CNS Research Bootcamp

Event Program

Tuesday, September 14, 2021

Schulich MEDICINE & DENTISTRY

Western

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WELCOME NOTE

Dear Attendees,

On behalf of Department of Clinical Neurological Sciences, Schulich School of Medicine & Dentistry, Western University, we are pleased to welcome you to the second-annual CNS Resident Research Bootcamp. We are thrilled to host this webinar designed to inspire our Neuroscience trainees to engage in clinical and basic science research at Western University and beyond.

This year we are also welcoming trainees from across Canada, with a special welcome to trainees from McMaster University and the University of Ottawa, joining us for the first time in 2021. We look forward to many more successful educational collaborations with you!

We hope that this learning experience provides you with opportunities that lead to successful forays into research and academia. Thank you for joining us.

We want to recognize the efforts of our distinguished speakers and neurosciences researchers for making this a successful learning event. I would like to thank Dr. Liz Finger for her advice and mentorship. We would also like to recognize the technical support provided by the team at Eyepowered Media and Highland Medial Biz, our distinguished sponsor Alexion, and administrative support from Alexandra Kylindris who has been instrumental in making today a reality.

We hope you will have an enjoyable experience.

Sincerely,

Courtney Casserly, MD, FRCPC
CNS Research Bootcamp Chair & Assistant Professor
Department of Clinical Neurological Sciences,
Schulich School of Medicine & Dentistry,
Western University

ITINERARY

Department of Clinical Neurological Sciences

presents

the 2020 CNS Research Bootcamp on
Tuesday, September 14th, 2021

8:00 – 8:45	**Dr. Brian G. Weinshenker** **Keynote Speaker** Consultant, Department of Neurology Professor of Neurology, College of Medicine Mayo Clinic *Q&A period to follow*
9:00 – 9:30	**Dr. Caitlin Hoffman** Assistant Professor of Neurological Surgery Weill Cornell Medicine Neurological Surgery *Q&A period to follow*
9:45 – 10:00	Break
10:00 – 10:45	**Dr. Josep Dalmau, PhD, FAAN** Research Professor ICREA-IDIBAPS, Service of Neurology, Hospital Clínic, University of Barcelona Adjunct Professor Neurology, University of Pennsylvania *Q&A period to follow*
11:00 – 11:30	**Dr. Bruce Carleton, FCP, FISPE** Director, Pharmaceutical Outcomes Programme, BC Children's Hospital Professor of Pediatrics, Medical Genetics, Pharmaceutical Sciences, Population & Public Health Chair, Division of Translational Therapeutics, Department of Pediatrics University of British Columbia Senior Clinician Scientist, BC Children's Hospital Research Institute *Q&A period to follow*
11:45 – 12:00	**Break**
12:00 – 13:00	**Power Panel**

NOTE FROM OUR SPONSOR

Alexion, AstraZeneca Rare Disease, is the group within AstraZeneca focused on rare diseases, created following the 2021 acquisition of Alexion Pharmaceuticals, Inc. As a leader in rare diseases for nearly 30 years, Alexion is focused on serving patients and families affected by rare diseases and devastating conditions through the discovery, development and commercialization of life-changing medicines. Alexion focuses its research efforts on novel molecules and targets in the complement cascade and its development efforts on haematology, nephrology, neurology, metabolic disorders, cardiology, ophthalmology, and acute care. Headquartered in Boston, Massachusetts, Alexion has offices around the globe and serves patients in more than 50 countries.

GUEST PRESENTERS

Brian G. Weinshenker, MD

Dr. Brian G. Weinshenker is Professor of Neurology and Consultant at Mayo Clinic, Rochester MN. Dr. Weinshenker's major research interests are directed at the understanding of inflammatory demyelinating diseases of the central nervous system including multiple sclerosis including: 1) natural history of multiple sclerosis; 2) defining clinical and radiologic differential diagnosis of inflammatory myelopathy; 3) classification, diagnosis, and treatment of severe inflammatory demyelinating syndromes of the central nervous system including neuromyelitis optica; 4) McArdle's sign, a recently rediscovered clinical sign that is highly specific for multiple sclerosis. He was awarded the John J. Dystel award for multiple sclerosis research in 2011 by the American Academy of Neurology and National Multiple Sclerosis Society (USA).

Caitlin Hoffman, MD, FACS, FAAP

Dr. Caitlin Hoffman is an award-winning neurosurgeon who specializes in pediatric neurosurgery as well as in adult and pediatric epilepsy surgery. She has completed fellowship training in pediatric neurosurgery with a focus on surgical epilepsy and craniofacial disorders. Her clinical research focuses on advancement of minimally invasive approaches toward epilepsy treatment and genomic factors associated with outcome in craniosynostosis. Her academic focus is in surgical and health care disparities with current research focusing on the impact of longitudinal mentorship for under-represented minority pipeline students. She also has a significant interest in global neurosurgery and is co-chair for an international summit on

the state and future of global neurosurgery initiatives and is involved in the department's Tanzania mission to provide training and surgical presence.

Dr. Hoffman has published academic papers in leading journals including Cancer Research, Nature Medicine, Neurosurgery, and Journal of Neurosurgery: Pediatrics on topics ranging from mechanisms of tumor progression to pediatric cerebrovascular disorders.

Josep Dalmau, MD, PhD, FAAN

Dr. Josep Dalmau received his MD & PhD from the Autonoma University of Barcelona, Spain. He trained in Neuro-oncology at Memorial Sloan-Kettering Cancer Center in New York and afterwards was appointed to the faculty. After 11 years at Memorial, he became co-director of Neuro-oncology at the University of Arkansas for Medical Sciences and in 2002 joined the University of Pennsylvania as Professor of Neurology. He is currently ICREA Research Professor at IDIBAPS-Hospital Clínic and Adjunct Professor of Neurology at Penn.

Dr. Dalmau's early work focused on cancer associated neuroimmunologic disorders and evolved with his discovery and characterization of autoimmune encephalitis, a new category of disorders mediated by antibodies to neuronal cell surface and synaptic proteins. This work included uncovering the mechanisms underlying autoimmune encephalitis and the development of the first animal models of these disorders. His research has been continuously funded by agencies including the USA National Institutes of Health, the Spanish Health Institute and the European Commission. In recognition of his outstanding contributions to clinical medicine he was elected to the National Academy of Medicine, USA and has received numerous awards including the distinguished George W. Jacoby award (American Neurological Association), the Rey Jaime I Prize (Spain), and the Zülch Prize (Max Planck Society), as well as many career awards and distinguished lectureships. He has been a highly cited researcher (Clarivate

Analytics) since 2015. Throughout his career he has mentored numerous junior faculty, fellows, residents and graduate students whom have gone on to develop successful, research careers throughout the world.

Bruce Carleton, FCP, FISPE

Dr. Bruce Carleton has been at the British Columbia Children's Hospital for 30 years taking care of kids. He is Director of the Med Safe Programme and Chief of the Division of Translational Therapeutics, in the Department of Pediatrics and a Senior Clinician Scientist at the BC Children's Hospital Research Institute. A Professor of Pediatrics, Medical Genetics, Pharmaceutical Sciences, and Population & Public Health at the University of British Columbia in Vancouver, his work in human genomics is more recent, since 2004. When he isn't working he can be found boating, hiking, biking and camping around remote locations on the Sunshine Coast of British Columbia and Hawai'i. The latter of course pre-pandemic. Now his exotic destinations include El Patio de Cabana (his porch) and La Kitchen (sounds more exotic than it is in reality but makes him feel like he is traveling again).

POWER PANELISTS

Basic Sciences/Benchwork/Lab *moderated by Dr. Mel Boulton*	Dr. Adrian Budhram Dr. Steve Kerfoot Dr. Marlys L. Koschinsky Dr. Stephen Pasternak
Clinical trials/Clinical *moderated by Dr. Sarah Morrow*	Dr. Teneille Gofton Dr. Mandar Jog Dr. Alexander Khaw Dr. Seyed Mirsattari Dr. Maryam Nouri
Education *moderated by Dr. David Steven*	Dr. Sandrine de Ribaupierre Dr. Mary Jenkins Dr. Lorelei Lingard Dr. Lauren Mai Dr. Shannon Venance
Imaging *moderated by Dr. Michael Mayich*	Dr. Andrea Andrade Dr. Elizabeth Finger Dr. Ravi Menon Dr. Adrian Owen Dr. Ana Suller Marti
Patient registry/Epidemiology *moderated by Dr. Sachin Pandey*	Dr. Craig Campbell Dr. Joseph Megyesi Dr. Juan Racosta Dr. Luciano Sposato

Andrea Andrade
Imaging

Dr. Andrea Andrade is a paediatric neurologist, stroke specialist and paediatric epileptologist who is currently appointed as an Assistant Professor of Paediatrics with a crossed appointment in CNS here at Schulich. She is also a executive member of the Canadian Paediatric Epilepsy Network (CPEN) and a site PI for the International Paediatric Stroke Study

Dr. Andrade is also the Director of the Paediatric Epilepsy Program at Schulich and the program Director of the paediatric epilepsy fellowship. Dr. Andrade's research involves implentation science and mixed methods, her areas of interests are in paediatric epilepsy surgery, drug resistant epilepsy, access to specialized epilepsy tertiary centres and paediatric stroke.

Mel Boulton
Basic Science/Benchwork/Lab

Dr. Mel Boulton is an Associate Professor in the Division of Neurosurgery at Western University. He earned a Bachelor of Science degree at Queen's University. Afterwards, Dr. Boulton attended the University of Toronto for Medical school and Neurosurgical training. He also received Fellowship training at St. Michael's Hospital. In 2008, Dr. Boulton joined Western as a member of the cerebrovascular group. He is the Head of the Division of Neurosurgery in CNS and the Co-Lead for the Competency by Design Neurosurgery Residency Program and assists with the development of the neurosurgery exam created by the RCPSC.

Adrian Budhram
Basic Science/Benchwork/Lab

Dr. Adrian Budhram obtained his medical degree from McMaster University, followed by residency training in neurology at Western University. He then went on to complete fellowship training in Autoimmune Neurology at the Mayo Clinic in Rochester, Minnesota. He has expertise in both the laboratory diagnosis and clinical management of patients with autoimmune neurological diseases. Alongside the Clinical Immunology Laboratory, Dr. Budhram facilitated the launch of comprehensive neural antibody testing for autoimmune encephalitis at London Health Sciences Centre. He also runs the Autoimmune Neurology Clinic, which specializes in the evaluation of patients with diseases that include autoimmune encephalitis, stiff-person spectrum disorders and paraneoplastic neurological

syndromes. He has authored over 40 peer-reviewed publications, with his primary research interests being the diagnostic utility of neural antibody testing and the clinico-radiographic characterization of autoimmune neurological diseases.

Craig Campbell
Patient registry/Epidemiology

Dr. Craig Campbell is the Interim Chair of Pediatrics, the Head of the Division of Pediatric Neurology and the medical director of the multidisciplinary neuromuscular clinic based at Thames Valley Children's Centre and the Pediatric Neurophysiology Laboratory at Children's Hospital London Health Sciences Centre. He is a Professor in Pediatrics, Clinical Neurological Sciences and Epidemiology at Western University and a Scientist at the Children's Health Research Institute. His training in Pediatrics, Neurology and Epidemiology was completed at the University of Ottawa.

The pediatric neuromuscular service at Children's Hospital LHSC/TVCC has evolved into an internationally recognized site for clinical care delivery, research and clinical outcomes evaluation. Clinical trial work in DMD patients has been an area of academic activity, and Dr. Campbell is collaboratively involved in many academic and industry initiated clinical trial activities in pediatric neuromuscular disease. He is a member of the Muscle Study Group, World Muscle Society, and recent past chair of the TREAT-NMD Registry Oversight Committee and Task Force. Dr. Campbell has been awarded the George Karpati Award Researcher of the Year in 2011 and 2015, Muscular Dystrophy Canada and the Children's Health Research Institute Scientist of the Year in 2018.

Sandrine de Ribaupierre
Education

Dr. Sandrine de Ribaupierre earned her MD at the University of Geneva in Switzerland. After a Neurosurgery residency in Lausanne (Switzerland), she completed an epilepsy fellowship in the Fondation Rothschild in Paris (France), then a paediatric neurosurgery fellowship in the Hospital for Sick Children in Toronto. She is currently an Associate Professor , working as a paediatric neurosurgeon with some involvement in paediatric and adult trauma and adult epilepsy and endoscopic surgery. Her main research areas are medical education, using virtual and augmented reality as an educational tool, with a special interest in neuroanatomy. She is also interested in surgical simulation with the development and evaluation of AR/VR tools for surgical simulation. Her clinical research focuses on epilepsy, cognition and functional imaging. She is collaborating with CSTAR, Robarts and the Centre for Brain and Mind. On-going projects include the evaluation of surgical simulators (NRC, AngioMentor), online neuroanatomical curriculum with a spin on a

learner's point of view, brain variability using fMRI and DTI, and new technologies to monitor IVH in preterm infants.

Elizabeth Finger
Imaging

Dr. Finger is an Associate Professor and the Director of Research for the Department of Clinical Neurological Sciences at Western University. Dr. Finger received her MD from Cornell University. She completed an internship in Internal Medicine at Massachusetts General Hospital, followed by residency in Neurology at Massachusetts General Hospital and Brigham and Women's Hospital in Boston, Massachusetts. Dr. Finger completed a clinical research fellowship at the National Institutes of Health in the Unit on Affective and Cognitive Disorders at the NIMH.

Dr. Finger's research focuses on understanding the cognitive, neural, and genetic substrates of abnormal decision-making, emotion, and social behavior. The research program combines neuropsychological tasks with functional MRI, diffusion tensor imaging, lesion studies, pharmacologic challenges and randomized clinical trials to delineate and treat the cognitive and neural systems affected in patients with Frontotemporal Dementia, related disorders and their at-risk family members.

Teneille Gofton
Clinical trials/Clinical

Dr. Teneille Gofton completed medical school in Halifax, Nova Scotia at Dalhousie University in 2005. She then finished a Neurology Residency at Western University in London, Ontario in 2010. Dr. Gofton has two years of fellowship subspecialty training. The first year of fellowship training focused on Hospice and Palliative Medicine and was completed in 2011 at Memorial Sloan-Kettering Cancer Centre in New York, New York. The second year of fellowship training focused on Neurocritical Care, which Dr. Gofton completed under the mentorship of Dr. Young at Western University and during which she obtained certification for electroencephalography.

Dr. Gofton joined the faculty in the Department of Clinical Neurological Sciences at Western University in July of 2012. She specializes in and Palliative Care for patients living with neurological illnesses and in adult Neurocritical Care.

Mary Jenkins
Education

Dr. Mary Jenkins received her MD and Neurology Residency at Western University. Following residency, Dr. Jenkins completed two years of fellowship training in Movement Disorders, the first year at Western University and the second year at the University of Rochester. Dr. Jenkins is an Associate Professor at Western University and the Program Director for the Division of Neurology.

Dr. Jenkins' main research interests are in the field of Movement Disorders diseases, including Parkinson's Disease. Her research focus is Motor Control and encompasses human studies of gait, posture, upper limb control, speech and cognition. The research is conducted as part of an interdisciplinary team of professionals within the Faculties of Medicine, Engineering, Neuroscience, and Health Sciences.

Mandar Jog
Clinical trials/Clinical

Dr. Mandar S. Jog is the Director of the National Parkinson Foundation Centre of Excellence in Parkinson Disease and Movement Disorders Program at London Health Sciences Centre and a Professor of Neurology at Western University, both in London, Ontario, Canada. He is also one of the Associate Directors of the Lawson Health Research Institute. He trained in Neurology in Toronto and completed a fellowship in movement disorders with Dr. Anthony Lang. This was followed by a 4-year post-doctoral fellowship in Computational Neuroscience at the Massachusetts Institute of Technology (MIT) in Boston, Massachusetts, under Dr. Ann Graybiel and a visiting professorship at Stanford Research Institute (SRI Inc.) in California.

In addition to a large clinical practice Dr. Jog supervises many masters, PhD and post-doctoral research and clinical fellows in his laboratory. With 6 patents and 4 provisional patents for innovative technology he is the co-founder of Medtrode Inc. and founder of ManJog Enterprises Limited and MDDT Inc. Dr. Jog's research attempts to probe the structure and function of the basal ganglia and their role in movement disorders. His research projects on which he has published more than 300 papers and given over 300 national and international presentations.

Dr. Jog travels internationally to conduct workshops and courses, along with many speaking engagements. Dr. Jog has also published two books including one on the mathematical basis of information processing in the brain. In addition, Dr. Jog participates in many national and international clinical trials for new treatments for movement disorders.

Dr. Jog was awarded the Dean's Award for Excellence in Research (2012), Queens Diamond Jubilee award (2013) and has been awarded the Faculty Scholar Award (2014) for exemplary research, teaching and service, the President's Award for Innovation (2014) from the London Health Sciences Centre and the Strategic Research Fund Award (2015) from the Lawson Health Research Institute. He was awarded the Lawson Innovation award for 2018.

Steve Kerfoot
Basic Science/Benchwork/Lab

Steve Kerfoot obtained his PhD from the University of Calgary, where he trained with Dr. Robert Bell and later with Dr. Paul Kubes studying brain inflammation. He then spent six years at Yale University investigating different aspects of basic B cell biology, first with Dr. Philip Askenase and then with Drs. Ann Haberman and Mark Shlomchik (now at U Pitt).

Dr. Kerfoot returned to Canada in the fall of 2011 to join the Department of Microbiology & Immunology at Western University, Schulich School of Medicine & Dentistry. He is currently an Associate Professor in the Department and an Associate Scientist with Robarts Research Institute.

Alexander Khaw
Clinical trials/Clinical

Dr. Alexander Khaw graduated medical school at the Johannes Gutenberg Universität of Mainz, Germany. He is board certified in Neurology after training at Mannheim University Hospital of Ruprecht Karls Universität of Heidelberg, University of Ulm, and Ernst Moritz Arndt Universität of Greifswald, Germany. His residency comprised extensive training in stroke medicine and epileptology. His doctoral thesis on the fetal evolution of glycoconjugate patterns in human vertebral column tissues was rewarded magna cum laude at Johannes Gutenberg Universität of Mainz.

He completed an 18-month clinical research fellowship at the Stroke Centre of the Neurological Institute, Columbia University, New York City, with Dr. J.P. Mohr and Dr. Ralph L. Sacco. Dr. Khaw was Director of the Stroke Unit and Neuro-IMC, Ultrasound Laboratory and Cerebrovascular Clinic at the University Hospital Greifswald before joining Western University and London Health Sciences Centre in 2014.

He has been for 7 years Co-Medical Director and Steering Committee member of the Southwest Ontario Stroke Network, Steering Committee member of the Regional Stroke

Project with the Southwest and Erie St. Claire LHIN to reorganize and continuously improve care provided to stroke patients in the region by evidence-based standards, and is a continuous member of CorHealth Ontario's Stroke Evaluation and Quality Committee (SEQC), which advises stroke care evaluation, quality improvement and reporting strategies to the Stroke Leadership Council.

Marlys L. Koschinsky
Basic Science/Benchwork/Lab

Dr. Marlys Koschinsky is an internationally recognized expert on lipoprotein(a) (Lp(a)), an important causal and independent risk factor for cardiovascular diseases including stroke. She holds a PhD in Biochemistry from the University of British Columbia, and completed post-doctoral studies at Genentech Inc. (San Francisco, CA, 1988-1991) where she initiated her work on Lp(a). She has contributed significantly to many aspects of Lp(a) biology and pathophysiology, with funding from provincial and national sources, charitable foundations, and the private sector. She collaborates with investigators worldwide including basic scientists and clinicians and serves as a consultant for pharma. She has delivered over 120 invited presentations in 8 different countries and has published over 165 peer-reviewed articles. She has also participated in the development of international statements and recommendations for the use of Lp(a) in clinical practice.

In addition to attaining the rank of Full Professor at Queen's University in 2001, Dr. Koschinsky has held numerous administrative posts including as Director of the Queen's Cardiac, Circulatory, and Respiratory Research Program (2002-2008), Dean of Science at University of Windsor (2008-2015) and Scientific and Executive Director of Robarts Research Institute at Western University in London, Canada (2015-2020). She has also served on numerous committees and boards in both the private and non-for-profit sectors including, most recently, as President of the Midwest Chapter of the National Lipid Association. Dr. Koschinsky has been the recipient of many honours and awards in recognition of her research and leadership contributions including Fellow of the American Heart Association, Fellow of the National Lipid Association, and Fellow of the Canadian Academy of Health Sciences, and most recently has been named to the Order of Ontario.

Lorelei Lingard
Education

Lorelei Lingard is an internationally recognized researcher in the study of communication and collaboration on healthcare teams. She is Professor in the Department of Medicine, and Senior Scientist at the Centre for Education Research & Innovation, both at the Schulich School of Medicine & Dentistry at Western University.

Lorelei's work puts the spotlight on language: how do the words we use shape our learning as trainees, our practice as clinicians, and our identities as professionals? Drawing on her PhD in Rhetoric, Lorelei has examined how language routines (e.g., pre-operative team briefings, or patient handover) influence team collaboration and patient safety. She has also explored how teaching trainees to talk in sanctioned ways (think morning case presentation, or calling for a consult) shapes their attitudes and their behaviors. She is fascinated by the tacit power of words, how they create emphases and blind spots that we may not be conscious of. A recent medical education example is her work to shift our notion of 'competence' beyond its individualist focus, so that we can better recognize – and assess – "collective competence" in clinical training environments.

Lorelei is a committed mentor and teacher, and a prolific scholar with more than 250 peer reviewed publications. In 2018, she was awarded the highest international honor in her scientific field, the Karolinska Institutet Prize for Research in Medical Education. In 2021, she was made an honorary fellow of the Royal College of Physicians and Surgeons of Canada for her national impact on postgraduate medical education.

Lauren Mai
Education

Dr. Lauren Mai earned her medical degree at the McMaster University in 2011 and completed her neurology residency at Western University in London, Ontario. Subsequently, she completed a one-year fellowship specializing in stroke/cerebrovascular neurology at McMaster University. Dr. Mai joined the Department of Clinical Neurological Sciences as an Assistant Professor specializing in stroke in 2019.

Dr. Lauren Mai is actively involved in international multicenter clinical trials aiming at stroke prevention and management. She is a collaborator with the Canadian Consortium on Neurodegeneration in Aging and a member of the Canadian Hemorrhagic Stroke Trials Initiative (CoHESIVE) network. Her local research looks at the differences in recovery trajectories between intracerebral hemorrhage and ischemic stroke survivors and the use of rehabilitation triaging tools in these two groups.

Dr. Lauren Mai is passionate about teaching the next generation of clinicians and organizes teaching sessions for the stroke fellows and residents. She is pioneering online modules to complement stroke education in the department and contributes to Competency-Based Medical Education.

Joseph Megyesi
Patient registry/Epidemiology

Dr. Joseph Megyesi received his MD from Western University in 1985. He completed a comprehensive surgical internship the same institution followed by a neurosurgical residency at the University of Alberta Hospitals in Edmonton. Following his training, Dr. Megyesi completed fellowships at Harvard University and the University of Alberta.

Dr. Megyesi's clinical research interests focus on angiogenesis in brain tumors. A tumor's ability to grow is linked to its ability to recruit a supply of new blood vessels. In order to do this, it sends out "signals" to already existing blood vessels to sprout new branches to feed it. This is the process of angiogenesis. His past studies have investigated angiogenic growth factors such as vascular endothelial growth factor (VEGF) and basic fibroblast growth factor (bFGF).

Dr. Megyesi's research interests also include cerebral vasospasm in the brain. Cerebral vasospasm is delayed-onset, prolonged and pathological cerebral arterial narrowing following aneurysmal subarachnoid hemorrhage (SAH). His past work has looked at the treatment of this disorder using transluminal balloon angioplasty in an animal model.

Ravi Menon
Imaging

Dr. Ravi Menon is a Professor of Medical Biophysics, Medical Imaging and Psychiatry at Western University, where he is also a member of the Graduate Program in Neuroscience and the Graduate Program in Biomedical Engineering and Founding Director of Western's Centre for Functional and Metabolic Mapping (CFMM), Canada's National Ultra-High field MRI Platform. He holds a Ph.D. in Medicine from the University of Alberta (1990), a M.Sc.(A) in Medical Physics from McGill University and a B.Sc. (Hons) in Physics from the University of British Columbia.

He was awarded one of the inaugural Canada Research Chairs in 2001 and has held grants from a broad spectrum of national and international funding agencies including a CIHR Foundation Grant in 2016. He currently serves as co-Scientific Director of

BrainsCAN, a $66M grant from the Canada First Research Excellence Fund held at Western.

He is a Senior Fellow of the International Society for Magnetic Resonance in Medicine and the Canadian Academy of Health Sciences and was elected as a Fellow of the Royal Society of Canada in 2019.

He has served in numerous advisory capacities, including 7 years on the Canada Gairdner Foundation and the Board of Scientific Councilors of NIMH/NIH. He served for 7 years (the last 4 as Chair) on the Institute Advisory Board of the Institute for Neuroscience, Mental Health and Addiction of the CIHR. He currently serves on the Board of the Brain Canada Foundation along with several of Canada's leading philanthropists.

Dr. Menon's research is in the development and application of advanced MRI methods to basic and clinical neuroscience. His basic research interests involve understanding the biophysical mechanisms of functional magnetic resonance imaging in animal models and in humans. His primary clinical research is in the area of 7 Tesla MRI of multiple sclerosis, where he is addressing the questions of how to predict disease progression and what brain pathology drives cognitive deficits in MS patients.

Seyed Mirsattari
Clinical trials/Clinical

Dr. Mirsattari received his MD from Queen's University in Kingston, Ontario in 1995. He completed his neurology residency training at the University of Manitoba in 2000 and became a diplomate of the American Board of Psychiatry and Neurology in 2001. He was a postdoctoral research fellow of the Canadian Institutes of Health Research (CIHR) in clinical epileptology and neurophysiology at Western University until June 2004. He completed his PhD in neurophysiology in 2005. His postdoctoral research was on simultaneous EEG-fMRI/MR spectroscopy in an animal model of focal epilepsy and treatment of refractory status epilepticus.

Dr. Mirsattari is currently an Associate Professor in the Department of Clinical Neurological Sciences at Western University. He joined the Department in 2004. He is one of the physicians involved in the Complex Epilepsy Surgery Program and Epilepsy/General Neurology Clinic at the London Health Science Centre. He also provides neurology consultation services to Health Sciences North Hospital (HSN) in Sudbury and Ontario Telestroke Network.

Sarah Morrow
Clinical trials/Clinical

Dr. Sarah Morrow is an Associate Professor in the Department of Clinical Neurological Sciences at Western University (London, ON) and Director of the London MS Clinic. She received her MD from the University of Calgary and completed her residency training in neurology at Western University. This was followed by a clinical fellowship in MS at the London MS clinic at Western University and a research fellowship on Cognition and MS with Dr. Ralph Benedict, a neuropsychologist, at the Jacobs Neurologic Institute in Buffalo, New York. Dr. Morrow has also completed a Master's of Science in Epidemiology at the State University of New York in Buffalo.

In addition to her clinical work in the London MS clinic, she established the first MS Cognitive clinic in Canada located at Parkwood Institute. She is a Board member for the Canadian Journal of Neurological Sciences and the International Journal of MS Care. She is also the Neurology section editor for The Chronicles of Neurology & Psychiatry. She is an Executive Board Member for the International Multiple Sclerosis Cognition Society (IMSCOGS) and a Board member for the Consortium of MS Centers (CMSC). She currently has over 100 peer-reviewed publications on the area of MS.

Maryam Nouri
Clinical trials/Clinical

Dr. Maryam Nabavi-Nouri received her medical degree from Iran University of Medical Sciences in Tehran in 2009. She completed her paediatric neurology residency at the Hospital for Sick Children/University of Toronto in 2016. Through a fellowship grant from Canadian League against Epilepsy, she finished her Neurophysiology/Pediatric epilepsy fellowship at University of British Colombia with a focus on pediatric EEG interpretation and epilepsy surgery evaluations. She is pursuing a Masters in Clinical epidemiology through London School of Health of Tropical Medicine. She is expanding the pediatric epilepsy research program focusing on multi-center studies to understand the pathophysiology of autoimmune causes of epilepsy, while improving diagnostic accuracy, access to disease-modifying therapies, and patient outcomes. Her research interests further include medically refractory epilepsy, epilepsy surgery, epidemiological studies in epilepsy and global burden of neurological disorders.

Adrian Owen
Imaging

Adrian M. Owen, Ph.D., OBE (Cognition, Full Professor, Western) was recruited by Western as the Canada Excellence Research Chair in Cognitive Neuroscience and Neuroimaging. He is best known for his 2006 discovery, published in Science, showing that some patients thought to be in a persistent vegetative state are fully aware and can communicate using fMRI. In the 2019 Owen was made an Officer of the Most Excellent Order of the British Empire (OBE) for services to scientific research. Owen has published more than 350 peer-reviewed scientific papers and over 40 chapters and books, which have been cited over 60,000 times. His h-index is 113 and 107 of his papers have >100 citations each. Owen is expert in the development of computerized cognitive test batteries for humans, and is Co-Founder and Chief Scientific Officer of Cambridge Brain Sciences, an online platform for cognitive assessment.

Sachin Pandey
Patient registry/Epidemiology

Dr. Sachin K. Pandey is a practicing Interventional Neuroradiologist LHSC. Dr. Pandey received both his BA and MD degrees from Boston University as part of the 7-year combined liberal arts and medical education program. From there, Dr. Pandey completed a residency in Diagnostic Radiology at Beth Israel Deaconess Medical Center at Harvard University, graduating in 2012. He then pursued clinical fellowship training, first in Diagnostic Neuroradiology also at Beth Israel Deaconess. Dr. Pandey then completed a fellowship in adult and pediatric Interventional Neuroradiology at Brigham and Women's Hospital and Boston Children's Hospital, also at Harvard University.

Following his time in Boston, Dr. Pandey then joined the faculty at Western University Schulich School of Medicine. He now serves as the city-wide Division Head for Diagnostic and Interventional Neuroradiology. Dr Pandey maintains an active interest in organized medicine and academic leadership and is the current Section Chair for the division of Neuroradiology at the Ontario Medical Association as well as the current President of the LHSC Professional Staff Organization. Dr. Pandey's research interests are primarily clinical and focused on cerebrovascular disease, with emphasis on radial access for cerebrovascular procedures and hyperacute stroke thrombectomy.

Stephen Pasternak
Basic Science/Benchwork/Lab

Dr. Stephen Pasternak is a Cognitive Neurologist (specialized in the diagnosis and treatment of neurodegenerative disease) and Director of the Cognitive Neurology and Alzheimer's Disease Research Centre at Parkwood Institute and a Scientist at the Robarts Research Institute. His laboratory at Robarts focusses on using live cell imaging to beta amyloid generation and secretion in Alzheimer's disease, on blood biomarkers to diagnose neurodegenerative disease, and on harnessing protein clearance to treat neurodegenerative disease. At his clinic at Parkwood he sees patients with neurodegenerative disease including Alzheimer's disease, Lewy Body disease and Parkinson's Disease Dementia and participates in academic and industrial and academic clinical trials including his own phase 2 trial of Ambroxol to treat Parkinson's Disease Dementia.

Juan Racosta
Patient registry/Epidemiology

Dr. Juan Racosta is a Multiple Sclerosis and Autonomic Dysfunction Clinical Researcher. Dr. Racosta is currently establishing his research program in London Ontario, where he collaborates with the departments of Computer Sciences and Epidemiology. Dr . Racosta research combines insights from Multiple Sclerosis, Autonomic Dysfunction and Natural Language Processing. He has created MuSicaL and MuSicaL-NeMO registries for people with Multiple Sclerosis and Neuromyelitis Optica, both using Natural Language Processing to interpret unstructured text from clinical notes. His research interests also include brain hypoperfusion in patients with Multiple Sclerosis, and its relation with dysautonomia; and different fields on biostatistics.

Luciano Sposato
Patient registry/Epidemiology

Dr. Luciano Sposato is a stroke neurologist, Associate Professor at the Department of Clinical Neurological Sciences, London Health Sciences Centre (LHSC), and Scientist at Lawson Health Research Institute and Associate scientist at Robarts Research Institute. Dr. Sposato completed his medical degree at University of Buenos Aires, Argentina, followed by training in Internal Medicine and Neurology at Hospital de Clinicas, University of Buenos Aires, Argentina, and a Stroke fellowship at UWO. Dr. Sposato leads the LHSC/Western University Stroke Program and holds the Kathleen and Dr. Henry Barnett Chair in Stroke Research. Dr. Sposato's has established the Heart & Brain Lab at Western University and his research focuses on the heart and brain connection, including, stroke, atrial

fibrillation and dementia; and on stroke epidemiology, to investigate how brain damage affects the heart and vice-versa through experimental, clinical and population-based research.

David Steven
Education

Dr. Steven received his Bachelor of Science at the University of Manitoba in 1992. After obtaining his MD at the University of Manitoba in 1996, Dr. Steven completed his residency in neurosurgery at the Western University in 2002. During his residency, Dr. Steven obtained his Master of Public Health at Yale University in New Haven, Connecticut. Following residency, Dr. Steven completed a fellowship in epilepsy surgery at the Montreal Neurological Institute.

Dr. Steven is a Professor and Richard and Beryl Ivey Chair of the Department of Clinical Neurological Sciences at Western University in London, Ontario, Canada. Nationally, Dr. Steven has been heavily involved with the Royal College of Physicians and Surgeons of Canada as a member of the Specialty Committee in Neurosurgery, a Royal College surveyor and examiner. He has been an examiner since 2008 and is the current Chair of the Royal College Examination Board in Neurosurgery. Internationally, Dr. Steven represents Canadian Neurosurgical Society on the Neurosurgery Advisory Board of the American College of Surgeons.
Dr. Steven has devoted considerable time developing epilepsy surgery in Peru and helping develop post-graduate medical training in neurosurgery and neurology in the Middle East. He devotes the majority of his clinical practice to the surgical treatment of epilepsy and his research focuses on clinical outcomes after epilepsy surgery.

Ana Suller Marti
Basic Science/Benchwork/Lab

Dr. Suller Marti studied medicine at the Universidad de Valencia in Spain, spending one academic year at the University of Turku, Finland. She completed the Neurology residency at Hospital Lozano Blesa in Zaragoza, Spain. During that time, Dr. Suller Marti acquired her Master's degree in Initiation in Medical Investigation at the Universidad de Zaragoza. She completed a clinical-research headache fellowship at Hospital Clínico de Valencia. In July 2018, she moved to Canada to complete her epilepsy training, with a two-year clinical epilepsy fellowship and one-year research fellowship, while working on her PhD. In July 2019, Dr. Suller Marti started her position as Assistant Professor in the Department of Clinical Neurological Sciences at Western University, shortly after she got a cross appointment with Neuroscience and Paediatrics. She developed an expertise in neuromodulation, SEEG recordings and SUDEP. She developed a multidisciplinary

research group to coordinate research concerning stereoencephalography, enhancing epilepsy research and increasing international visibility of the London Health Sciences Centre Epilepsy Program. She developed collaborations with several other researchers from different disciplines. She received the Herbert-Jasper Award in 2020 from the Canadian Society of Clinical Neurophysiologists, recognizing her expertise in the field of epilepsy. She is an active member of the Educational Task Force through the Young Epilepsy Society-ILAE and she is collaborating on the Competence-Based Educational Curriculum in Epilepsy through ILAE. Since starting her position, Dr. Suller Marti has mentored several students who participate in her research, engaging the next generation of future researchers and neurologists and increasing interest in epilepsy and research.

Shannon Venance
Education

Dr. Shannon Venance received her PhD from Queen's University and completed medical school and Neurology residency at the Faculty of Medicine, University of Ottawa. Dr Venance is an Associate Professor in the Department of Clinical Neurological Sciences, Schulich School of Medicine & Dentistry, Western University. Her clinical expertise is in disorders of muscle. Dr. Venance is actively involved in education across the learning continuum. She brings a collaborative approach and expertise in change management with a quality improvement lens to her recent roles as the Faculty Lead, MD Curriculum Implementation, Director, Postgraduate Medical Education, CBME Implementation and Assistant Secretary to the Committee on Accreditation of Canadian Medical Schools. Her contributions to medical education have been recognized with the Schulich Award of Excellence Distinguished Leader – Undergraduate Medical Education, the Douglas Bocking Award for Excellence in Medical Teaching and the Angelika F Hahn Award for Excellence in Clinical Teaching. She began her 5-year term as Vice Dean, Undergraduate Medical Education on August 1, 2021.