

Saturday, 7 th May 2022	
09:00-18:00	Registration Room: West Level 2 Burrard Foyer
Room:	West Meeting Rooms 211-214
11:00-11:15	Welcome and general announcements Stefano Stifani , McGill University, Canada Dan Goldowitz , University of British Columbia, Canada
11:15-12:15	[PLN01] Diversity and evolution of brain development as revealed by single cell transcriptomic approaches Arnold Kriegstein , UCSF, USA Chair: Dan Goldowitz , University of British Columbia, Canada
12:15-13:45	Lunch Room: West Level 3
Room:	West Meeting Rooms 211-214
Symposium 1: Evolution and cortical expansion of the human brain Chair: Fumio Matsuzaki , RIKEN, Japan	
13:45-14:25	Exploring the relationship of progenitor subtypes in and between gyrencephalic species at the single cell level Fumio Matsuzaki , RIKEN Center for Biosystems Dynamics Research, Kobe, Japan
14:25-15:05	The role of mechanics during cortical folding Silvia Budday , Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany
15:05-15:30	Refreshments Room: West Level 3
Symposium 1 (contd.): Evolution and cortical expansion of the human brain	
15:30-16:10	Repurposed cells of development in the adult brain Zoltan Molnar , University of Oxford, Oxford, UK
16:10-16:50	Neural stem cells, human-specific genes, and neocortex expansion in development and human evolution Wieland B. Huttner , Max Planck Institute for Molecular Cell Biology and Genetics, Dresden, Germany
16:50-18:20	Poster session 1 with drinks Room: West Level 3

Sunday, 8 th May 2022		
08:00-13:30	Registration Room: West Level 2 Burrard Foyer	
Room:	West Meeting Rooms 211-214	
08:30-09:30	[PLN02] Early adversity, 5-HT_{2A} receptors and the programming of emotionality Vidita Vaidya , Tata Institute of Fundamental Research, India Chair: Shubha Tole , Tata Institute for Fundamental Research, India	
Rooms	West Meeting Rooms 211-214	West Meeting Rooms 217-219
Symposium 2: Adult neurogenesis Chair: Freda Miller , University of British Columbia, Canada		Symposium 3: Autism spectrum disorders Chair: Dalila Pinto , Mount Sinai, USA
09:30-10:00	Cell cycle arrest determines adult neural stem cell ontogeny Yukiko Gotoh , The University of Tokyo, Tokyo, Japan	09:30-10:00 Transcriptomic insights from long-read sequencing of autism and control brain tissues Dalila Pinto , Icahn School of Medicine at Mount Sinai, New York, USA
10:00-10:30	Stem cells in the adult brain: regulation and diversity Fiona Doetsch , Biozentrum, Basel, Switzerland	10:00-10:30 Studying cortical development through the lens of human disorders Gaia Novarino , Institute of Science and Technology Austria, Austria
10:30-11:00	Lessons from a multiomics perspective on stem cell choices in the adult brain during homeostasis and injury Ana Martin-Villalba , German Cancer Research Centre, Heidelberg, Germany	10:30-11:00 A phenotypic spectrum of autism is attributable to the combined effects of rare variants, polygenic risk and sex Jonathan Sebat , University of California, San Diego, USA
11:00-11:30	Refreshments Room: West Level 3	
Symposium 2 (contd.): Adult neurogenesis		Symposium 3 (contd.): Autism spectrum disorders
11:30-12:00	Neural stem cell activation in freely behaving mice is regulated by the day/night cycle and intracellular Ca ²⁺ dynamics Armen Saghatelian , Cervo Brain Research Centre, Quebec, Canada	11:30-12:00 Autism genetics and social skills training Kristina Tammimies , Karolinska Institutet, Sweden
12:00-12:30	Activity-dependent regulation of neural development in the adult and aging brain Alejandro Schinder , Leloir Institute Foundation, Buenos Aires, Argentina	12:00-12:30 Convergence and divergence in autism spectrum disorder Sagiv Shifman , Hebrew University of Jerusalem, Israel
12:30-13:30	Boxed Lunch Room: West Level 3	
13:30-18:30	Free time (on your own)	
18:30-21:00	Conference gala dinner Pan Pacific Hotel	

Monday, 9 th May 2022			
08:30-19:00	Registration Room: West Level 2 Burrard Foyer		
Rooms	West Meeting Rooms 211-214	West Meeting Rooms 217-219	
Symposium 4: Development of the cerebellum and cerebellar tumours Chairs: Dan Goldowitz , University of British Columbia, Canada; Michael Piper , University of Queensland, Australia		Symposium 5: Development and function of astrocytes Chair: Shubha Tole , Tata Institute for Fundamental Research, India	
09:00-09:45	Surprises from human cerebellar development: we can't model what we don't know Kathleen Millen , University of Washington, Seattle, USA	09:00-09:30	Control of astrogliogenesis in the developing cerebral cortex Shubha Tole , Tata Institute for Fundamental Science, Mumbai, India
09:45-10:30	Integrative multi-omics implicates converging developmental origins of distinct medulloblastoma subgroups Paul Northcott , St. Jude Children's Research Hospital, Memphis, USA	09:30-10:00	Exploring the genesis of cortical astrocyte diversity using multicolor lineage tracing tools Karine Loulier , Institut des Neurosciences de Montpellier, Montpellier, France
		10:00-10:30	Using Drosophila to understand the differentiation of astrocytes, their role in regulating sleep and their dysfunction in episodic ataxia Don van Meyel , McGill University, Montreal, Canada
10:30-11:00 Refreshments Room: West Level 3			
Symposium 4 (contd.): Development of the cerebellum and cerebellar tumours			
11:00-11:45	TBC Michael Taylor , Hospital for Sick Children, Toronto, Canada		
11:45-12:00	Panel Discussion		
Rooms	West Meeting Rooms 211-214		
12:00-12:30	ISDN Business Meeting		
12:30-13:30 Lunch Room: West Level 3			
Room	West Meeting Rooms 211-214		
13:30-14:30	[PLN03] Mechanical forces in morphogenesis Mototsugu Eiraku , Kyoto University, Japan Chair: Stefano Stifani , McGill University, Canada		
Symposium 6: Non-coding elements and human brain development Chair: Flora Vaccarino , Yale University, USA			
14:30-15:10	Organoid modeling of gene regulatory events during forebrain development: relevance to autism spectrum disorders Flora Vaccarino , Yale University, New Haven, USA		
15:10-15:40 Refreshments Room: West Level 3			
Symposium 6 (contd.): Non-coding elements and human brain development			
15:40-16:20	Exploring the in vivo functions of distant-acting enhancers in brain development and disease Axel Visel , Lawrence Berkeley National Laboratory, Berkeley, USA		
16:20-17:00	From chromatin regulation to synapse development in autism and intellectual disability Anne West , Duke University Medical Center, Durham, USA		
17:00-17:15	Panel Discussion		
17:15-18:45 Poster session 2 with drinks Room: West Level 3			

Tuesday, 10th May 2022

08:00-16:30	Registration Room: West Level 2 Burrard Foyer	
Rooms	West Meeting Rooms 211-214	West Meeting Rooms 217-219
Symposium 7: Single cell OMIC approaches to study cell lineage and system organization Chairs: Songhai Shi, Tsinghua University, China, Stefano Stifani, McGill University, Canada		Symposium 8: Primary cilia in normal and pathological conditions Chair: Jeong Ho Lee, Korea Advanced Institute of Science and Technology, Republic of Korea
08:30-09:00	High-resolution CRISPR lineage tracing in model systems Aaron McKenna, Dartmouth School of Medicine, Hannover, USA	08:30-09:00 Primary cilia dynamics in cortical neuronal circuits Eva S Anton, University of North Carolina at Chapel Hill, USA
09:00-09:30	Next-generation clonal tracing of brain development with single-cell and spatial transcriptomics Michael Ratz, Karolinska Institute, Sweden	09:00-09:30 Investigating the requirements for ciliary signaling in the development and viability of cerebellar neurons Sarah C. Goetz, Duke University, USA
09:30-10:00	Single cell analysis of epigenome in human and mouse brains Bing Ren, University of California, San Diego, USA	09:30-10:00 Interneuronal communication via cilia Jeremy Reiter, University of California, San Francisco, USA
10:00-10:30	Progressive expression and activity of NFIs as global temporal regulators tune neural progenitor cell lifespan, output and cerebral cortical volume Song-Hai Shi, Tsinghua University, Beijing, China	10:00-10:30 TBC Nathalie Spassky, IBENS, Paris, France
10:30-11:00 Refreshments Room: West Level 3		
Symposium 7 (contd.): Single cell OMIC approaches to study cell lineage and system organization		Symposium 8 (contd.): Primary cilia in normal and pathological conditions
11:00-11:30	Somatic mutations in human cerebral cortical development Chris Walsh, Harvard University, Boston, USA	11:00-11:30 The subdistal appendages of multi-ciliated cells Soochul Park, Sookmyung Women's University, South Korea
11:30-12:00	Panel Discussion	11:30-12:00 Panel Discussion
Room	West Meeting Rooms 211-214	
Mini symposium: Post-translational control of neurogenesis Chair: Carol Schuurmans, University of Toronto, Canada		
12:00-12:15	Differences in transcript and protein levels in embryonic microglia Deborah Kurrasch, University of Calgary	
12:15-12:30	Functional rejuvenation of aged neural stem cells by Plagl2 and anti-Dyrk1a activity Ryoichiro Kageyama, Riken Center for Brain Science, Japan	
12:30-12:45	Translational control of cortical development and disease Debra Silver, Duke Institute for Brain Sciences, Durham, USA	
12:45-13:00	4E-T ubiquitination regulates processing body formation and neurogenesis in the developing murine cortex Guang Yang, University of Calgary, Canada	
13:00-14:15 Lunch Room: West Level 3		
Room	West Meeting Rooms 211-214	
Symposium 9: Epigenetics and chromatin remodeling in neural coding Chairs: Yukiko Gotoh, The University of Tokyo, Japan; Ana Pombo, Berlin, Germany		
14:15-14:55	Specialisation of 3D genome topologies in specific brain cells Ana Pombo, Humboldt University of Berlin, Berlin, Germany	
14:55-15:35	Linking cell type specific chromatin dysregulation to memory deficits in mice Nathalie Bérubé, Western University, London, Canada	
15:35-16:00 Refreshments Room: West Level 3		
Symposium 9 (contd.): Epigenetics and chromatin remodeling in neural coding		
16:00-16:40	Single amino acid substitution in H3.3G34 causes progressive neurodegeneration Nada Jabado, McGill University, Canada	
16:40-17:20	"Seq-ing" epigenetic mechanisms underlying the etiology of neurodevelopmental disorders Zhaolan Zhou, University of Pennsylvania, Philadelphia, USA	
Room	West Meeting Rooms 211-214	
17:20-18:00	Poster awards and closing remarks	