

MNN Annual Report 2019





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Outreach

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The 2019 MNN Scientific Meeting was held on June 7, 2019 at the University of Winnipeg. The meeting was co-Chaired by Drs. Renee Douville and Domenico Di Curzio. The scientific theme of this meeting was: Neuropathology.

The program featured two keynote speakers:

Dr. Daniel Goldowitz from the University of British Columbia, who is an internationally recognized Canadian Research Council Chair in Developmental Neurogenetics.

Dr. Janice Robertson from the University of Toronto, a leading expert in Amyotrophic Lateral Sclerosis (ALS) neuropathology and therapeutic development.

Trainees participated in a poster session/competition, which was followed by a networking mixer and neuroscience art silent auction fundraiser at the Winnipeg Art Gallery.



Program

Friday, June 7, 2019

8:30	Registration	Desk	Open

9:00 **Opening Remarks**

Dr. Domenico Di Curzio & Dr. Renée Douville

Co-chairs - 2019 MNN Scientific Meeting Departments of Psychology and Biology, University of Winnipeg

SESSION 1: GENETICS OF NEURODEVELOPMENT

KEYNOTE

9:10 Big data in service of better research and care: Tales from the bench

Dr. Daniel Goldowitz

Professor – Department of Medical Genetics, University of British Columbia Member of Centre for Molecular Medicine and Therapeutics and BC Children's Hospital Research Institute



Program

10:00	Genetics and Intellectual Disabilities	
SP-1	Dr. Albert Chudley Professor Emeritus, Rady Faculty of Health Sciences, Max Rady College of Medicine, University of Manitoba	
9:25	Candrive: a longitudinal, multi-disciplinary project assessing medical fitness to drive in older adult	
10:30	Refreshment & exercise break	
SESSION 2:	HISTORICAL PERSPECTIVES ON NEUROPATHOLOGY	
10:45	Neuropathology, Surgery, and the Discovery of Intracerebral Vascular Nerves	
SP-2	Dr. Delia Gavrus Associate Professor and Chancellor's Research Chair History Department, University of Winnipeg	

Program

KEYNOTE

11:10 *Neuropathology of Parkinsonism: a clinician's perspective*

Dr. Alex Rajput

Director, Saskatchewan Movement Disorders Program Division of Neurology, Department of Medicine, University of Saskatchewan

SESSION 2 BREAKOUT: EMOTIONAL & COGNITIVE NEUROSCIENCE

10:45 Neuroimaging Investigations of the Autonomous Sensory Meridian Response (ASMR)

SP-3 **Dr. Stephen Smith** Professor, Department of Psychology, University of Winnipeg Adjunct Professor, Department of Psychology, University of Manitoba



Program

11:10	Exploring the potential of Sharing Dance for people living with dementia and carers
SP-4	Dr. Rachel Herron Associate Professor, Department of Geography and Environment, Brandon University
11:35	Learning to Read Changes the Dynamics of Spoken Language Processing
SP-5	Dr. Amy Desroches Associate Professor, Department of Psychology, University of Winnipeg
12:00	Taco bar lunch
1:00	Welcome address
	Dr. Annette Trimbee President, University of Winnipeg



Program

SESSION 3: NEURO-ONCOLOGY

- 1:10 Dissecting cellular heterogeneity in search of new therapeutic targets for medulloblastoma
- SP-6 Dr. Tamra Werbowetski-Ogilvie Associate Professor, Regenerative Medicine Program, University of Manitoba Departments of Biochemistry & Medical Genetics / Physiology & Pathophysiology Canada Research Chair in Neuro-oncology and Human Stem Cells
- 1:35 Proteomics of adult brain tumors for the discovery of novel biomarkers and treatments
- SP-7 **Dr. Thomas Klonisch** Department Head, Department of Human Anatomy and Cell Science Max Rady College of Medicine, University of Manitoba



Program

2:00	Brain metastasis – a fatal complication
SP-8	Dr. Sabine Hombach-Klonisch Associate Professor and Section Head Gross Anatomy Department of Human Anatomy and Cell Science, University of Manitoba
2:25	Poster session, refreshments & exercise break
SESSION 4:	FOCUS ON ALS
SESSION 4: 3:45	FOCUS ON ALS Raltegravir effectively reverses ERVK integrase-mediated pathology
	Raltegravir effectively reverses ERVK



Program

KEYNOTE

4:05

Amyotrophic Lateral Sclerosis and Frontotemporal Dementia: a Disease Spectrum

Dr. Janice Robertson

The James Hunter Family Chair in Amyotrophic Lateral Sclerosis Research Professor, Tanz Centre for Research in Neurodegenerative Diseases Department of Laboratory Medicine and Pathobiology, University of Toronto

4:50 Closing remarks

Dr. Domenico Di Curzio & Dr. Renée Douville Co-chairs - 2019 MNN Scientific Meeting

WAG EVENT

5:00–7:00 Winnipeg Art Gallery networking mixer & neuroscience art silent auction



Dr. Keith Murai

January 14, 2019

January 25, 2019

Director for the Centre for Research in Neuroscience Professor, Neurology & Neurosurgery, Faculty and Department of Medicine Research Institute of the McGill University Health Centre

Astrocyte diversity and brain circuit microenvironments

Dr. Saeid Ghavami Assistant Professor Human Anatomy & Cell Science Rady Faculty of Health Sciences

Glioblastoma and Cholesterol Metabolism Pathway



Dr. Spencer Gibson

March 29, 2019

Professor, Department of Immunology & Biochemistry and Medical Genetics Director, Manitoba Institute of Cell Biology Senior Scientist, Research Institute in Oncology and Hematology Director, Translational Research University of Manitoba

Understanding the regulation of cell death in glioblastoma. Context Matters?

Dr. David Amaral Professor, Faculty of Medicine McGill University May 6, 2019

Recent Advances in our Understanding of the Causes and Effects of Autism Spectrum Disorder





Dr. Tamra Ogilvie May 31, 2019 Canada Research Chair in Neuro-oncology and Human Stem Cells Associate Professor, Regenerative Medicine Program Biochemistry & Medical Genetics and Physiology & Pathophysiology Max Rady College of Medicine Rady Faculty of Health Sciences University of Manitoba

Novel gene networks regulating self-renewal and differentiation in medulloblastoma

Dr. Tiina Kauppinen September 27, 2019 Associate Professor, Department of Pharmacology & Therapeutics, University of Manitoba Principal Investigator, Kleysen Institute for Advanced Medicine

Microglial modulation rescues cognitive impairment caused by fetal exposure to gestational diabetes



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Dr. Mandana Modirrousta October 25, 2019 Associate Professor, Department of Psychiatry and Pathology & Pathophysiology, University of Manitoba Principal Investigator, Department of Neurodegenerative Disorders, St. Boniface Hospital Albrechtsen Research Centre

Depression in 2020, a multidimensional approach? Oxolipidomic profiles in major depressive disorder

Dr. Alyson Fournier Professor Faculty of Medicine McGill University November 13, 2019

Small molecule stabilization of protein Interactions to promote axon regeneration

Dr. Jun-Feng Wang November 29, 2019 Associate Professor, Department of Pharmacology & Therapeutics, University of Manitoba | Principal Investigator, Kleysen Institute for Advanced Medicine

Contribution of thioredoxin-interacting protein to chronic stress-induced cellular damage





BAW Activities

Calendar

WINNIPEG BRAIN BEE Saturday, March 9 Bannatyne campus, University of Manitoba

VISITING SPEAKER

Dr. Steven Conor March 11, 2019 Assistant Professor, Department of Biology York University

Taming the wild synapse: MDGAs as negative regulators of synapse development



Outreach

BAW – Winnipeg Brain Bee

The 5th Annual Winnipeg Brain Bee was organized by Dr. Sari Hannila and had almost 30 high school participants this year.

Activities included:

- Neuroanatomy demonstration using preserved and fresh brain samples with Dr. Sari Hannila, Dr. Sabine Klonish-Hombach and students from Let's Talk Science – University of Manitoba
- MRI lecture from Dr. Melanie Martin
- Pizza lunch

The winners of the 2019 Brain Bee were:

1 st prize	Elayna Paddock Thiessen (Vincent Massey
	High School)
2 nd prize	Sarah Beel (UW Collegiate)
3 rd prize	Catherine Lin (Vincent Massey High School)





Financial Report

April – December 2019

Opening balance	\$7759.95
Total revenue Memberships Registrations	\$7514.26
Expenses Administration Meeting Outreach Visiting Speaker	\$8810.96









