doc Fellow. Big Data in the Wild: Modulation of Artificial Intelligence Model Weights in Real Time

2:05 pm - Artificial Intelligence and Digital Health

* Dr. Abhishek Pratap, Independent Scientist, CAMH

2:20 pm – BrainHealth Databank

- David Rotenberg, Director, Data Strategy and Business Intelligence, CAMH & Operations Director, KCNI
- * Dr. Joanna Yu, BrainHealth Databank Senior Portfolio Manager, CAMH
- Dr. Marta Maslej, Postdoctoral Fellow, KCNI. Examining the value of psychiatric notes for clinical prediction and decision support
- Dr. Victor Tang, Resident Physician, Clinician Scientist Program Department of Psychiatry, University of Toronto. Integrated Care Pathways for Mood and Substance Use Disorders: Collaborative Data Collection Across Diagnoses and Clinical Services

2:55 pm – KCNI Education & Knowledge Transfer

Dr. Erin Dickie, Project Scientist, CAMH

3:05 to 3:25 – BREAK

3:30pm to 4:30pm – Panel Discussion

- Topic: How can digital health data and brain simulations transform mental health care in the near future?
- Moderator: Dr. David Goldbloom
- Clinicians: Drs. Stefan Kloiber, Abigail Ortiz, George Foussias
- KCNI Team: Dr. Sean Hill, David Rotenberg, Drs. Shreejoy Tripathy, Etay Hay, John Griffiths, Andreea Diaconescu, Daniel Felsky, Abhishek Pratap, Joanna Yu, and Erin Dickie

4:35 pm - Closing Remarks

Have more questions? Meet the KCNI PIs & trainees back in our virtual space via <u>Gathertown</u> (PW: KCNI)

Want to hear more from the Krembil Centre for Neuroinformatics? Subscribe to our mailing list!



Krembil Centre for Neuroinformatics 250 College St, 12th floor Toronto, ON M5T 1R8