8:30  Registration / Poster Set-up / Breakfast
9:00  Welcome Address
9:10  Key Note Lecture by Dr. Dorian McGavern
10:00 Coffee Break with discussion Chair: Stefania Echeverry
10:45 Poster Session I
11:45 Oral Session I

Oral session I   Chair: Bryce Durafourt
11:45  Zografos Caramanos (Dr. D. L. Arnold): Predicting Long-Term Clinical Disability in Patients with Multiple Sclerosis
12:00  Antje Kroner (Dr. S. David): Myelin phagocytosis influences macrophage polarization
12:15  Dominique Favreau (Dr. P. Talbot): Coronavirus-induced human neuronal apoptosis is cyclophilin D-dependent and caspase-dispersible

12:30  Lunch/ Group photo
13:30  Poster Session II + Coffee Break

Oral session II   Chair: Celina Wu and Crystal Lee
15:15  Bryce Durafourt (Dr. J. Antel): Distinct polarization properties of human adult microglia and blood-derived macrophages
15:30  Rui Li (Dr. A. Bar-Or): Activated human B cells drive macrophage to M2 like phenotype
15:45  Stanley Hum (Dr. N. Mayo): Using modern psychometrics to Rasch analyze the Physical Function Index
16:00  Amy Styles (Dr. C. Wolfson): Active and passive smoke exposure as environmental risk factors in multiple sclerosis
16:15  Hui Chen (Dr. J. Nalbantoglu): Role of CAR-JAML interaction in CAR-mediated suppression of glioma growth in vivo
16:30  Marc-André Lecuyer (Dr. A. Prat): The study of activated leukocyte cell adhesion molecule in neuroinflammation

16:45  Wine and Cheese
17:15  Presentation of Awards
Poster Session I - 10:45-11:45

Category A: Blood brain barrier and immune cell migration

**Jorge Alvarez** (Dr. A. Prat): Preactive MS Lesions Are Associated With Early Disturbances in the blood brain barrier

**Steve Gendron** (Dr. A. Prat): Expression and functional role of integrin alpha8beta1 in CD4 T cells: potential role in MS

**Lamia Naouel Hachehouche** (Dr. A. Prat): Interleukin 26: a novel Th17 cytokine with potential impact on the blood brain barrier

**Hania Kebir** (Dr. A. Prat): Ninjurin-1 is an important determinant of myeloid cell recruitment into the CNS

**Catherine Larochelle** (Dr. A. Prat): MCAM defines a subset of CD4+CD45RO+ TH17 cells involved in CNS inflammation

**Flora Li** (Dr. G. Luheshi): The study of activated leukocyte cell adhesion molecule in neuroinflammation

**Akiko Nakano** (Dr. A. Prat): The blood brain barrier induces differentiation of migrating monocytes into pDCs in MS

**Cornelia Podjaski** (Drs. T. Kennedy, J. Antel, A. Prat): Netrins Regulate Blood Brain Barrier Function

Poster contributions from external invited trainees: Category A

**Manoj Mishra** (Dr. V. Wee Yong): Mechanisms of laquinimod in reducing the accumulation of monocytoid cells in the CNS

Category B: Epidemiology and Genetics

**Vanessa Bouchard** (Dr. N. Mayo): Multiple Sclerosis Physical Impairments Do Not Drive Illness Intrusiveness

**Zia Choudhry** (Dr. R. Joober): Catechol-o-methyltransferase gene haplotypes and cognitive function in ADHD children

**Ayse Kuspinar** (Dr. N. Mayo): Capturing Quality of Life in People with Multiple Sclerosis: Generic versus Individualized

**Pamela Ng** (Dr. N. Mayo): Employment Profile of People with Multiple Sclerosis in the Canadian Context

**Lisa Palladini** (Dr. N. Mayo): Cognitive Functioning in HIV/AIDS: Approach Using Rasch Analysis

**Sarojini Sengupta** (Dr. R. Joober): Examining the association between norepinephrine transporter gene polymorphisms and ADHD
**Poster Session II – 13:30- 15:15**

**Category C: PNS and neuropathic pain**

Stefania Echeverry (Dr. J. Zhang): Peripheral nerve injury alters BSCB integrity via inflammatory Mechanisms

Stefania Echeverry (Dr. J. Zhang): Effects of intraneural TGF-β in a model of neuropathic pain.

SeungHwan Lee (Dr. J. Zhang): Exploring macrophage phenotypes in injured trigeminal nerves

Tony Lim (Dr. J. Zhang): Statins alleviate experimental nerve injury-induced neuropathic pain

Satyanarayana Padi (Dr. J. Zhang): Differential Spinal Glial Responses in Diabetic Rats: Correlation to Neuropathic Pain

Katrin Schulz (Dr. S. David): Iron plays a role in peripheral axon growth

Yichen Wu (Dr. J. Zhang): Persistence of glial activation at 3 months post injury in models of neuropathic pain

**Category D: Neuron-glia and inter-glia communication**

Anshul Awasthi (Dr. A. Bar-Or): Neurons regulate global cell surface protein expression in astrocytes

Qiao Ling Cui (Dr. J. Antel): In vitro analysis of myelination potential of human fetal oligodendrocyte progenitor cells

Celina Wu (Drs. J. Antel and A. Bar-Or): Inflammatory effects of inter-astrocytes communication

**Category E: Imaging**

Fei Xu (Dr. D. Arnold): The impact of obstructive sleep apnea/hypopnea on neurodegeneration in multiple sclerosis

**Category F: MS and EAE pathogenesis**

Jennifer Berard (Dr. S. David): The role of lipocalin-2 in EAE and its expression pattern in multiple sclerosis

Sukhdev Kamboj (Dr. S. David): Characterization of prostaglandin E2 receptors (EP 1-4) in CNS during EAE

Crystal Lee (Dr. S. Fournier): Role of Perforin/Fas-L in a Spontaneous CD8+ T Cell-Mediated Demyelinating Disease

Sandra Magalhaes (Dr. A. Bar-Or): Implicating Osteopontin in Pediatric-onset Multiple Sclerosis

Eric Nelson (Dr. G. Luheshi): A proinflammatory role for leptin in experimental autoimmune encephalomyelitis
Emilie Viel (Dr. N. Arbour): IL-27 promotes a new phenotype in memory CD8 T cells
Evelyn Zastepa (Dr. D. Haegert): Transcriptional program regulating naive CD4 T-cell activation defines a SPMS subgroup

**Poster contributions from external invited trainees: Category F**

Trisha Finlay (Dr. S. Ousman): Deciphering the role of alphaB-crystallin in oligodendrocytes
Naila Makhani (Dr. B. Banwell): CMV Seropositivity at First Attack of Demyelination in Childhood Decreases MS Risk
Camille Olechowski (Dr. B. Kerr): Changes in exploratory behaviours and cognitive deficits in a chronic-relapsing model of EAE

**Category G: Regulatory T-cells**

Mara Kornete (Dr. C. Piccirillo): The ICOS co-stimulatory pathway is critical for the stability of Foxp3\(^+\)T\(_{reg}\) cell functions
Sarah Lawrie (Dr. A. Bar-Or): Examining the capacity of human B cells to modulate regulatory T cell (Treg) function
Eva D’Hennezel (Dr. C. Piccirillo): Single-cell analysis of human Treg cells: FOXP3 instability and functional heterogeneity
Vlad Dragan (Dr. S. Fournier): Role of Foxp3\(^+\) regulatory T cells in an animal model of CD8\(^+\) T cell-mediated demyelination
Khalid Bin Dhuban (Dr. C. Piccirillo): Rapamycin Restores FOXP3\(^+\) Treg Function in Autologous Graft-Versus-Host Disease post HSCT
Lei Zheng (Dr. C. Piccirillo): Distinct translational control of gene expression in CD4\(^+\) effector and regulatory T cells

**Category H: Cell adhesion molecules and apoptosis**

Vikas Kaushal (Dr. A. LeBlanc): The role of inflammation in regulating caspase-6 activity through P2X7 receptors
Nadia Houri (Dr. J. Nalbantoglu): The effects of enzymatic cleavage on the function of the cell adhesion molecule CAR
Songsong Geng (Dr. J. Nalbantoglu): CAR Associates with Translational Machinery and Controls Protein Synthesis
Category I: Viral infection and prenatal exposure

Renée Douville (Drs. J. Hiscott and R. Lin): HTLV-1 HBZ protein inhibits IRF3-mediated innate immune responses

Elodie Brison (Dr. P. Talbot): Glutamate excitotoxicity mediates human coronavirus-induced paralysis in mice

Geeta Thakur (Dr. R. Joober): Smoking Behaviour during Pregnancy in Mothers of Children with ADHD and DA-Related Genes

Louise Harvey (Dr. P. Boksa): How does maternal inflammation in the mouse result in alterations in reelin and GAD67 expression in the hippocampus?