Great Lakes Glia 2019
Sunday, Sept 29th – Tuesday, Oct 1st
The Holiday Inn/West Bay Resort, Traverse City, MI

Session 1 - Neuroinflammation
Organizer: Shailendra Giri, Henry Ford Hospital
Ranjan Dutta, Cleveland Clinic Foundation
Guang-Xian Zhang, Thomas Jefferson University
Bonnie Dittel, Medical College of Wisconsin
Kalipada Pahan, Rush Medical College

Pathogenesis of Multiple Sclerosis
Ursolic acid promotes neural regeneration through both immunomodulation and direct oligodendrocyte maturation
Leveraging interactions between regulatory B cells and regulatory T cells for the treatment of CNS autoimmunity
Selective inhibition of TLR2 by TIDM peptide reduces microglial activation

Session 2 - Glial and Neuronal Cell Signalling in Diseases
Organizer: Robert Miller, George Washington University
Wendy B. Macklin, University of Colorado
Gabriel Corfas, University of Michigan
Terri Wood, New Jersey Medical School
Fraser J. Sim, SUNY at Buffalo

Signaling Regulating CNS Myelination
Modulating Peripheral Myelin
mTOR and Myelin Across the Ages
Improving Myelin Repair by Modulation of Extracellular Heparin Sulfate Proteoglycan Sulfation

Session 3 - Peripheral Glia
Organizer: Bruce Carter, Vanderbilt University
Jun Li, Wayne State University
Michael Granato, University of Pennsylvania
Cody Smith, University Notre Dame
Bruce Carter, Vanderbilt University

Phosphoinositides and Myelination
Molecular Mechanisms Directing Axon Glia Interactions During Peripheral Nerve Regeneration
Peripheral Glia in Visceral Organs Beyond Schwann Cells
Sensory Neuropathy Caused by Deficiencies in Schwann Cell Metabolism

Session 4 - Astrocytes
Organizer: Doug Feinstein, University Illinois (Chicago)
Gordon Meares, West Virginia University
Doug Feinstein, University Illinois (Chicago)
Robert McCullumsmith, University of Toledo
Grant Gordon, University of Calgary

JAK1 drives ER Stress-Induced Gene Expression in Astrocytes
Disruption of Astrocyte Metabolism Exacerbates EAE
Alterations of Glutamate Transporter Expression in Severe Mental Illness
Astrocyte Bioenergetics Control Cortical Plasticity During Stress

Keynote Presentation
Peter Stys, University of Calgary
Axo-myelinic Neurotransmission: Role in Physiology and Diseases of Myelin

Session 5 - Microglia
Organizer: Jeff Dupree, Virginia Commonwealth University
Lauren Green, University of Notre Dame
Jeff Dupree, Virginia Commonwealth University
Timothy Hammond, Harvard Medical School
Marie-Ève Tremblay, Université Laval Québec QC

Microglia in the CNS and PNS
Microglial Regulation of Axon Initial Segment Structure and Function in Inflammatory Disease
Redefining Microglial States in Health and Disease
Dark Microglia: Remodeling Neuronal Circuits in Health and Disease