NEURO COURSE



November 16-17, 2023

De Grandpre Communications Centre, The Neuro

Program Booklet







NEURO COURSE



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Program

Thursday No	Thursday November 16, 2023				
8:15	Registration and Continental Breakfast				
09:00	Opening Remarks Ron Postuma, Montreal Neurological Institute-Hospital (The Neuro) McGill University				
	Chair: Milan Nigam, Université de Montréal Session 1: The Basics Sponsored by Eisai Canada				
09:15	Basics of Sleep Physiology Marcus Ng, MD, University of Manitoba				
09:45	Basics on the Methods of Investigation for Sleep Disorders Mark Boulos, MD, University of Toronto				
10:15	Refreshment Pause				
10:45	Circadian Rhythm: Physiology & Pathology Garima Shukla, MD, Queen's University				
11:10	Panel Discussion				
11:40	Transition and Stretch				
	Chair: Shelly Weiss, University of Toronto Session 2: Children & Sleep				
11:45	Sleep Disorders in Children Evelyn Constantin, MD, McGill University (video presentation)				
12:15	Evaluation and Treatment of Pediatric Insomnia Shelly Weiss, MD, University of Toronto				
12:45	Panel Discussion (Dr. Constantin via zoom)				

13:05		Lunch sponsored by Paladin Labs Inc.
		Session 3: Sleep-Related Breathing Disorders
14:25		Diagnosis & Management of Obstructive Sleep-Related Breathing Disorders John Kimoff, MD, McGill University
14:55		Q&A
15:15		Refreshment pause
	de Mo	Chair: Milan Nigam, MD, Hôpital du Sacré-Cœur de Montréal, Université Intréal
		Session 4: Movement Disorders and NREM Parasomnias
15:45		Restless Leg Syndrome and Sleep Related Movement Disorders Milan Nigam, MD Hôpital du Sacré-Cœur de Montréal, Université de Montréal
16:15		NREM Parasomnias & Differential Diagnostic Considerations Ron Postuma, MD, Montreal Neurological Institute-Hospital, McGill University
16:45		Panel Discussion
17:15		Summary & Closing Remarks
		Mark Boulos, University of Toronto
18:00		Evening program – Sponsored by Eisai Osteria MKT (1333 Blvd Robert-Bourassa, Montréal, QC H3A 1T9) Cocktail – Speed-dating – Dinner

Friday, November 17, 2023

8:15	Registration and Breakfast à la Montréalaise
09:00	Welcome and overview – Day 2 Marcus Ng, University of Manitoba
	Chair: Thanh Dang-Vu, Concordia University
	Session 5: Insomnia
09:10	Insomnia Disorder: Evaluation and Management Thanh Dang-Vu, MD, PhD
09:35	Cognitive Consequences of Primary Sleep Disorders Véronique Latreille, PhD
10:00	Cognitive Behavioral Therapy for Insomnia (CBT-I): Hands-on session
	Véronique Latreille, PhD
10:25	Refreshment Pause
	Chair: Ron Postuma, Montreal Neurological Institute-Hospital (The Neuro McGill University
	Session 6: REM sleep parasomnias and Central Disorders of Hypersomnolence
	Sponsored by: Jazz Pharmaceuticals
10:40	REM Sleep Behavior Disorder and Risk of Neurodegenerative Disease
	Ron Postuma, MD, Montreal Neurological Institute-Hospital, McGill University
11:10	Narcolepsy & Other Central Disorders of Hypersomnolence Brian Murray, MD, University of Toronto

Panel Discussion
Lunch sponsored by Paladin Labs Inc.
Hand-on Sessions
Patient Case Presentations (Milan Nigam, Marcus Ng, Garima Shukla)
Refreshment pause
Tips and Tricks on How to Land a Sleep-Focused Fellowship Laurel Charlesworth, MD, University of Ottawa
How and Why to Choose a Career in Sleep Neurology? Experience port.
Laurel Charlesworth, MD, University of Ottawa
Closing Remarks - Participation Prize draw
Marcus Ng, University of Manitoba

SPEAKER, HOST, AND CHAIR BIOGRAPHIES

Mark Boulos

Dr. Mark Boulos is a Sleep & Stroke Neurologist, Associate Professor, and Clinician-Researcher in the Division of Neurology at the University of Toronto and Sunnybrook Health Sciences Centre, as well as Medical Director of the Sunnybrook Sleep Laboratory. Dr. Boulos oversees an active research program that investigates the association of sleep disorders with TIA/stroke, dementia, and other neurological disorders. In addition, he has an interest in home sleep monitoring, normative sleep data, and novel treatment interventions for managing sleep disorders. Dr. Boulos has published nearly 70 peer-reviewed journal articles, and many book chapters, abstracts, and poster presentations. His research program has been supported by the Canadian Institutes of Health Research, Heart and Stroke Foundation, the Innovation Fund of the Academic Health Sciences Centres of Ontario, and several industry partners. In 2020, Dr. Boulos was awarded by the American Academy of Neurology the Wayne Hening Sleep Medicine Investigator Award in recognition of outstanding achievements in Sleep Science research.

Laurel Charlesworth

Dr. Laurel Charlesworth is a neurologist and sleep physician at The Ottawa Hospital, and an assistant professor of medicine at the University of Ottawa. She completed her medical degree at McMaster University's Niagara Regional Campus, followed by neurology residency in Ottawa, and sleep medicine fellowship at Queen's University. She is a clinician teacher with clinical interest in overlap of sleep and chronic neurological conditions, as well as occupational / aerospace medicine.

Evelyn Constantin

My research focuses on sleep in children. I study the effect of obstructive sleep apnea (OSA) on cardiometabolic risk, neurocognitive deficits and quality of life, as well as the impact of treatment for sleep disorders on specific health outcomes and the promotion of healthy sleep habits. I have developed a research program with interdisciplinary collaborations to explore sleep issues in children with chronic conditions, including neurodevelopmental disabilities and genetic or metabolic conditions

Thanh Dang-Vu

Thanh Dang-Vu, M.D. Ph.D., FAASM, is a Full Professor in the department of Health, Kinesiology and Applied Physiology at Concordia University, where he holds a Research Chair in Sleep, Neuroimaging and Cognitive Health. He is affiliated with Concordia's Perform center, the Center for Studies in Behavioral Neurobiology, and engAGE research center for aging. He is also a neurologist, researcher and the Associate Director for Clinical Research at the Centre de Recherche de l'Institut Universitaire de Gériatrie de Montréal (CIUSSS Centre-Sud-de-l'île-de-Montréal). He is an Associate Professor of Neurosciences at Université de Montréal and an Adjunct Professor in Neurology and Neurosurgery at McGill University. Dr. Dang-Vu received his MD & PhD from University of Liege, with postdoctoral training in sleep medicine at Harvard Medical School and Université de Montréal. He is a sleep researcher with expertise in the neurophysiology and neuroimaging of sleep, as well as a neurologist with expertise in sleep disturbances.

Mike Fitzpatrick

Dr. Michael Fitzpatrick is a Professor in the Division of Respirology & Sleep Medicine at Queen's University. He is a graduate of University College Dublin and did higher specialty and research training at the University of Edinburgh, before moving to Canada in 1991. Dr. Fitzpatrick is a board-certified sleep specialist (ABSM) and his clinical practice includes general internal medicine, general respirology, sleep medicine and respiratory care of patients with neuromuscular disease. His research interests have been in upper airway physiology and in cost-efficient algorithms for sleep apnea diagnosis and management. He is a former chair of the Division of Respirology & Sleep Medicine at Queen's University and currently serves as Chief of Staff and Executive Vice-President of Medical & Academic Affairs at Kingston Health Sciences Centre, Kingston, Ontario.

John Kimoff

Dr. R. John Kimoff is Professor of Medicine in the Respiratory Division, Department of Medicine at the McGill University Health Center. He is medical director of the MUHC Clinical Sleep Laboratory and the MUHC Research Institute Sleep Research facility. His clinical practice involves respiratory medicine and multi-disciplinary sleep disorders. His academic activities include diverse teaching responsibilities and a clinically-oriented research program on sleep-disordered breathing under three themes: 1) innovative diagnostic and therapeutic strategies; 2) upper airway neuromuscular dysfunction and inflammation, with a recent focus on clinical trials in neuromuscular disorders; and 3) cardiometabolic and reproductive health, with clinical trials in congestive heart failure and adverse effects of maternal sleep apnea on pregnancy outcomes including hypertensive disorders of pregnancy.

Véronique Latreille

Véronique Latreille is a neuropsychologist with subspecialty training in neurological and neurodegenerative disorders. She is a member of the Order of Psychologists of Quebec (OPQ) and an OPQ-certified neuropsychologist. She did her Ph.D. in clinical neuropsychology at the Université de Montréal and two postdoctoral fellowships (Brigham and Women's Hospital/Harvard Medical School and McGill University/Montreal Neurological Institute-Hospital), where she studied the relationships between sleep physiology and cognitive functioning in adults with Parkinson's disease and epilepsy.

Brian Murray

Brian J. Murray is a professor of neurology and sleep medicine at Sunnybrook Health Sciences Centre, University of Toronto. His major clinical interests are in neurological aspects of sleep medicine, and the relationship between sleep and behaviour. He is the Head of the Division of Neurology at Sunnybrook, and Chair of the Sunnybrook Research Ethics Board.

Marcus Ng

Dr. Marcus Ng is an Associate Professor of Neurology, Epileptologist, and Adjunct Professor of Biomedical Engineering at the University of Manitoba in Winnipeg, Canada. He completed his fellowship in Epilepsy, EEG, and Clinical Neurophysiology at the Massachusetts General Hospital, and he is the former chief EEG examiner for the Canadian Society of Clinical Neurophysiologists. Co-author of the "Atlas of Intensive Care Quantitative EEG", his research interest is focused on the understanding and clinical application of the suppressive effects of rapid eye movement (REM) sleep on seizures and epilepsy. He is also interested in the development of novel tools and techniques (such as quantitative EEG) for the analysis of sleep in the epilepsy monitoring and critical care units.

Milan Nigam

Dr. Nigam is a sleep neurologist and associate clinical professor at the University of Montreal's Center for Advanced Research in Sleep Medicine. He completed his sleep medicine fellowship under Prof Isabelle Arnulf at the Pitié-Salpêtrière Hospital in Paris, with a focus on hypersomnias and Kleine-Levin. He participates in clinical, teaching and research duties encompassing both sleep medicine and general neurology.

Ron Postuma

Dr. Postuma is Professor of Neurology at McGill University. He graduated with his Medical Degree from the University of Manitoba, completed a Neurology fellowship at McGill University, a Movement Disorders research fellowship at the University of Toronto, and a Masters in Epidemiology at McGill. He is a clinical movement disorders specialist, with a research interest mainly centered around non-motor aspects of Parkinson's disease. Main areas of interest include early detection of PD, diagnosis and treatment of sleep disorders including REM sleep behavior disorder, diagnosis and diagnostic criteria for PD, and clinical trials in the early stages of PD.

Garima Shukla

Dr. Garima Shukla is a Professor of Neurology, specializing in Epilepsy and Sleep Medicine, at the Queen's University in Kingston, ON. Her prior appointment was as Professor of Neurology at the All India Institute of Medical Sciences, New Delhi, India. Her research focus comprises the sleep-epilepsy-cognition interface, epilepsy co-morbidities as well as sleep disorders in neurology. Currently a section editor of the journal Sleep Medicine, she has more than 150 peer reviewed publications and is a recipient of numerous academic awards and honors.

Shelly Weiss

Dr. Shelly Weiss is a pediatric neurologist at SickKids and Professor, Faculty of Medicine, University of Toronto. Her clinical and research interests are in pediatric sleep neurology and pediatric epilepsy. Dr. Weiss is the Chair-Elect for the AFC in Sleep Disorder Medicine for the RCPSC, and a past Chair of the Canadian Sleep Society. She has also been on the Governing Council of the World Sleep Society and on the Program Committee for several WSS conferences.

SPEAKER ABSTRACTS

Basics on the Methods of Investigation for Sleep Disorders

Mark Boulos, MD, Staff Neurologist & Associate Professor, Sunnybrook Health Sciences Centre & University of Toronto

In this lecture, we will review basic methods for evaluating a variety of sleep disorders in clinical practice. We will discuss history-taking, the use of sleep diaries, as well as standardized questionnaires. Next, we will discuss overnight in-laboratory polysomnography (PSG), and normal vs. abnormal PSG parameters. We will also learn about daytime sleep testing and its use in detecting disorders of hypersomnolence; daytime sleep tests include the Multiple Sleep Latency Test and the Maintenance of Wakefulness Test. We will then explore ambulatory sleep testing methods, including home sleep apnea testing and actigraphy. Finally, we will conclude with ancillary methods such as cerebrospinal fluid testing samples for evaluating narcolepsy and related central disorders of hypersomnolence.

How and Why to Choose a Career in Sleep Medicine

Laurel Charlesworth, MD, University of Ottawa

Exciting review of options for choosing a career in sleep medicine as a neurologist, including details regarding fellowship opportunities in Canada and internationally.

Sleep Disorders in Children

Evelyn Constantin, MD, McGill University

Insomnia Disorder: Evaluation and Management

Thanh Dang-Vu, MD, PhD, Concordia University and Institut Universitaire de Gériatrie de Montréal

This presentation will provide an overview of the clinical presentation, impact, assessment and treatment options of insomnia disorder in adults

Sleep-disordered Breathing in Neuromuscular Disease

Mike Fitzpatrick, MD, Queen's University

This talk will discuss physiological control of breathing in normal subjects, how that is impacted by sleep and the consequent pathophysiological changes that occur during sleep in patients with neuromuscular disease. The talk will also briefly discuss monitoring and management of the respiratory aspects of neuromuscular disease.

Diagnosis & Management of Obstructive Sleep-Related Breathing Disorders

John Kimoff, MD, McGill University Health Centre

This session will provide a brief overview of Sleep-Related Breathing Disorders and then focus on recent advances in the clinical recognition, complications, diagnosis, and management strategies for obstructive sleep apnea-hypopnea. Emphasis will be placed on how advances in the understanding of ventilatory control instability and the neural mechanisms of upper airway motor control during sleep are informing novel treatment approaches.

Cognitive Consequences of Primary Sleep Disorders

Véronique Latreille, PhD, McGill University

At some point, we all tend to sacrifice sleep when confronted with increasing workload and duties. Yet sleep is vital for all living species, and insufficient or poor sleep has been associated with a wide variety of dysfunction in most body systems, including endocrine, metabolic, and nervous systems. Sleep is also essential for cognitive functioning: it helps us stay alert, be productive, and retain the information previously learned. This talk will review the main cognitive comorbidities associated with five major sleep disorders (insomnia, sleep-disordered breathing, hypersomnia, narcolepsy, and parasomnias).

Narcolepsy & Other Central Disorders of Hypersomnolence

Brian Murray, MD, Sunnybrook Health Sciences Centre, University of Toronto

At the end of this presentation, the participant will be able to: 1) Assess daytime sleepiness subjectively and objectively in an individual patient 2) Summarize the most common causes of excessive daytime sleepiness and recognize features suggestive of narcolepsy in particular 3) Implement treatment strategies for these conditions.

Basics of Sleep Physiology

Marcus Ng, MD, University of Manitoba

Dr. Ng will discuss the 'Basics of Sleep Physiology' starting with a brief historical overview, then consideration of sleep architecture, and followed by a review of sleep scoring as per the American Academy of Sleep Neurology.

Restless Leg Syndrome and Sleep Related Movement Disorders

Milan Nigam, MD, Hôpital du Sacré-Coeur de Montréal, Université de Montréal

We will discuss the pathophysiology, diagnosis and management of restless leg syndrome and other common sleep related movement disorders.

REM Sleep Behavior Disorder and Risk of Neurodegenerative Disease

Ron Postuma, MD, Montreal Neurological Institute-Hospital, McGill University

REM sleep behaviour disorder is characterized by loss of the normal atonia of REM sleep. This enables patients to 'act out their dreams'. In its idiopathic form, this occurs in approximately 1% of the population over age 50, although the vast majority never present to medical attention. Diagnosis is generally made via overnight polysomnogram. Treatments include bed safety measures, withdrawal of potential triggers such as antidepressants, and medications such as melatonin and clonazepam. There is a very strong connection between RBD and neurodegenerative synucleionpathies, including Parkinson's disease, Dementia with Lewy bodies, and multiple system atrophy. Over 80% of iRBD patients will eventually develop one of these conditions. The implications for identification of early syncuelinopathy markers, tracking early changes of disease over time, and potential for timely provision of neuroprotective therapy will be discussed.

Circadian Rhythm: Physiology & Pathology

Garima Shukla, MD, Queen's University

Evaluation and Treatment of Pediatric Insomnia

Shelly Weiss, MD, University of Toronto

Pediatric insomnia affects 20-30% of children and up to 90% of children with comorbid neurologic disorders. It is the most common pediatric sleep disorder. This presentation will

provide an update and evidence-based research on the evaluation and management of insomnia in typically developing children and those with neurodevelopmental disorders and other neurologic comorbidities. Research advances in digital pediatric sleep therapies (eHealth) will be outlined.

ORGANIZING COMMITTEE

Dr. Birgit Frauscher

Dr. Marcus Ng

Dr. Ron Postuma

Debbie Rashcovsky

Sponsors





