

Friday, July 21 | 9 a.m. EDT

Jeanne Timmins Amphitheatre, The Neuro



GRADIENTS OF BRAIN ORGANIZATION

8:30 - 9:00

Registration & Coffee

9:00 - 9:15

Welcome

9:15 - 10:30

Multiscale Studies

Chairs: Konrad Wagstyl and Jessica Royer

Tools for multimodal, multiscale annotation of brain networks

Justine Hansen, McGill University, Canada

Three transcriptional axes underpin anatomy, development, and disorders of the human cortex

Richard Dear, University of Cambridge, UK

Organization of laminar thickness covariance in the human cortex

Amin Saberi, Max Planck Institute for Human Cognitive and Brain Sciences and Forschungszentrum Jülich, Germany

Panel discussion

10:30 - 10:45

Coffee break

10:45 - 12:00

Evolutionary perspectives

Chairs: Sofie Valk and Ting Xu

Gradients and the search for human brain specializations

Nicole Eichert, University of Oxford, UK

Intrinsic timescales as a unifying organizational principle of neural processing in nonhuman primates

Ana M. G. Manea, University of Minnesota, USA

Linking temporal lobe organization across modalities to individual differences in language processing

Marius Braunsdorf, Donders Centre for Cognition, The Netherlands

Panel discussion

12:00 - 13:00	Lunch break
13:00 - 13:15	Flash Talks
13:15 - 14:30	<p>Dynamics Chairs: Seok-Jun Hong and Richard Bethlehem</p> <p>Neural state dynamics along the canonical gradients of functional brain organization reflect cognitive and attentional dynamics <i>Hayoung Song, University of Chicago, USA</i></p> <p>Cortex-wide maturational changes in excitation-inhibition ratio <i>Shaoshi Zhang, National University of Singapore, Singapore</i></p> <p>Gradients go to the movies: Macroscale cortical organization during naturalistic viewing <i>Tamara Vanderwal, University of British Columbia, Canada</i></p> <p>Panel discussion</p>
14:30 - 14:45	Coffee break
14:45 - 16:15	<p>Cognitive and clinical perspectives Chairs: Daniel Margulies and Boris Bernhardt</p> <p>Why cognitive neuroscience needs a state space <i>Bronte Mckeown, Queen's University, Canada</i></p> <p>Cortical gradients in semantic cognition <i>Tirso Gonzalez-Alam, University of York, UK</i></p> <p>Atypical functional connectivity subspaces reflect declarative retrieval impairments in temporal lobe epilepsy <i>Donna Gift Cabalo, McGill University, Canada</i></p> <p>Microstructural and functional interactions in visual networks for perceptual learning <i>Liz Yuanxi Lee, University of Cambridge, UK</i></p> <p>Panel discussion</p>
16:15 - 16:45	Closing comments
16:45 - 17:00	Transition
17:00 - 18:30	Poster session and cocktail