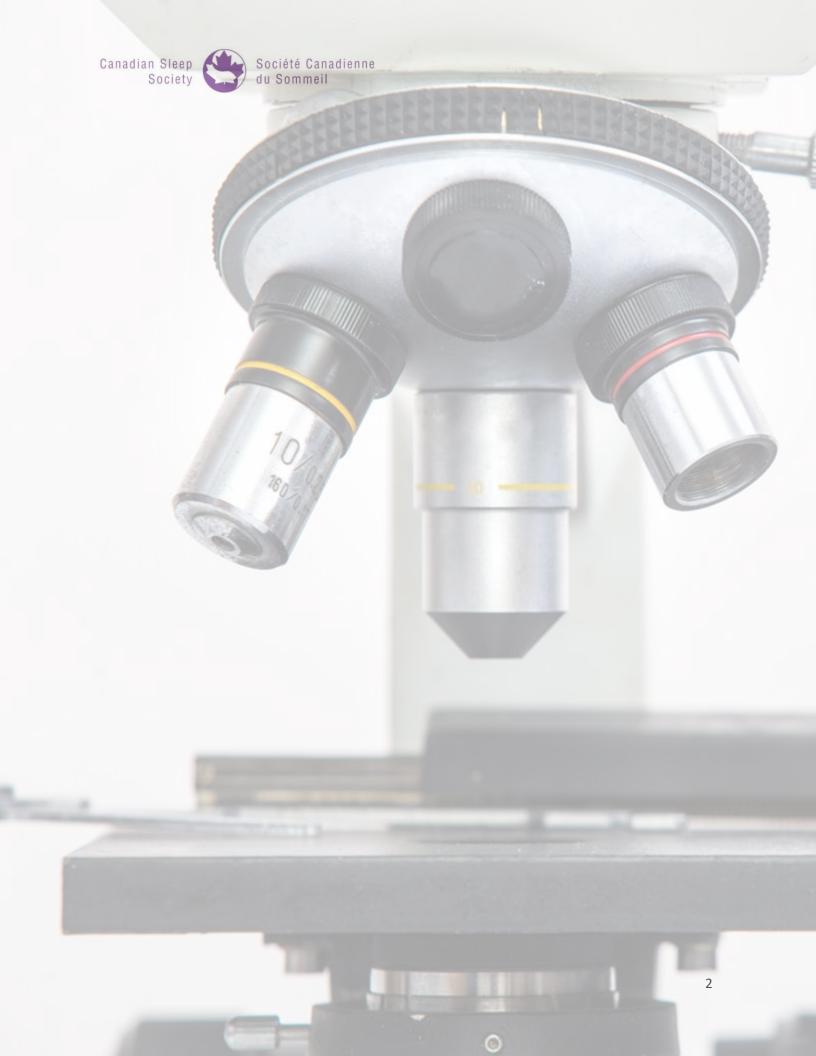


April 27-29 I 27-29 avril Westin, Ottawa





#### PRIME MINISTER . PREMIER MINISTRE

April 27–29, 2023

#### Dear Friends:

I am pleased to extend my warmest greetings to everyone taking part in the 11th National Conference of the Canadian Sleep Society.

This multidisciplinary scientific congress brings together delegates from Canada's professional sleep science and medical communities to discuss the latest advances in the diagnosis and treatment of sleep disorders. I am certain that delegates will make the most of the many educational opportunities planned for the next three days as well as the chance to network with their peers.

I would like to commend the members of the Canadian Sleep Society for their commitment to improving sleep for all Canadians through research, clinical care, education and advocacy. I would also like to thank the organizers for putting together an informative and rewarding program for everyone involved.

Please accept my best wishes for a productive conference in the Nation's Capital.

Sincerely,

The Rt. Hon. Justin P. J. Trudeau, P.C., M.P.

Prime Minister of Canada

#### WELCOME FROM THE CSS PRESIDENT AND CONFERENCE CO-CHAIR

Dear colleagues,

On behalf of the Canadian Sleep Society (CSS), and the Executive board of the society, I look forward to welcoming you to the 11th Congress of the CSS! We are excited we will get to meet in person for the first time in several years as we gather at the beautiful Westin Ottawa. As always, our scientific conference will be an opportunity to share scientific discoveries, network with colleagues, and, of course, learn about the latest innovations in sleep research and sleep medicine.

CSS is leading the discussion about sleep health in Canada with the public *Sleep On It* campaign so although we are an apolitical body, advocating for healthy sleep for all Canadians is essential to our mission. We salute the growth of all our people, from



trainees to scientists, researchers, physicians, technologists, pharmacists, dentists and all fields of sleep research and sleep medicine you have chosen to exercise/practice.

As we plan our 2023 in-person conference, I would like to acknowledge and thank many people who are working hard to make this conference a success. There are dozens of volunteers on the various working committees who devoted their time and efforts to make this event a success. The Chairs of these committees deserve a special recognition for their leadership. As Chair of the Scientific Program Committee and our Vice President of Research, Dr Thanh DANG-VU brings us a high-quality and energic program and his team of reviewers will select the best of many submissions for symposia, oral presentations, and abstracts. I also look forward to the contributions of our keynote speakers and distinguished honourees.

Our Technologist representatives (Santixay and Elyse), Student representatives (Nic and Sara), and Dental CME representatives (Fernanda and Nelly) are creating dynamic programs designed for their communities. The CME Family Physician program (led by Reshma and Birgit), Pharmacists program (led by Marie) and the CBT-I workshops/courses (led by Judith, Colleen and Annie) will round out the remaining programs. We have many experts from our CSS membership who will share knowledge and build informative programs to fulfil the CSS education mission.

Whether this will be your first time attending a Canadian Sleep Society conference, or you if are a faithful member of the CSS who has been part of them all, the 2023 program will include new and leading-edge knowledge of sleep while you meet new colleagues who share your interests. For sponsors and industry partners who will join us, your contributions will enable this conference to take place and add significantly to the spirit of discovery and innovation that marks this Canadian Sleep Society meeting. So, mark the dates in your calendar and let's get back together in style with all the learning and fun we can possibly have in the days we are together.

Célyne Bastien, PhD President, Canadian Sleep Society



#### WELCOME FROM 2023 CHAIR OF THE SCIENTIFIC COMMITTEE

Dear colleagues,



On behalf of the CSS and the Scientific Program Committee, I would like to welcome you to the 2023 Canadian Sleep Society Conference. We are thrilled to be back in person and we have an exciting program that features a broad range of topics within sleep research and sleep medicine. From new key discoveries in basic sleep science to clinical research for the treatment of sleep disorders, experts will share their knowledge from many perspectives.

Our Distinguished Scientist and Distinguished Lecturer presentations will open and close the conference. Their

knowledge of sleep disorders brings excellence to the program that also features six (6) keynote speakers, twelve (12) scientific symposia, four (4) oral sessions and two (2) lunchtime poster sessions. All our keynote speakers are renowned experts in their field and will provide the latest perspectives on current developments and practice in sleep science and sleep medicine. Our scientific symposia cover a broad range of topics ranging from basic science to advanced research. Presentation of original scientific research in both poster and oral formats will enable trainees and researchers to interact with the broader scientific sleep community.

I would like to thank the members of the Scientific Program and other Committees for their contribution to this program. It is my hope and expectation that the scientific program will be informative and stimulating, that it will address the needs of the multidisciplinary sleep community in Canada and beyond, and will advance the clinical, educational and research objectives of the CSS. Welcome to Ottawa for the 2023 Canadian Sleep Society National Conference!

Sincerely | Sincèrement, Thanh Dang-Vu, MD PhD Vice-President (Research), Canadian Sleep Society



#### **TABLE OF CONTENTS**

VELCOME FROM THE CSS PRESIDENT AND CONFERENCE CO-CHAIR									
WELCOME FROM 2023 CHAIR OF THE SCIENTIFIC COMMITTEE									
ABLE OF CONTENTS									
TABLE OF CONTENTS	(								
ABOUT THE CANADIAN SLEEP SOCIETY									
ABOUT THE CONFERENCE   http://sleepconference.ca	<u></u>								
CONFERENCE COMMITTEES	10								
2023 AWARD WINNERS	12								
2023 Canadian Sleep Society Distinguished Scientist Award	13								
Roger Broughton Young Investigator Award Winner	16								
CSS Trainee Outstanding Achievement Awards	17								
CSS Technologist Service Award	18								
CSS Student Abstract PrizeS	18								
GENERAL SCIENTIFIC PROGRAM	19								
SCHEDULE AT A GLANCE: THURSDAY, APRIL 27, 2023	20								
SCHEDULE AT A GLANCE: FRIDAY, APRIL 28, 2023	22								
SCHEDULE AT A GLANCE: SATURDAY, APRIL 29, 2023	22								
2023 CONFERENCE KEYNOTE SPEAKERS	23								
GENERAL SCIENTIFIC PROGRAM DETAILED AGENDA	27								
GENERAL SCIENTIFIC PROGRAM   THURSDAY, APRIL 27, 2023	28								
GENERAL SCIENTIFIC PROGRAM   FRIDAY, APRIL 28, 2023	29								
GENERAL SCIENTIFIC PROGRAM   SATURDAY, APRIL 29, 2023	41								
PRIMARY CARE   PHYSICIAN CME PROGRAM	56								
PRIMARY CARE   PHYSICIAN CME PROGRAM AT A GLANCE	56								
PRIMARY CARE   PHYSICIAN CME PROGRAM DETAIL	57								
	61								
ENGLISH TECHNOLOGIST PROGRAM	62								
ENGLISH TECHNOLOGIST PROGRAM AT A GLANCE   April 27-28, 2023	62								
ENGLISH TECHNOLOGIST PROGRAM DETAIL   THURSDAY, APRIL 27, 2023	63								
FNCLISH TECHNOLOGIST PROCRAM DETAIL   FRIDAY APRIL 28 2022	61								

FRENCH TECHNOLOGIST PROGRAM	69
FRENCH TECHNOLOGIST PROGRAM AT A GLANCE   April 27-28, 2023	69
FRENCH TECHNOLOGIST PROGRAM DETAIL   THURSDAY, APRIL 27, 2023	70
FRENCH TECHNOLOGIST PROGRAM DETAIL   FRIDAY, APRIL 28, 2023	72
CIHR-ICRH/CSS CAPACITY DEVELOPMENT WORKSHOP	76
Program   Thursday, April 27, 2023	76
DENTAL CME PROGRAM	80
Dental CME Program – At a Glance   Saturday, April 29, 2023	80
Dental CME Program – DETAILED   Saturday, April 29, 2023	81
CBT-I FOR PSYCHOLOGISTS	85
PROGRAM ACCREDITATION: CME, CEC AND CDE INFORMATION	87
SPONSOR AND EXHIBITOR SUPPORT	89



#### **ABOUT THE CANADIAN SLEEP SOCIETY**

https://css-scs.ca/

The Canadian Sleep Society is a national organization committed to improving sleep for all Canadians through support for research, promotion of high-quality clinical care, education of professionals and the public, and advocacy for sleep and sleep disorders medicine.

**OUR VISION:** "Healthy sleep for healthy Canadians"

**MISSION STATEMENT:** The Canadian Sleep Society is a national organization committed to improving sleep for all Canadians through:

- Support for research,
- Promotion of high-quality clinical care,
- Education of professionals and the public, and
- Advocacy for sleep and sleep disorders medicine.

**PRIORITIES:** Our priorities are to improve sleep for all Canadians through support for research, promotion of access to high quality clinical care, education of healthcare professionals and the public, and advocacy for healthy sleep in the schools and in the workplace.

#### Past-Presidents of the Canadian Sleep Society:

•	Roger Broughton, MD, PhD	1986-1988
•	Robert D. Ogilvie, PhD	1988-1990
•	Meir H. Kryger, MD	1990-1993
•	Alistair MacLean, PhD	1993-1996
•	Charlie George, MD	1996-1999
•	Joseph De Koninck, PhD	1999-2002
•	Charles Morin, PhD	2002-2005
•	Gilles Lavigne, DMD, PhD	2005-2008
•	Helen S. Driver, PhD, RPSGT, DABS	2008-2011
•	Shelly Weiss, MD	2011-2014
•	Kimberly Cote, PhD	2014-2017
•	Charles Samuels, MD, CCFP, DABSM	2017-2019
•	Célyne Bastien, PhD	2019-Present



#### ABOUT THE CONFERENCE | http://sleepconference.ca

A multi-day, multidisciplinary scientific congress focused on leading edge sleep science.

#### **Overall Conference Learning Objectives:**

At the conclusion of this learning activity, participants will be able to:

- 1. Discuss recent scientific advances in sleep research and sleep medicine.
- 2. Identify novel research opportunities and challenges associated with sleep science and sleep disorders.
- 3. Evaluate the role of sleep health in preventing and mitigating existing and emerging comorbidities.

#### **Past Conference Locations and Participant Numbers**

	Location	_ocation Dates		Theme
10 <sup>th</sup>	Online	October 28-30, 2021	620	Virtual
9 <sup>th</sup>	Vancouver*	Sep 20-25, 2019	3300	The Best of Sleep Medicine and Research
8 <sup>th</sup>	Calgary, AB	April 28-30, 2017	710	
7 <sup>th</sup>	Toronto, ON	Sep 25-27, 2015	800	Sleep, Health and Disease
6 <sup>th</sup>	Halifax, NS	Oct 4-6, 2013	500	Make Time for Sleep
5 <sup>th</sup>	Quebec City*	Sep 10-15, 2011	1600	Sleep, Health and Society
4 <sup>th</sup>	Toronto, ON	Apr 25-26, 2009	750	Waking Up to Sleep Disorders
3 <sup>rd</sup>	Montreal, QC	Apr 19-20, 2007	570	
2 <sup>nd</sup>	Quebec City, Qc	May 13-15, 2004	340	
1 <sup>st</sup>	Ottawa, ON	May 4-5, 2001	325	A Canadian Sleep Odyssey

<sup>\*</sup>Note – Quebec City (2011) and Vancouver (2019) were hosted in conjunction with the World Sleep Society Conference

#### **CONFERENCE COMMITTEES**

# **Scientific Program Committee** Co-Chairs:

- Thanh DANG-VU, MD PhD FAASM; Professor, Neurologist; Director, Sleep, Cognition & Neuroimaging Laboratory (SCNLab); Vice-President (Research), Canadian Sleep Society; Concordia University Research Chair in Sleep, Neuroimaging and Cognitive Health (Tier 1), Ctr for Studies in Behavioral Neurobiology & PERFORM Ctr, Dpt of Health, Kinesiology and Applied Physiology, Concordia University, Montreal, Qc; Associate Director for Clinical Research, Centre de Recherche de l'Institut Universitaire de Gériatrie de Montréal (CRIUGM), CIUSSS du Centre-Sud-de-l'île-de-Montréal, Montreal. Qc
- Mark I. Boulos, BSc MD FRCPC CSCN(EEG)
   MSc; Staff Neurologist (Sleep & Stroke),
   Sunnybrook Health Sciences Centre, Associate
   Professor, University of Toronto

#### **Committee Members:**

- Célyne Bastien, PhD; School of Psychology, Université Laval, Québec (Québec); Director of Graduate Programs, School of Psychology; President Canadian Sleep Society; Partner of the National campaign on sleep 'Sleep on it Canada'
- Nelly Huynh; Professeure agrégée, Faculté de médecine dentaire - Département de santé buccale, University of Montreal
- James McFarlane, BSc, MSc, PhD, FAASM; Assistant Professor, Psychiatry, University of Toronto
- Penny Corkum, PhD; Professor & Psychologist, Psychology & Neuroscience, Dalhousie University
- Rebecca Robillard; Director, Clinical Sleep Research, University of Ottawa Institute of Mental Health Research; Associate Professor, University of Ottawa, School of Psychology
- Tetyana Kendzerska, MD PhD; Associate Professor, Department of Medicine, University of Ottawa; Associate Scientist, Ottawa Hospital Research Institute
- Marta Kaminska, MD; Associate Professor -Department of Medicine, Division of

- Experimental Medicine, McGill University Health Centre
- Guido Simonelli, MD; Assistant Professor in the Department of Medicine at the University of Montréal, Research Scientist at the Center for Advanced Research in Sleep Medicine at the Hôpital du Sacré-Cœur de Montréal

## Primary Care CME Program Committee Program Co-Chairs:

- Reshma Amin, MD, FRCPC, MSc; Director of Sleep Medicine and Long-term Ventilation; Staff Respirologist, Division of Respiratory Medicine; Program Director, Sleep and Longterm Ventilation Fellowship Training Programs; Senior Associate Scientist; Associate Professor, University of Toronto, The Hospital for Sick Children
- Birgit Frauscher, MD; Associate Professor, McGill University; Director, ANPHY Lab, Montreal Neurological Institute and Hospital; Group Leader, Epilepsy, Montreal Neurological Institute and Hospital

#### **Committee Member:**

• Thanh DANG-VU, MD PhD FAASM

## Dental CME Program Committee Co-Chairs:

- Fernanda Almeida, MD; University of British Columbia
- Nelly Huynh, Professor; Assistant Professor under grant, Faculty of Dentistry, Oral Health Department, University of Montreal and the CHU Sainte-Justine Research Center; Coordinator, Orthodontic Axis for the GramDENT (Clinical Research), Faculty of Dentistry, University of Montreal

## English Technologist Program Committee Chair:

 Santixay Homsombath, BSc, RPSGT, RST, CCSH; Laboratory Director, Centre for Sleep and Human Performance Calgary, Alberta

#### **Committee Members:**

 Laree Fordyce, Maple Respiratory Group (MRG)



## French Technologist Program Committee Chair:

 Élyse Chevrier; Medical Electrophysiology
 Technologist, Sleep Disorders Clinic at Rivièredes-Prairies Hospital

#### **Communications Committee:**

• Liza Perez; Communications Officer, Canadian Sleep Society | Société canadienne du sommeil

#### **Local Host Committee**

- Rebecca Robillard, PhD, University of Ottawa Institute of Mental Health Research
- Tetyana Kendzerska, MD PhD, University of Ottawa; Ottawa Hospital Research Institute
- Célyne H. Bastien, PhD, Laval Université
- Florence Lambert-Beaudet, CSS Admin/Strategic Meeting Designs
- Laura Ray, Sleep Well
- Nicholas Vandenberg, PhD Candidate, University of Ottawa
- Stuart Fogel, PhD, University of Ottawa

#### **Fundraising Committee**

- Célyne Bastien, PhD
- Marina Vetrovec, Strategic Meeting Designs
- Valerie Viau

#### **CBT-I Courses**

 Judith R. Davidson, Ph.D., C. Psych; Clinical and Health Psychologist Somnologist (ESRS):

- Behavioural Sleep Medicine & Adjunct Professor, Queen's University
- Annie Vallières, M.Ps., PhD; Full Professor, School of Psychology, Université Laval; Head of the Sleep Unit, CEP, Laboratoire psycho socio culturel du sommeil, Centre de recherche CERVO; Centre de recherche du CHU de Québec- Université Laval
- Colleen Carney, Ph.D.; Toronto Metropolitan University (Formerly Ryerson University)

## Trainee Day Committee Co-Chairs:

- Sara Pintwala, PhD Candidate, University of Toronto
- Nicholas van den Berg, PhD Candidate, University of Ottawa

#### **Committee Members:**

- Samuel Gillman, PhD Candidate, Concordia University
- Tanya Leduc, PhD Candidate, Université de Montréal
- Matt Orr, PhD, Dalhousie University
- Meggan Porteous, PhD Student, University of Ottawa

#### **Conference Management Team:**

- Roberta Dexter Robidoux, Strategic Meeting Designs
- Marina Vetrovec, Strategic Meeting Designs
- Florence Lambert-Beaudet, CSS Admin/Strategic Meeting Designs

# **2023 AWARD WINNERS**

The Canadian Sleep Society is pleased to announce the 2023 Society Awards will be presented in the opening ceremonies. The awards are adjudicated by a Selection Committee composed of CSS Board Members and former award recipients.



#### 2023 CANADIAN SLEEP SOCIETY DISTINGUISHED SCIENTIST AWARD

The CSS Distinguished Scientist Award is in recognition of a scientist who has made significant contributions to the field of sleep research in Canada. It is awarded at the Conference of CSS and the recipient is invited to give a keynote address. The Executive Committee of the CSS determines the Distinguished Scientist Award nominee.

# CONGRATULATIONS TO THE 2023 DISTINGUISHED SCIENTISTS

### DR CHARLES MORIN, PhD



#### DR JOHN PEEVER, PhD



#### Past Winners of the Distinguished Scientist Award:

2007 Jacques Montplaisir

2009 Carlyle Smith

2011 Ben Rusak and Meir Kryger

2013 Joseph De Koninck

2015 Elliot Phillipson

2017 Barbara E. Jones

2019 Kazue Semba

2021 Julie Carrier

#### **2023 DISTINGUISHED SCIENTISTS**

#### Dr John Peever, PhD University of Toronto



**SESSION TITLE:** REM Sleep in Health and Disease **DATE/TIME:** Opening Keynote Presentation | April 27, 2023 | 16:30 – 17:15 Eastern Time

#### **BIOGRAPHY:**

John Peever is a Professor in the Department of Cell and Systems Biology, and President-Elect of the Canadian Sleep Society. His research examines how and why we sleep with a particular focus on identifying the brain mechanisms that control REM sleep and how their dysfunction underlies narcolepsy and REM sleep behavior disorder. Dr. Peever is also a strong advocate for promoting the awareness of sleep in health and disease. Outside of work he is a hobby farmer, beekeeper, and an avid horseman.

#### Dr Charles Morin, PhD Laval University



**SESSION TITLE:** Cognitive-Behavioural Therapy for Insomnia: From Clinical Trials, to Practice Guidelines, to Dissemination and Implementation **DATE/TIME:** Opening Keynote Presentation | April 27, 2023 | 17:15 – 18:00 Eastern Time

#### **BIOGRAPHY:**

Charles M. Morin, PhD, is Professor of Psychology and Director of the Sleep Research Centre at Université Laval in Quebec City. He holds a Canada Research Chair on behavioural sleep medicine. Professor Morin is a world leader on insomnia research. He has been at the forefront of new developments on behavioural approaches to treating insomnia and on studying the natural history, risk factors and burden of insomnia. He has published extensively (textbooks, articles, chapters, books for the lay public) and these writings have been instrumental in enhancing the standards of clinical care for patients affected with insomnia. Professor Morin has held several leadership positions in the field of sleep medicine, including as President of the World Sleep Society and the Canadian Sleep Society and member of the the American Psychiatric Association work group revising sleep disorders diagnostic criteria for DSM-5. He is an Associate Editor for the journals SLEEP and for Behavioral Sleep Medicine and is currently Program Chair for the next World Sleep Congress in Rio de Janeiro.



#### 2023 CIHR-ICRH/CSS Distinguished Lecturer Award in Sleep Sciences

The CIHR Institute of Circulatory and Respiratory Health (CIHR-ICRH) and the Canadian Sleep Society(CSS) have partnered on the 2023 CIHR-ICRH/CSS Distinguished Lecturer Award in Sleep Sciences to recognize an individual's outstanding contribution to the advancement of sleep sciences both in Canada and internationally.

#### CONGRATULATIONS TO THE 2023 CIHR-ICRH/CSS DISTINGUISHED LECTURER

**SESSION TITLE:** Mechanisms of Sleep and Breathing Reveal Therapeutic Targets



**DATE/TIME:** Closing Keynote Presentation | April 29, 2023 | 15:45 – 16:30 Eastern Time

#### DR RICHARD HORNER, PHD, FCAHS

#### **BIOGRAPHY:**

Richard Horner is Full Professor in the Department of Physiology & Department of Medicine at the University of Toronto, and Tier 1 Canada Research Chair in Sleep and Respiratory Neurobiology (2007-2021). He is also Vice-Chair, Research, in the Department of Physiology. He is author of over 125 research papers in peer-reviewed journals, and chapters in textbooks such as Principles and Practice of Sleep Medicine and the Textbook of Respiratory Medicine. Dr. Horner is author of the book - The Universal Pastime: Sleep and Rest Explained. For his body of work in sleep and breathing, Dr. Horner was elected Fellow of the Canadian Academy of Health Sciences (FCAHS) in 2017. Dr. Horner also leads undergraduate and graduate teaching on sleep science in the Faculty of Medicine at the University of Toronto spanning physiology to clinical problems. Dr. Horner has won awards for his research and teaching, including from the Faculty of Medicine for 'Sustained Excellence in Graduate Teaching and Mentorship' (2015) and 'Excellence in Linking Undergraduate Teaching to Research' (2013).

#### Past Winners of the Distinguished Lecturer Award:

2018 Charles Morin2021 Douglas Bradley



#### ROGER BROUGHTON YOUNG INVESTIGATOR AWARD WINNER

The Roger Broughton Young Investigator Award honours the contributions of Dr. Roger Broughton, founding President of the Canadian Sleep Society (1986-88), and one of the founding figures of Canadiansleep research. The award will be made to a young scientist for important early career research contributions, rather than a single submitted abstract or paper.

# Congratulations to the 2023 Roger Broughton Young Investigator Award Winner: Rebecca Robillard

#### **BIOGRAPHY:**

After completing her PhD in clinical neuropsychology at the University of Montreal, Dr Robillard is now Associate Professor at the School of Psychology of the University of Ottawa and conducts clinical sleep and mental health research at the Institute of Mental Health Research at the Royal. Her research group investigates the interactions between mental health, the sleeping brain and the sleeping heart, with particular attention to mood disorders and post-traumatic stress disorder. Their work also seeks to optimise sleep and chronobiological interventions for people with mental disorders. Dr Robillard is invested in knowledge mobilization efforts to promote the importance of sleep for mental and physical health.



Dr Rebecca Robillard, PhD

The winner will receive the award during the opening ceremonies and award presentations on Thursday, April 27, 2023 starting at 16:00 Eastern Time.

Past Winners of the Roger Broughton Young Investigator Award:

- 2004 Kimberly Cote
- 2007 John Peever and Penny Corkum
- 2009 Jean-Francois Gagnon
- 2011 Robyn Stremler
- 2013 Antoine Adamantidis
- 2015 Jean-Philippe Chaput and Thanh Dang-Vu
- 2017 Stuart Fogel
- 2019 David Samson
- 2021 Guido Simonelli



#### CSS TRAINEE OUTSTANDING ACHIEVEMENT AWARDS

This award is for the scientific merit of a single publication by a student in the field of sleep research. Funding for these awards is made through the CSS student fund – thank you to CSS members who made contributions to the student fund with their CSS registration.

# Congratulations to the 2023 Canadian Sleep Society Trainee Outstanding Achievement Award Winner: Dr Shady Rahayel



Dr Shady Rahayel

postdoctoral researcher at The Neuro, McGill University, where he delves into the intricacies of brain computational imaging and sleep. His research endeavors center on uncovering the underlying brain mechanisms of REM sleep behavior disorder, a parasomnia that is a precursor to conditions such as Parkinson's disease and dementia with Lewy bodies. In 2023, he will establish his own lab at the Center for Advanced Research in Sleep Medicine (Montreal), using brain imaging and computational modeling to investigate the connection between sleep and the development of neurodegenerative disorders. Dr. Rahayel also possesses professional experience as a sleep psychologist, with expertise in cognitive-behavioral therapy and treatment of chronic insomnia.

The winner will receive the award during the opening ceremonies and award presentations on Thursday, April 27, 2023 starting at 16:00 Eastern Time.

#### Past Winners of the Trainee (Student) Outstanding Achievement Awards:

- 2009 Patti Brooks
- 2011 Ari Shecter and Émilie Fortier-Brochu
- 2013 Jennifer Lapierre
- 2015 Kevin Grace
- 2017 Richard Boyce and Samuel Laventure
- 2019 Erlan Sanchez
- 2021 Claudia Picard-Deland and Véronique Latreille



#### CSS TECHNOLOGIST SERVICE AWARD

This award honours and recognizes a CSS member who has made significant contributions to the growth and development of the sleep technology profession.

# Congratulations to the 2023 Canadian Sleep Society Technologist Service Award Winner: Colin Massicotte, RPSGT

#### Past Winners of the Technologist Service Award:

2016 Michael Eden

2017 Laree Fordyce

2021 AnDrea Siemens

#### **CSS STUDENT ABSTRACT PRIZES**

Each year the CSS holds a competition for CSS student members for the best abstract submitted (to either SLEEP in the US, or CSS when conferences are held in Canada). The competition is open to trainees (undergraduate or graduate students) who are current CSS members. The award applicant must be the first author on the abstract presented at the CSS 2023 Conference.

#### STUDENT ABSTRACT PRIZE WINNERS:

#### Best 2023 Abstract Submission from a Trainee

Award Winner: Russell Luke, University of Toronto

Abstract Title: "Propagation of  $\alpha$ -synuclein pathology drives phenotypic progression from REM

sleep behaviour disorder to Parkinsonism in mice".

#### **Best Experimental Sleep Research Student Abstract**

Award Winner: Audrey Hector, Université de Montréal

Abstract Title: "Wake/Sleep architecture and electrocorticographic activity in two rodent

models of Alzheimer's disease".

#### **Best Clinical Sleep Research Student Abstract**

Award Winner: Jari Gool, Amsterdam University Medical Center

Abstract Title: "Data-driven phenotyping of central disorders of hypersomnolence with

unsupervised clustering: toward more reliable diagnostic criteria".

#### Best Sex and Gender Student Abstract generously funded by CIHR-ICRH

Award Winner: Rafael Perez-Medina-Carballo, McGill University

Abstract Title: "Role of melatonin on EEG frequency bands after menopause".

WINNING ABSTRACT PRESENTATIONS WILL TAKE PLACE DURING THE TRAINEE RESEARCH DAY – APRIL 27, 2023

# 2023 Canadian Sleep Society Conference

# GENERAL SCIENTIFIC PROGRAM

APRIL 27-29, 2023

	THURSDAY, APRIL 27, 2023							
7:00 AM	7:00 PM REGISTRATION DESK OPEN							
	2023 CONFERENCE SPECIALTY COURSES							
8:00 AM	CIHR-ICRH/CSS Capacity Development Workshop for Trainees  CIHR-ICRH/CSS Capacity Family Physician CME Day Family Physician CME Day (EN)  CBTI Psychologists (EN) Program (FR) Program							
12:00 PM	1:00 PM			LUNCH				
1:00 PM	4:00 PM	CIHR-ICRH/CSS Capacity Development Workshop for Trainees	Family Physician CBTI (EN)		Technologist (EN) Program	Technologist (FR) Program		
3:30 PM	4:00 PM	BREAK BEFORE CONFERENCE OPENING						

4:00 PM	4:30 PM	CONFERENCE OPENING AND AWARDS				
		2023 CANADIAN SLEEP SOCIETY DISTINGUISHED SCIENTISTS				
4:30 PM	5:15 PM	Dr. John Peever University of Toronto  KEYNOTE 1A: REM Sleep in Health and Disease				
5:15 PM	6:00 PM	Dr. Charles Morin Laval University  KEYNOTE 1B: Cognitive Behavioral Therapy for Insomnia: from Clinical Trials to Practice Guidelines, Dissemination and Implementation				
6:00 PM	7:00 PM	CSS ANNUAL GENERAL MEETING				
6:00 PM	8:00 PM	WELCOME RECEPTION WITH SPONSORS AND EXHIBITORS				

<sup>\*</sup>Please refer to each program schedule for specific start and end times for sessions

### SCHEDULE AT A GLANCE

			FRI	DAY, APRIL	28, 2023			
6:30 AM	6:30 PM	REGISTRATION DESK OPEN						
7:00 AM 8:15 AM	8:15 AM	BREAKFAST SYMPOSIUM   SPONSORED BY PALADIN  New developments in the Diagnosis and Management of Narcolepsy  Dr. Yves Dauviliers, University of Montpellier, France  Dr. Atul Khullar, Northern Alberta Sleep Clinic in Edmonton  Dr. Emmanuel Mignot, Craig Reynolds Professor of Sleep Medicine, Stanford University						
8:15 AM 8:30 AM	9:15 AM			BREAK	BEFORE SESSIONS I			
		Poster	Healthy Sleep, Healthy Brain: Neuropathological and Cellular Correlates of Sleep and Circadian Disruption in the Aging Human Brain				i i	
9:15 AM	10:00 AM	Installation						
10:00 AM	10:30 AM		<u> </u>	HEALTH	BREAK AND EXHIBI	T HALL		
10:30 AM	12:00 PM	EXHIBIT HALL	SYMPOSIUM 1:  A Canadian stepped care model for interprofessional insomnia care to improve access to CBT-I and deprescribing CHAIRPERSON: Judith Davidson	SYMPOSIUM 2: Basic and Clinical Research in the Field of REM Sleep CHAIRPERSON: John Peever	SYMPOSIUM 3: Barriers of equitable access to sleep apnea care for underserved populations CHAIRPERSON: Azadeh Yadollahi	ORAL SESSION 1: Sleep, Mental Health and Novel Interventions CHAIRPERSON: Rebecca Robillard	Technologist (EN) See Technologist (EN) Schedule at a Glance for Details	Technologist (FR) See Technologist (FR) Schedule at a Glance for Details
12:00 PM	1:30 PM			LUNCH, E	XHIBIT HALL AND P	OSTERS		
12:30 PM	1:30 PM			POSTER SESSI	ON IN EXHIBIT HAL	L AND FOYER		
1:30 PM	3:00 PM	EXHIBIT HALL	SYMPOSIUM 4: Heart rate analysis to describe sleep and diagnose sleep disorders CHAIRPERSON: Babak Amera	significance of slow wave – spindle – ripple coupling	SYMPOSIUM 6: Obstructive sleep apnea in middle- aged and older adults: impact on brain health and cognitive consequences CHAIRPERSON: Claire André	ORAL SESSION 2: Sleep, assessments and cognition CHAIRPERSON: Fernanda Almeida	Technologist (EN) See Technologist (EN) Schedule at a Glance for Details	Technologist (FR) See Technologist (FR) Schedule at a Glance for Details
3:00 PM	3:30 PM	HEALTH BREAK AND EXHIBIT HALL						
3:30 PM	4:15 PM	<b>KEYNOTE 4</b> Mental Health and Sleep Health: Progress Made and Challenges Ahead  Dr. Allison Harvey, University of California, Berkeley						
4:15 PM	5:00 PM		KEYNOTE 5  Dissecting the Heterogeneity of Obstructive Sleep Apnea  Dr. Susan Redline, Harvard Medical School					
5:00 PM	5:15 PM		BREAK					
5:15 PM	6:45 PM			CSS-JAZZ RESEA	RCH COMPETITION	WINE & TAPAS		
7:30 PM	10:00 PM	BLACK & WHITE GALA   CANADIAN MUSEUM OF HISTORY						

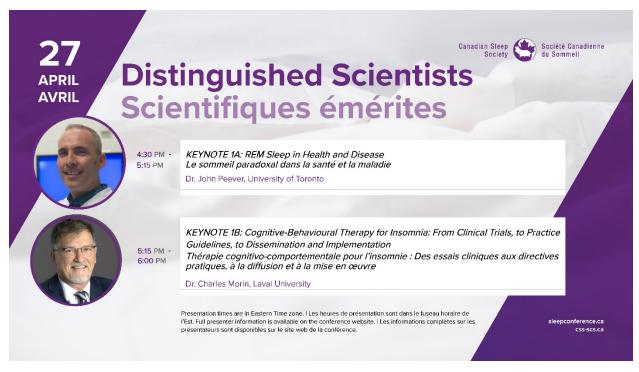
<sup>\*</sup>Please refer to each program schedule for specific start and end times for sessions

## SCHEDULE AT A GLANCE

			SA	TURDAY, AF	PRIL 29, 20	23		
6:30 AM	4:00 PM		REGISTRATION DESK OPEN					
6:30 AM 7:00 AM	7:00 AM 8:00 AM	REGISTRATION WALK	GREAT CANADIAN SLEEPWALK: 5 KM ROUTE					
9:00 AM 9:15 AM	9:00 AM 9:15 AM 10:00 AM		BREAKFAST SYMPOSIUM   SPONSORED BY EIASI  A Newer Look at the Economic Cost and Treatment Approaches of Insomnia  Jean-Philippe Chaput, University of Ottawa  Atul Khullar, Northern Alberta Sleep Clinic and MedSleep  BREAK BEFORE SESSIONS BEGIN  KEYNOTE 6  Sleep and Pain Interaction with Placebo Analgesia  Dr. Gilles Lavigne, University of Montreal					
10:00 AM	10:45 AM		KEYNOTE 7  Diet & Sleep: Vicious or Healthful Cycle?  Dr. Marie-Pierre St-Onge, Columbia University Institute of Human Nutrition					
10:45 AM	11:15 AM			HEALT	TH BREAK AND EXHI	BIT HALL		
11:15 AM	12:45 PM	EXHIBIT HALL	SYMPOSIUM 7: Sleep, Cerebrovascular and Cardiovascular Health: An Evidence- Based Clinical Update CHAIRPERSON: Mark Boulos	SYMPOSIUM 8: The impact of lifestyles factors on sleep across different population groups. CHAIRPERSON: Jonathan Charest	for OSA in Children	SYMPOSIUM 10: Expanding the Role of Digital Approaches to Enhance Sleep Education for Canadians CHAIRPERSON: Penny Corkum	ORAL SESSION 3: Sleep across the lifespan CHAIRPERSON: Stuart Fogel	Dental Program See Dental Schedule at a Glance for Details
12:45 PM	2:00 PM		4	LUNCH	, EXHIBIT HALL AND	POSTERS		!
1:15 PM	2:00 PM				SSION IN EXHIBIT HA			
2:00 PM	3:30 PM	EXHIBIT HALL CLOSED	SYMPOSIUM 11:  Bridging tiers of service using a multi-disciplinary approach to address wait times for Canadian paediatric sleep services. A priority setting discussion.  CHAIRPERSON: Elizabeth Keys	SYMPOSIUM 12: Novel Technologies for Assessing Night- to-Night Variability in Normal Sleep and Sleep Disorders CHAIRPERSON: Amy Bender	CONCELLER	SYMPOSIUM 14: Short and long-term impacts of COVID on sleep and alertness CHAIRPERSON: Diane Boivin	ORAL SESSION 4: Sleep and Medical Conditions CHAIRPERSON: Marta Kaminska	Dental Program See Dental Schedule at a Glance for Details
3:30 PM	3:45 PM		HEALTH BREAK					
3:45 PM	4:30 PM		2023 ICRH/CSS LECTURE - DISTINGUISHED LECTURER AWARD IN SLEEP SCIENCES  Mechanisms of Sleep and Breathing Reveal Therapeutic Targets  Dr. Richard Horner, University of Toronto					
4:30 PM	5:00 PM		CONFERENCE WRAP UP AND PRIZES					

<sup>\*</sup>Please refer to each program schedule for specific start and end times for sessions



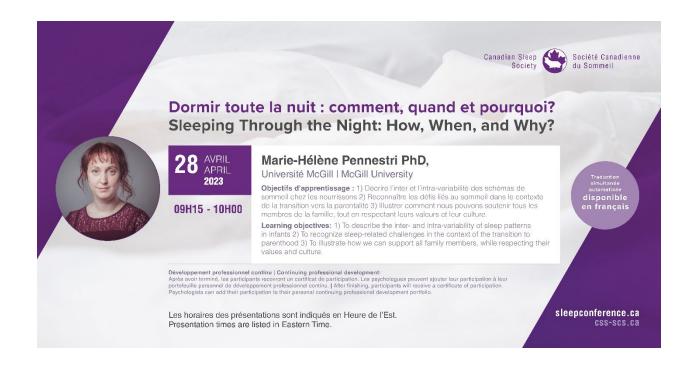




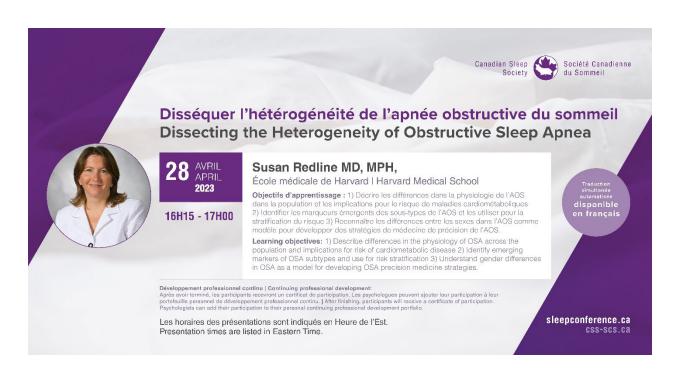














# 2023 Canadian Sleep Society Conference

# GENERAL SCIENTIFIC PROGRAM DETAILED AGENDA

APRIL 27-29, 2023

#### GENERAL SCIENTIFIC PROGRAM | THURSDAY, APRIL 27, 2023

#### CONFERENCE OPENING AND AWARDS

PRESENTER: Dr Célyne Bastien PhD

AFFILIATION: School of Psychology, Laval University, Chercheure, CERVO

DATE: 04/27/2023

START TIME: 4:00 pm END TIME: 4:30 pm

#### KEYNOTE 1A: REM SLEEP IN HEALTH AND DISEASE

PRESENTER: Dr John Peever PhD AFFILIATION: University of Toronto

DATE: 04/27/2023

START TIME: 4:30 pm END TIME: 5:15 pm

DESCRIPTION: Dr. John Peever will highlight our basic science research that explores the biology and

pathobiology of REM sleep.

LEARNING OBJECTIVES

By Participating in this session, participants will be able to:

1. Describe the basic science of REM sleep.

2. Recognize how REM sleep mechanisms contribute to narcolepsy.

3. Explain how changes in REM sleep circuitry contribute to REM sleep behaviour disorder.

# KEYNOTE 1B: COGNITIVE BEHAVIORAL THERAPY FOR INSOMNIA: FROM CLINICAL TRIALS TO PRACTICE GUIDELINES, DISSEMINATION AND IMPLEMENTATION

PRESENTER: Dr Charles Morin PhD

AFFILIATION: School of Psychology, Laval University

DATE: 04/27/2023

START TIME: 5:15 pm END TIME: 6:00 pm

DESCRIPTION: This lecture will present a brief history of Cognitive-Behavioural Therapy for Insomnia



(CBT-I) and how it evolved from non-specific sleep hygiene recommendations to a set of well-defined and structured behavioural and cognitive interventions. How did CBT-I came to be recognized by sleep and professional organizations as the treatment of choice for chronic insomnia? We will also identify key challenges for moving to the next step, that is from practice guidelines to actual adoption and implementation in clinical settings. The promise, contributions, and limitations of digital therapeutics to enhance

access to treatment will be reviewed.

LEARNING OBJECTIVES

By Participating in this session, participants will be able to:

- 1. Summarize key milestones in the history of CBT-I over the past four decades.
- 2. Describe the current status of CBT-I in the field.
- 3. Identify challenges for the future.

#### **CSS ANNUAL GENERAL MEETING**

DATE: 04/27/2023

START TIME: 6:00 pm END TIME: 7:00 pm



#### WELCOME RECEPTION IN THE EXHIBIT HALL

DATE: 04/27/2023

START TIME: 6:00 pm END TIME: 8:00 pm

#### GENERAL SCIENTIFIC PROGRAM | FRIDAY, APRIL 28, 2023

SPONSORED SYMPOSIUM: NEW DEVELOPMENTS IN THE DIAGNOSIS AND

MANAGEMENT OF NARCOLEPSY

PRESENTER: Dr. Yves Dauviliers, MD, PhD

AFFILIATION: University of Montpellier, France

PRESENTER: Dr. Atul Khullar, MD, MSc, FRCPC, DABPN AFFILIATION: Northern Alberta Sleep Clinic in Edmonton

PRESENTER: Dr. Emmanuel Mignot, MD, PhD

AFFILIATION: Craig Reynolds Professor of Sleep Medicine, Stanford University

DATE: 04/28/2023

START TIME: 7:00 am END TIME: 8:00 am

DESCRIPTION: Expert panel discussion with Dr. Dauvilliers, Dr. Khullar, and Dr. Mignot on the clinical

features and diagnosis of narcolepsy, and on the recent developments in the

pharmacologic management of narcolepsy.

SPONSORED BY: Paladin

# KEYNOTE 2: HEALTHY SLEEP, HEALTHY BRAIN: NEUROPATHOLOGICAL AND CELLULAR CORRELATES OF SLEEP AND CIRCADIAN DISRUPTION IN THE AGING HUMAN BRAIN

PRESENTER: Dr Andrew Lim MD, FRCPC AFFILIATION: University of Toronto

DATE: 04/28/2023

START TIME: 8:30 am END TIME: 9:15 am

DESCRIPTION: A growing body of evidence links sleep and circadian disruption to cognitive impairment and dementia in older adults. However, the neurobiological mechanisms underlying these links remain incompletely described. By relating sleep measured

using actigraphy and other ambulatory tools to cognitive

outcomes, brain imaging, histological markers, and brain gene expression in older adults, we have provided data linking sleep and circadian disruption to cognitive decline and to dementia-related brain changes including neurofibrillary tangle pathology, Lewy body pathology, arteriolosclerosis, microglial activation, and astrocyte activation, among others. These data suggest that sleep disruption may be an important contributor to or consequence of dementia-related brain changes in older adults.





#### LEARNING OBJECTIVES

By Participating in this session, participants will be able to:

- 1. Describe the epidemiological evidence linking sleep disruption to Alzheimer's disease.
- 2. Compare associations between sleep disruption and dementia associated histopathological changes.
- 3. Summarize the associations between sleep disruption and changes in microglial and astrocyte transcriptional phenotype in older adults.

#### KEYNOTE 3: SLEEPING THROUGH THE NIGHT: HOW, WHEN, AND WHY?

PRESENTER: Dr Marie-Hélène Pennestri PhD

AFFILIATION: Department of Educational and Counselling Psychology, McGill University

DATE: 04/28/2023

START TIME: 9:15 am END TIME: 10:00 am

DESCRIPTION: Sleeping through the night should be conceptualized as a process, rather



than a milestone. This presentation will describe the sleep consolidation process in infancy, with a special focus on inter-individual and intra-individual variability. Sleep patterns vary greatly between different babies, and they also vary between nights for the same baby. Furthermore, parental sleep as well as the challenges related to the transition to parenthood will be described. Finally, other factors and practices associated with infant sleep patterns, such as breastfeeding and co-sleeping, will also be considered from a developmental, familial, and cultural perspective.

LEARNING OBJECTIVES

By Participating in this session, participants will be able to:

- 1. Describe the inter- and intra-variability of sleep patterns in infants.
- 2. Recognize sleep-related challenges in the context of the transition to parenthood.
- 3. Illustrate how we can support all family members, while respecting their values and culture.

#### HEALTH BREAK AND EXHIBITS OPEN

DATE: 04/28/2023

START TIME: 10:00 am END TIME: 10:30 am





# SYMPOSIUM 1: A CANADIAN STEPPED CARE MODEL FOR INTERPROFESSIONAL INSOMNIA CARE TO IMPROVE ACCESS TO CBT-I AND DEPRESCRIBING

DATE: 04/28/2023

START TIME: 10:30 am END TIME: 12:00 pm

CHAIRPERSON: Judith Davidson

Gardner, David¹; Fretz, Katherine²; Lynch, Stephanie³; Sloan, Eileen⁴; Watson, Shayna³; Davidson, Judith²

<sup>1</sup>Department of Psychiatry, Dalhousie University, <sup>2</sup>Department of Psychology, Queen's University, <sup>3</sup>Department of Family Medicine, Queen's University, <sup>4</sup>Department of Psychiatry, University of Toronto

**DESCRIPTION:** Transforming insomnia care from the routine use of sedative-hypnotic medications to evidence-based, first-line cognitive behavioural therapy (CBT-I) requires an innovative, interdisciplinary solution. Access to CBT-I is uneven and inequitable and use of sedative-hypnotics remains high across Canada despite education campaigns, policy interventions and practice recommendations against their chronic use. We describe a stepped care model to show how the person with insomnia can benefit from evidence-based resources at various levels based on their needs. This model encompasses self-guided approaches, interventions by the primary care provider, the pharmacist, the healthcare team, trained CBT-I providers, and behavioural sleep experts. The model aims to: a) optimize the efficient use of CBT-I resources and services, and b) reduce prevalent and incident use of pharmacotherapies. This approach involves collaborative training and service coordination. Enhancing sleep education at¬and between-all levels, will enable Canadians to readily access effective treatment. We describe and exemplify how this model can be used to optimize treatment access and outcomes.

- 1. Stepped Care. Katherine Fretz (health psychology trainee, Halifax) and Eileen Sloan (psychiatry and sleep medicine, Toronto) will introduce the model that we developed for interdisciplinary insomnia training.
- 2. Self-care. David Gardner (pharmacy & psychiatry, Halifax) will speak about the effectiveness of self-directed resources for CBT-I and deprescribing using research results from the Maritime provinces.
- 3. Primary Care. Shayna Watson (family medicine, Kingston) will speak about her experience managing insomnia in primary care.
- 4. Trained CBT-I providers. Stephanie Lynch (pharmacy, Belleville) and Katherine Fretz will speak about insomnia care in the community, including within healthcare teams.
- 5. Behavioural sleep experts. Judith Davidson (psychology, Kingston) will discuss the place of this model within Canadian healthcare systems, theoretically and practically. An audience-panel discussion will follow on the catalysts and obstacles for this model of insomnia care in Canada.

#### LEARNING OBJECTIVES

By Participating in this session, participants will be able to:

- 1. Integrate insights from a stepped care and interprofessional approach to insomnia care in Canada.
- 2. Identify where on the model you are, or want to be, in terms of providing care for the person with insomnia and if you have any training goals.
- 3. Recognize some of the barriers that currently exist to providing care for insomnia in Canada and how using the stepped care model can help address such barriers.



#### SYMPOSIUM 2: BASIC AND CLINICAL RESEARCH IN THE FIELD OF REM SLEEP

DATE: 04/28/2023

START TIME: 10:30 am END TIME: 12:00 pm

CHAIRPERSON: John Peever

Peever, John¹; Weber, Franz²; Adamantidis, Antoine³; Gan-Or, Ziv⁴

<sup>1</sup>University of Toronto, <sup>2</sup>University of Pennsylvania, <sup>3</sup>University of Bern, Switzerland, <sup>4</sup>McGill University, Canada

**DESCRIPTION:** This symposium is designed to discuss the latest basic and clinical research in the field of REM sleep in both health and disease. The goal of this symposium is to highlight: 1) how the central nervous system generates REM sleep, 2) the potential biological and physiological functions of REM sleep, and 3) how changes in the circuits and genes that control REM sleep contribute to neurodegenerative disorders such as REM sleep behaviour disorder. The first symposium speaker (Antoine Adamantidis; U of Bern) will discuss the latest research highlighting the biological functions of REM in the context of health. The second speaker (Franz Weber; U of Pennsylvania) will discuss the latest research outlining how the central nervous system controls REM sleep generation. The third speaker (John Peever; U of Toronto) will highlight how breakdown in the circuits that control REM sleep underlie the pathogenesis of REM sleep behaviour disorder in preclinical models. The fourth speaker (Ziv Gan-Or; McGill) will discuss the most recent research concerning the genetics of REM sleep behaviour disorder and how this new information can inform rational treatment of this disorder. Importantly, symposium presenters will highlight how biological sex impacts the control of REM sleep, particularly in the areas of function and in the context of RBD. At the end of this symposium audience members will have an up-to-date understanding of the basic science and clinical significance of REM sleep in both health and disease.

- 1. Franz Weber: REM sleep in health and disease
- 2. Antoine Adamantidis: Behavioural and physiological functions of REM sleep
- 3. John Peever: Disease mechanisms of REM sleep behaviour disorder
- 4. Ziv Gan-Or: The genetics of REM sleep behaviour disorder: Lessons from basic science and clinical trials

#### LEARNING OBJECTIVES

By Participating in this session, participants will be able to:

- 1. Describe the genetic and circuit control of REM sleep in humans and animals.
- 2. Explain the physiological functions of REM sleep in the context of normal physiology.
- 3. Identify how genetic and circuit-based changes in REM sleep control contribute to REM sleep behaviour disorder.



# SYMPOSIUM 3: BARRIERS OF EQUITABLE ACCESS TO SLEEP APNEA CARE FOR UNDERSERVED POPULATIONS

DATE: 04/28/2023

START TIME: 10:30 am END TIME: 12:00 pm

CHAIRPERSON: Azadeh Yadollahi

Yadollahi, Azadeh<sup>1,2,3,4</sup>; Rac, Valeria<sup>6</sup>; Pendharkar, Sachin R.<sup>5</sup>; Adams, Rene<sup>7</sup>; Redline, Susan<sup>7</sup>

'Canada Research Chair (Tier 2), Cardiorespiratory Engineering, 'Senior Scientist, KITE, Toronto Rehabilitation Institute, University Health Network, 'Associate Professor, Institute of Biomedical Engineering, University of Toronto, Toronto, ON, 'Chair, Inclusion, Diversity, Equity and Accessibility Committee – UHN Research, 'Associate Professor, Departments of Medicine and Community Health Sciences O'Brien Institute for Public Health, Cumming School of Medicine, University of Calgary, Calgary, AB, Director, Program for Health System and Technology Evaluation; Faculty, IHPME/DLSPH, University of Toronto, 'Person with lived experience of living in a shelter and having sleep apnea, Community expert, KITE, Toronto Rehabilitation Institute, University Health Network, 'Harvard University

**DESCRIPTION:** Sleep apnea is highly prevalent in adults, especially in those living with obesity (45%), older age >50 years (43%), post-menopause (>47%), substance use and smoking. Untreated sleep apnea increases the risk of cardiovascular disorders (2x), depression (2.7x), inflammation (2-3x), and healthcare utilization. Conversely, sleep apnea treatment improves quality of life, tiredness, depression, and hypertension. However, sleep apnea is one of the most under-diagnosed conditions and 84% of adults at high risk of sleep apnea are not diagnosed. Moreover, equity deserving populations have had systematically and historically lower access to healthcare due to disability, older age, low socioeconomic, sexual orientation, geographical constraints, trust issues with healthcare system, or immigration status. Consequently, these populations have more chronic cardio-respiratory and psychological conditions, which suggest higher prevalence of sleep apnea in these populations. However, individual, social and systemic barriers further limit their access to sleep apnea care and led to higher rates of sleep apnea under-diagnosis in equity deserving populations. Exploring and understanding these disparities, and pro-actively engaging people with lived experience in co-design and co-implementation of research is the first step to mitigate these barriers and to provide equitable access to sleep apnea care. The objectives of this symposium are to provide an overview of social determinants of sleep apnea, systemic and policy barriers for access to sleep apnea care, and the challenges and opportunities of assessing sleep apnea in underserved populations who experience homelessness and live in shelters.

- 1. Susan Redline: Disparities in sleep apnea-social, environmental and household level factors
- 2. Sachin Pendharkar: Barriers of current policies and funding models to provide equitable access to sleep apnea care
- 3. Rene Adams: Impact of sleep apnea on the quality of life of people experiencing homelessness
- 4. Azadeh Yadollahi: A journey of partnership with people with lived experience of homelessness to assess sleep apnea in shelters



#### LEARNING OBJECTIVES

By Participating in this session, participants will be able to:

- 1. Explain the social determinants of sleep apnea, and discuss how the current policies and models to provide sleep apnea care affect equitable access to sleep apnea diagnosis and treatment.
- 2. Summarize the health and social impacts of sleep apnea, especially in underserved people with lived experience of homelessness delivered from a person with lived experience.
- 3. Discuss the challenges of providing sleep apnea care to shelter residents.

#### ORAL SESSION 1: SLEEP, MENTAL HEALTH AND NOVEL INTERVENTIONS

DATE: 04/28/2023

START TIME: 10:30 am END TIME: 12:00 pm

CHAIRPERSON: Rebecca Robillard, University of Ottawa, School of Psychology

#### ABSTRACTS TO BE PRESENTED:

	Effectiveness and Optimization of Lower-Sodium Oxybate in Participants With
	Narcolepsy Switching From Sodium Oxybate: Interim Data from the Substitution of
18	Equal Grams of Uninterrupted Xyrem to Xywav (SEGUE) Study
	Long-term Safety During a Clinical Trial of Lower-Sodium Oxybate in Participants With
19	Narcolepsy With Cataplexy
19	Efficacy of long-term treatment with daridorexant in patients with insomnia disorder
	on sleep and daytime functioning: a post-hoc analysis
31	
	The Insomnia Daytime Symptoms and Impacts Questionnaire: An Analysis of Clinically
32	Meaningful Change Using Phase 3 Clinical Trial Data
	Sleep, Mental Health, and Sleep-Related Healthcare in Canadians Using Wearable
42	Sleep Tracking Devices
	Behavioral therapy for shift work disorder improves healthcare workers' sleep,
62	sleepiness, and mental health: A pilot randomized control trial
02	YAWNS NB – a randomized controlled trial of direct-to-patient mailed interventions to
	reduce sedative-hypnotic use in older adults
100	7.
	Effects of Closed-Loop Auditory Stimulation (CLAS) on Sleep and Memory in Chronic
141	Insomnia
153	Endotyping OSA Using Polysomnography in People with Depression
	Effect of Continuous Positive Airway Pressure, Mandibular Advancement Splints and
	Combination Therapy on Blood Pressure in Obstructive Sleep Apnea Patients: A Multi-
160	Center Randomized Clinical Trial
	•

Abstracts are in numerical order, not necessarily in presentation order.

#### **LUNCH AND EXHIBITS OPEN**

DATE: 04/28/2023

START TIME: 12:00 pm END TIME: 1:30 pm



#### POSTER SESSION & POSTER TOUR - SESSION 1

DATE: 04/28/2023

START TIME: 12:30 pm END TIME: 1:30 pm

DESCRIPTION: Starting at 12:30 PM, Poster Presenters will be at their posters for discussion and

questions. There will also be an organized poster tour with identified posters participating in this review which will includes awards for several categories.

SPONSORED BY: Paladin

Best Poster (as judged by the poster tour)

Best Poster Presentation (as judged by the poster tour)

People's Choice Award

# SYMPOSIUM 4: HEART RATE ANALYSIS TO DESCRIBE SLEEP AND DIAGNOSE SLEEP DISORDERS

DATE: 04/28/2023

START TIME: 1:30 pmEND TIME: 3:00 pm

CHAIRPERSON: Charles Morin

Amera, Babak'; Morin, Charles M.<sup>2</sup>; Schoebel, Christoph<sup>3</sup>; Kaminska, Marta<sup>4</sup>; Penzel, Thomas<sup>5</sup>

<sup>1</sup>Bamdad Respiratory and Sleep Research Center, Isfahan University of Medical Sciences, <sup>2</sup>School of Psychologie, Université Laval, <sup>3</sup>University Medicine Essen, Ruhrlandklinik - West German Lung Center, Center for Sleep- and Telemedicine, <sup>4</sup>McGill University Health Centre (MUHC), <sup>5</sup>Interdisciplinary Center of Sleep Medicine, Charité-Universitätsmedizin Berlin, Germany

**DESCRIPTION:** Heart rate variability analysis in electrocardiogram signals as a non-invasive and relatable measure to asses autonomic function in various sleep stage and sleep breathing disorders. It is an interesting tool can be used for screening and diagnosis sleep apnea, monitor treatment efficacy, insomnia and prognosis of adverse cardiovascular outcome in patients with sleep apnea and insomnia. In this symposium, the new technical aspects of HRV analysis, HRV analysis during various sleep stages pathophysiological features, and clinical applications of HRV will be discussed to explore its association with sleep disorder. Experience of one Contact less recording will also discussed in diagnosis.

- 1. Chair, Charles M. Morin
- 2. Speaker, Thomas Penzel
- 3. Speaker, Marta Kaminska
- 4. Speaker, Babak Amera
- 5. Speaker, Christoph Schöbel

#### LEARNING OBJECTIVES

By Participating in this session, participants will be able to:

- 1. Describe HRV in sleep stage diagnosis.
- 2. Discuss HRV in sleep breathing disorders and insomnia.
- 3. Explain contact-less recording in sleep apnea.



# SYMPOSIUM 5: THE FUNCTIONAL SIGNIFICANCE OF SLOW WAVE – SPINDLE – RIPPLE COUPLING

DATE: 04/28/2023

START TIME: 1:30 pmEND TIME: 3:00 pm

CHAIRPERSON: Stuart Fogel

Gabitov, Ella<sup>1</sup>; Mylonas, Dimitrios<sup>2</sup>; Fogel, Stuart<sup>3</sup>; Baena Perez, Daniel<sup>3</sup>

<sup>1</sup>McGill University, <sup>2</sup>Harvard Medical School, <sup>3</sup>University of Ottawa,

**DESCRIPTION:** Research into the role of sleep in memory consolidation has seen an exponential growth in the last 20 years. The process of memory consolidation involves transfer of information from the hippocampus to the neocortex and during sleep. One of the central features of sleep involved in this process is the hippocampal ripple. Ripples, however, do not occur in isolation. Rather, they are part of slow wave (SW) – spindle – ripple complexes, whereby ripples are nested in the excitatory troughs of spindles, and spindles are nested in slow waves. During non-REM sleep, the hippocampus and neocortex establish a dialog where slow wave coordinate the occurrence of thalamic spindles in synchrony with hippocampal ripples, the latter accompanying the reactivations and replay of hippocampal memory representations during sleep. This dialog is thought to mediate the transfer of selected new memories rendering them from temporary dependence on the hippocampus to longer-term representation in the neocortex. The proposed symposium aims at providing a multidisciplinary forum to discuss the relationship between SW-spindle-ripple complexes primarily in the context of memory consolidation. It will bring together experts in animal and human research who uses various neuroimaging methods (EEG, fMRI), pharmacological and non-invasive brain stimulations to study this relationship in healthy and clinical populations.

- 1. Stuart Fogel Symposium Chairperson
- 2. Daniel Baena Perez Spindle-slow wave coupling and Human intelligence
- 3. Ella Gabitov Spindle-slow wave coupling and memory consolidation
- 4. Dimitrios Mylonas Targeting sleep oscillations to improve memory in schizophrenia

#### LEARNING OBJECTIVES

By Participating in this session, participants will be able to:

- 1. Demonstrate the unique contribution of SW-spindle-ripple complexes to memory consolidation from healthy to clinical populations using both animal and human models.
- 2. Report on novel evidence from simultaneous EEG-fMRI studies highlighting functional differences between spindles that are coupled with SW and those that occur in isolation.
- 3. Discuss non-invasive brain stimulation approaches aimed to improve sleep dependent memory consolidation in clinical population.



# SYMPOSIUM 6: OBSTRUCTIVE SLEEP APNEA IN MIDDLE-AGED AND OLDER ADULTS: IMPACT ON BRAIN HEALTH AND COGNITIVE CONSEQUENCES.

DATE: 04/28/2023

START TIME: 1:30 pmEND TIME: 3:00 pm

CHAIRPERSON: Claire André

André, Claire<sup>1,2</sup>; Marchi, Nicola<sup>3,4</sup>; Boulos, Mark<sup>5,6,7</sup>; Gosselin, Nadia1,2

¹Centre d'Études Avancées en Médecine du Sommeil, Hôpital du Sacré Coeur de Montréal, ²Department of Psychology, Université de Montréal, ³Center for Investigation and Research in Sleep, ⁴Lausanne University Hospital, ⁵Hurvitz Brain Sciences Research Program, Sunnybrook Research Institute, Sunnybrook Health Sciences Centre, ⁴Department of Medicine, Division of Neurology, University of Toronto, ¬Sleep Laboratory, Sunnybrook Health Sciences Centre

**DESCRIPTION:** Obstructive sleep apnea (OSA) is very prevalent but underdiagnosed in middle-aged and older people. Recent data suggest that OSA is associated with several health outcomes, including cerebrovascular and neurodegenerative diseases. In the context of an aging population, better understanding whether and how OSA may impact brain and cognitive health is crucial in order to develop effective management strategies helping preserving autonomy and preventing or delaying cognitive impairment and dementia. In this symposium, we will describe recent advances on the associations between OSA and cognitive impairment in middle-aged and older adults, and its associations with the risk of stroke and dementia in epidemiological studies, with a special interest for Alzheimer's disease and vascular dementia. Furthermore, we will discuss the potential underlying brain mechanisms by reviewing the current knowledge about the impact of OSA on multiple aspects of brain health. We will cover the associations between OSA and brain structure (i.e., grey and white matter), cerebrovascular health and stroke, and Alzheimer's disease biomarkers (i.e., amyloid and tau pathologies). The impact of OSA management treatment on brain and cognitive health will also be discussed throughout the presentations. This symposium will be of interest for clinicians, residents and researchers (including post-doctoral fellows and PhD students) in the field of sleep medicine, neuroscience, neurology, brain imaging and neurodegeneration.

- 1. Nicola Marchi: Cognitive impairment and dementia risk in obstructive sleep apnea
- 2. Nadia Gosselin: Grey and white matter integrity in obstructive sleep apnea
- 3. Mark Boulos: Obstructive sleep apnea and cerebrovascular health: a focus on the associations with stroke
- 4. Claire André: Obstructive sleep apnea and Alzheimer's disease biomarkers

### LEARNING OBJECTIVES

- 1. Identify cognitive deficits associated with OSA.
- 2. Discuss the associations between OSA and brain health.
- 3. Describe why OSA participants are at greater risk of cognitive decline and dementia.



### ORAL SESSION 2: SLEEP, ASSESSMENTS AND COGNITION

DATE: 04/28/2023

START TIME: 1:30 pmEND TIME: 3:00 pm

CHAIRPERSON: Fernanda Almeida, MD; University of British Columbia

ABSTRACTS TO BE PRESENTED:

26	The Effects of Acute High-Intensity Interval Training on Declarative Memory in Sleep Restriction
91	REM Sleep Microstructure Scoring Guidelines – Technical Pearls and Interrater Harmonization
97	Hypersomnolence symptoms secondary to post-COVID-19 condition : preliminary results
126	Home sleep apnea tests: Are they sponsored or subsidized?
140	Attentional performances in sleep disorders compared to sleep restricted good sleepers
143	Self-Reported Perioperative Experience in Patients with Narcolepsy: A Survey Study
163	Habitual short and long sleepers are at risk of long COVID
167	A Link between Temporal Clustering of Sleep Spindles, Reactivation of the Task-Related Network and Memory Consolidation – Evidence from a Simultaneous EEG and fMRI Study

Abstracts are in numerical order, not necessarily in presentation order.

### HEALTH BREAK AND EXHIBITS OPEN

DATE: 04/28/2023

START TIME: 3:00 pm END TIME: 3:30 pm

KEYNOTE 4: MENTAL HEALTH AND SLEEP HEALTH: PROGRESS MADE AND

**CHALLENGES AHEAD** 

PRESENTER: Dr Allison Harvey PhD

AFFILIATION: Berkeley, University of California

DATE: 04/28/2023

START TIME: 3:30 pm END TIME: 4:15 pm

DESCRIPTION: Mental health problems remain common, chronic, and difficult to treat.



Insufficient sleep and mistimed sleep are prominent, yet underappreciated and understudied, contributors to mental illness. The evidence that improving sleep and circadian functioning is an important pathway to mental health continues to mount. This talk will address three of the (many) major challenges that remain. First, comorbidity is the norm not the exception for the sleep and circadian disorders that are associated with mental disorders. Hence, the sleep and circadian problems experienced by people diagnosed with a mental disorder may not fit into the neat diagnostic categories of existing nosologies nor be adequately treated with single disorder approaches. Second, there is large time lag between the development of a treatment and the availability of that treatment in routine clinical practice. This is a key reason for the emergence of implementation science, which is a flourishing, well-developed and quickly moving field. Third, one of the greatest puzzles of our time?which is key for promoting sleep health?is the need to unlock the fundamental elements of behaviour change. There is potential to harness the science of behaviour change to encourage widespread engagement in sleep health behaviour and thereby

reduce the staggering burden of sleep and circadian problems and the associated mental health problems.

### LEARNING OBJECTIVES

By Participating in this session, participants will be able to:

- 1. Describe the problem of comorbidity.
- 2. Compare the gap between science and practice.
- 3. Discuss approaches to behavior change.

### KEYNOTE 5: DISSECTING THE HETEROGENEITY OF OBSTRUCTIVE SLEEP APNEA

PRESENTER: Dr Susan Redline MD, MPH

AFFILIATION: Peter C. Farrell Professor of Sleep Medicine, Professor of Epidemiology, Harvard T.H.

Chan School of Public Health, Harvard University, Boston, MA

DATE: 04/28/2023

START TIME: 4:15 pmEND TIME: 5:00 pm

DESCRIPTION: This program will focus on emerging approaches for assessing and characterizing



Obstructive Sleep Apnea (OSA) that help define OSA subtypes that differ in underlying physiology, risk for long term outcomes, and response to treatment. Topics that will be reviewed include epidemiological, physiological, and genomic data that support the heterogeneity of OSA, with a specific focus on differences in disease presentation and outcomes in males and females. Emerging tools for risk stratification will be discussed, along with implications for precision sleep medicine. General and specialty (sleep, cardiovascular, neurology, psychiatry) clinicians and researchers will enhance their understanding of knowledge and skills.

### LEARNING OBJECTIVES

- 1. Describe differences in the physiology of OSA across the population and implications for risk of cardiometabolic disease.
- 2. Identify emerging markers of OSA subtypes and use for risk stratification.
- 3. Compare gender differences in OSA as a model for developing OSA precision medicine strategies.





### CSS-JAZZ RESEARCH PROJECT COMPETITION

DATE: 04/28/2023

START TIME: 5:15 pm END TIME: 6:45 pm

DESCRIPTION: The Canadian Sleep Society and Jazz Pharmaceuticals are proud to present the

inaugural "CSS-Jazz Research Awards".

These awards are intended for trainees/early career clinicians or doctorates (i.e., medical residents or fellows, PhD students in year 2 or higher, and post-doctoral fellows less than 5yrs post-PhD) who are or will be registered in a Canadian medical or research program, to fund a research project on the topic of sleep medicine and/or sleep biology. Projects focusing on central disorders of hypersomnolence (CDH) will be given priority. Projects related to insomnia and obstructive sleep apnea are excluded from this awards program. The awards will be presented at the Canadian Sleep Society National Conference in 2023 during this session.

SPONSORED BY: Jazz Pharmaceuticals

### SOCIAL EVENT: BLACK AND WHITE GALA

DATE: 04/28/2023

START TIME: 7:30 pm END TIME: 10:00 pm





### GENERAL SCIENTIFIC PROGRAM | SATURDAY, APRIL 29, 2023

### **GREAT CANADIAN SLEEPWALK**

DATE: 04/29/2023

START TIME: 7:00 am END TIME: 8:00 am

DESCRIPTION: WE HOPE YOU PLAN TO JOIN US FOR THE 2023 GREAT CANADIAN SLEEPWALK.

SIGNUP AS PART OF YOUR REGISTRATION AND WE WILL SETUP YOUR ACCOUNT IN

RACEROSTER.

COST = \$25 FOR CSS MEMBERS, \$30 FOR ALL OTHERS (Includes sleepwalk t-shirt)



# SPONSORED SYMPOSIUM: A NEWER LOOK AT THE ECONOMIC COST AND TREATMENT APPROACHES OF INSOMNIA

PRESENTER: Dr Atul Khullar MD, MSc, FRCPC (Psychiatry), DABPN (Cert. Sleep Medicine)

AFFILIATION: Northern Alberta Sleep Clinic and MedSleep Edmonton South

PRESENTER: Jean-Philippe Chaput BSc MSc PhD

AFFILIATION: University of Ottawa

DATE: 04/29/2023

START TIME: 8:00 am (doors open at 7:30 am) END TIME: 9:00 am

DESCRIPTION: In Canada, nighttime insomnia symptoms affect ~24% of the adult population

according to recent estimates and comes with significant health and economic consequences. In this symposium, we will review the latest data on the impact of poor sleep and insomnia; and the role of clinicians in managing this chronic disorder.

Learning Objectives:

- 1. Develop an understanding of the economic, medical and mental health impacts of poor sleep highlighted in recent publications.
- 2. Explore the current treatment options for insomnia in clinical care and the latest literature available to support your clinical practice.
- 3. Discuss the practical application of insomnia therapeutics for your patients.

SPONSORED BY: Eisai



### KEYNOTE 6: SLEEP AND PAIN INTERACTION WITH PLACEBO ANALGESIA

PRESENTER: Dr Gilles Lavigne DMD, PhD, FRCD (oral med)

AFFILIATION: University of Montreal

DATE: 04/29/2023

START TIME: 9:15 am END TIME: 10:00 am

DESCRIPTION: Many chronic pain individuals report sleep related problems such as poor quality,



insomnia, exacerbation of breathing or excessive muscle activity. Pre-sleep cognitive and physiological arousal can interfere with sleep quality and contribute to higher variability in pain sensory and emotional reports on the next day. Such a circular deleterious impact is not the same in all individuals. Association studies suggest that, across life span, some individuals may be resistant or vulnerable to such circular interaction. Brain area or network processing pain are either deactivated or overactivated during sleep. The causality remain a challenge and is probably not under a single cause. Phenotyping & endotyping evidences are growing to identify risk factor(s) and management strategies. Management before sleep can improve sleep and contribute to reduce morning pain; an effect limited to morning hours. Cognitive behavioral therapy, medication and oral or breathing devices can be among the ?tool kit? that a clinician may suggest to a chronic pain individual with sleep problems. The expectation of pain relief seems to be influenced by sleep. Few experimental studies have demonstrated that ?placebo analgesia conditioning? applied before sleep do influence self-report of sleep quality, pain perception and expectation of pain relief. REM sleep seem to ?moderate? pain analgesia (hypoalgesia, lower pain perception). The complex interaction of pain and sleep is not ubiquitous and need to be decrypted for each individual presenting pain and sleep complaints. (GL research was supported by FRQS, CIHR, Canada Research Chair)

LEARNING OBJECTIVES

- 1. Recognize pain and sleep circular interaction: not ubiquitous and search of phenotypes.
- 2. Describe the personalized pain and sleep management: CBT, medication, sleep devices.
- 3. Analyze the role of the unexpected persistence of 'placebo analgesia conditioning' during sleep.

### KEYNOTE 7: DIET & SLEEP: VICIOUS OR HEALTHFUL CYCLE?

PRESENTER: Dr Marie-Pierre St-Onge PhD

AFFILIATION: Center of Excellence for Sleep & Circadian Research at Columbia University Irving

**Medical Center** 

DATE: 04/29/2023

START TIME: 10:00 am END TIME: 10:45 am

DESCRIPTION: This session will cover the bi-directional relation between diet and sleep. It will first



describe how sleep influences food intake and dietary patterns followed by a discussion of the importance of diet on sleep quality. The session will cover information from epidemiological to intervention studies. Population studies will be used to describe how dietary patterns and sleep quality are inter-related; clinical intervention studies will elucidate a causal role of sleep on eating behaviors and dietary intakes. This same strategy will be employed to illustrate how diet can have an impact on sleep quality. The attendee will be able to understand the interrelationships between diet and sleep.

LEARNING OBJECTIVES

By Participating in this session, participants will be able to:

1. Explain the impact of sleep duration on dietary intakes.

2. Describe the impact of sleep duration on eating behaviors.

3. Identify dietary patterns associated with good sleep quality.

### HEALTH BREAK AND EXHIBITS OPEN

DATE: 04/29/2023

START TIME: 10:45 am END TIME: 11:15 am

### ORAL SESSION 3: SLEEP ACROSS THE LIFESPAN

DATE: 04/29/2023

START TIME: 11:15 am END TIME: 12:45 pm CHAIRPERSON: Stuart Fogel, PhD, University of Ottawa

### ABSTRACTS TO BE PRESENTED:

45	Changes in the macrostructure of sleep occurring after menopause
59	Early nap cessation in young children as a predictor of language and psychosocial outcomes: Evidence from a large Canadian sample
70	Propagation of α-synuclein pathology drives phenotypic progression from REM sleep behaviour disorder to Parkinsonism in mice
74	Effect of sleep deprivation on adult sleepwalkers with and without comorbid sleep disorders
83	Mitochondrial Function-Associated Genes Underlie Cortical Thinning in Isolated REM Sleep Behavior Disorder
85	Association between OSA, sleep quality, and neurocognitive function in children and adolescents with obesity
90	Obstructive Sleep Apnea, Hippocampal Volume, and Cerebral Small Vessel Disease in the Cognitively Impaired
94	Mouse models of REM sleep behaviour disorder
146	Phase-Amplitude Coupling of Theta and Gamma Rhythms During Rapid Eye Movement Sleep Improves Memory Across the Lifespan Samuel
183	Potential Proxy Markers for Dim-Light Melatonin Onset during Childhood & Adolescence

Abstracts are in numerical order, not necessarily in presentation order.



# SYMPOSIUM 7: SLEEP, CEREBROVASCULAR AND CARDIOVASCULAR HEALTH: AN EVIDENCE-BASED CLINICAL UPDATE

DATE: 04/29/2023

START TIME: 11:15 am END TIME: 12:45 pm

CHAIRPERSON: Mark Boulos

Ayas, Najib¹; Shukla, Garima²,³; Morin, Charles⁴; Boulos, Mark⁵,⁶,७; Kimoff, John®; Redline, Susan9

<sup>1</sup>Faculty of Medicine, UBC, <sup>2</sup>Professor of Neurology- Epilepsy & Sleep Medicine, Queen's University, Kingston, ON, <sup>3</sup>All India Institute of Medical Sciences, New Delhi, India, <sup>4</sup>Sleep Research Centre at Université Laval, Quebec City, Qc, <sup>5</sup>Hurvitz Brain Sciences Research Program, Sunnybrook Research Institute, Sunnybrook Health Sciences Centre, <sup>6</sup>Department of Medicine, Division of Neurology, University of Toronto, <sup>7</sup>Sleep Laboratory, Sunnybrook Health Sciences Centre, <sup>8</sup>Department of Medicine at the McGill University Health Center in Montreal, <sup>9</sup>Harvard Medical School

**DESCRIPTION:** Sleep disorders are common, treatable and increase the risk of cerebrovascular and cardiovascular events. Several pathophysiological mechanisms link sleep disorders with vascular disease. Despite the high prevalence of sleep disorders in patients with stroke and cardiovascular disease, and the vulnerability of these patients to adverse health outcomes, sleep disorders are often underrecognized and undertreated in clinical practice. In this symposium, we will describe pathophysiological mechanisms and the epidemiological evidence that links sleep disorders with vascular events. We will review ambulatory techniques that may facilitate the diagnosis of sleep disorders in individuals with stroke and cardiovascular disease. Moreover, we will explain the rationale for treating sleep apnea after stroke and cardiovascular events. Furthermore, we will discuss possible study designs that may help evaluate outstanding questions in this area of study (e.g. does treatment of sleep apnea after stroke reduce the incidence of vascular events and mortality?) Finally, future directions for investigations in sleep and vascular health will be explored.

- 1. Najib Ayas: Pathophysiological links between sleep apnea and vascular disease
- 2. Garima Shukla: Pathophysiological links between restless legs syndrome, cerebrovascular and cardiovascular events
- 3. Charles Morin: Epidemiological data linking insomnia with cerebrovascular and cardiovascular events
- 4. Mark Boulos: Ambulatory methods for detecting sleep disorders in stroke and other vascular populations
- 5. John Kimoff: Rationale and approach to treating obstructive sleep apnea for vascular health
- 6. Susan Redline: Suggested future directions for the field of sleep and vascular health

### LEARNING OBJECTIVES

- 1. Describe pathophysiological and epidemiological links between different sleep disorders and vascular disease.
- 2. Identify ambulatory methods that can diagnose sleep disorders in individuals with stroke and other vascular conditions.
- 3. Explain the rationale for treating sleep apnea to improve vascular health, as well as possible approaches for study designs in this area.



# SYMPOSIUM 8: THE IMPACT OF LIFESTYLE FACTORS ON SLEEP ACROSS DIFFERENT POPULATION GROUPS.

DATE: 04/29/2023

START TIME: 11:15 am END TIME: 12:45 pm

CHAIRPERSON: Jonathan Charest

Charest, Jonathan<sup>1,2</sup>; Bender, Amy<sup>3</sup>; St-Onge, Marie-Pierre<sup>4</sup>, Frimpong, Emmanuel<sup>5</sup>

<sup>1</sup>Center for Sleep & Human Performance, University of Calgary, <sup>2</sup>Laval University, <sup>3</sup>Clinical Sleep Science, Cerebra, <sup>4</sup>Center of Excellence for Sleep & Circadian Research at Columbia University Irving Medical Center, <sup>5</sup>SCN Lab

**DESCRIPTION:** Traditionally sleep has not been a primary focus for the management of health across different populations. Nowadays, there is a wealth of Behavioural Sleep Medicine literature supporting the bidirectional relationship between lifestyle factors and sleep. Poor sleep quality and low sleep duration represents a risk factor for developing cardiometabolic diseases. Recently sleep has been added on the Life's Essential list of the Heart American Association. With the detrimental impact of inadequate sleep on cognition, performance and general well-being, a better understating of the real-world lifestyle choices of different populations would be warranted. Research have demonstrated the impact of caffeine consumption that typically contribute to poor sleep. For example, with the known 4-6 hours half-life of caffeine, its consumption in the evening will have detrimental impact on the micro and macrostructure of sleep. Moreover, nowadays the usage of electronic devices also contributes to a general degradation of sleep quality. It has been shown that prolong exposure to electronic device could decrease the sleep quality of its user regardless of their general health. In addition to caffeine consumption and electronic device usage, physical activity has long been recognized as a sleep and general well-being enhancer. However, the type of physical activity and its timing across the day may impact sleep characteristics differently and may varies across certain populations. Poor sleep quantity and quality have been linked to poorer mental health state. Conversely, poor mental health is also associated with poorer sleep characteristics. This bidirectional relationship could hypothetically be influenced by certain lifestyle factors or choices. This symposium will provide novel data across different population and their lifestyle choices and their impact on sleep. Our speakers have complementary expertise and different scientific and academic backgrounds which will broaden the scope of our suggestions for the enhancement of understanding the impact of lifestyle factors.

- Jonathan Charest, Ph.D.: The Sleep Characteristics of Canadian Student-Athletes
- 2. Amy Bender, Ph.D.: The association of lifestyle factors and objective ORP sleep quality across 18-31 in-home PSG nights.
- 3. Emmanuel Frimpong, PT, Ph.D.: The interaction between exercise and sleep on memory
- 4. Marie-Pierre St-Onge, Ph.D.: Impact of sleep duration on cardiometabolic risk factors; adherence to life's essential 8 across sex and racial groups.



### LEARNING OBJECTIVES

By Participating in this session, participants will be able to:

- 1. Identify detrimental lifestyle factors that affect sleep.
- 2. Discuss the relationship between sleep and caffeine consumption.
- 3. Describe the relationship between physical activity type/timing and sleep and the impact of electronic device usage on sleep.

# SYMPOSIUM 9: AN EVIDENCE-BASED UPDATE OF SURGERY FOR OSA IN CHILDREN AND ADULTS

DATE: 04/29/2023

START TIME: 11:15 am END TIME: 12:45 pm

CHAIRPERSON: Tina Meisami

Meisami, Tina<sup>1,2</sup>; McLaren, Anya<sup>3</sup>; Propst, Evan<sup>4</sup>; Xu, Josie<sup>5</sup>

<sup>1</sup>Faculty of Dentistry, University of Toronto, University Health Network, TRI, Division of Dentistry, <sup>2</sup>+Dr. B. Meisami Foundation; <sup>3</sup>McMaster University; <sup>4</sup>Toronto Hospital for Sick Kids; <sup>5</sup>University of Toronto

**DESCRIPTION:** In 2021, the AASM published a clinical practice guideline that highlighted the importance of referring adults with OSA for surgical consultation. In Canada, most surgeons offer soft tissue surgery with tonsillectomy, uvulopalatopharyngoplasty (UPPP), septoplasty and bony surgery with maxillomandibular advancement, The surgical management of obstructive sleep apnea has evolved and matured in recent years to include a breadth of new techniques that will be highlighted in this symposium. For example, modern UPPP techniques replace tissue resection with tissue suspension to prevent circumferential scarring. Drug-induced sleep endoscopy and/or CINE MRI, performed in a state of artificial sleep, can be performed with standardized protocols on challenging patients to identify the site of obstruction for targeted management. Tongue base reductions no longer require precarious airways, but rather can be performed with coblation or minimally-invasive techniques such as radiofrequency ablation. There is now rigorous, promising long-term evidence for implantable options such as the hypoglossal nerve stimulator. Maxillomandibular advancement surgery continues to be a highly effective surgical option targeting multiple sites from the velum, to oropharynx, and the tongue. Preoperative diagnostics tests with DISE and Mandibular Advancement Therapy (MAD) have been used as prognostic indicators in patient selection, to optimize the magnitude of skeletal advancement/expansion, and to further increase the success rate by eliminating non-responders. In this symposium, we will introduce our models for multi-disciplinary care which include sleep medicine physicians and surgeons for comprehensive evaluation of pediatric and adult OSA patients. As many of these complex patients require multi-modality management, we hope to build synergistic collaboration between surgeons and sleep medicine physicians for development of optimal patient specific surgical plan, increasing the success predictability.

 Dr. Tina Meisami: Paediatric and Adult Skeletal Sleep Surgery – Maxillomandibular Advancement Surgery and Surgical Treatment Algorithm



- 2. Dr. Indra Narang: Multi-discilplinary Care for Sleep Medicine and Surgery
- 3. Dr. Evan Propst: Pediatric Sleep Surgery Beyond Tonsillectomy and Adenoidectomy
- 4. Dr. Josie Xu: Adult Soft Tissue Sleep Surgery Updates on Patient Selection and Surgical Techniques

### LEARNING OBJECTIVES

By Participating in this session, participants will be able to:

- 1. Identify the paediatric and adult OSA patients that may benefit from surgical consultation.
- 2. Describe common surgical procedures and surgical algorithm for OSA and their success and complication rates.
- 3. Discuss barriers to accessing multi-disciplinary pediatric and adult surgical care.

# SYMPOSIUM 10: EXPANDING THE ROLE OF DIGITAL APPROACHES TO ENHANCE SLEEP HEALTH FOR CANADIANS

DATE: 04/29/2023

START TIME: 11:15 am END TIME: 12:45 pm

CHAIRPERSON: Penny Corkum

Corkum, Penny<sup>1,2</sup>; Bertrand, Michel¹; Ilie, Alzena¹; Rosenberg, Lindsay¹; Jemcov¹; Vaughan, Katie¹; Weiss, Shelly³,<sup>4</sup>

<sup>1</sup>Psychology and Neuroscience, Dalhousie University, <sup>2</sup>Department of Psychiatry, Dalhousie University, <sup>3</sup>Toronto Hospital for Sick Kids; <sup>3</sup>Department of Paediatrics, University of Toronto

**DESCRIPTION:** To optimize the health and well-being of Canadians across the lifespan, it is critical that they have age-appropriate sleep quantity and quality, along with other health behaviours such as physical activity and balanced diets. To enhance sleep health in Canada, sleep education and interventions must be provided to individuals across the lifespan, directly and indirectly. Healthcare providers are in a unique position to provide sleep education and clinical sleep evaluation and treatment, however, they often do not have the education, resources, or time to do this. It is not only important to provide accessible training to healthcare providers in sleep health and sleep disorders, but also essential to provide resources to support their training and intervention activities. To further enhance sleep health, sleep education needs to be part of the education curriculum, so children, youth and adults can learn about the importance of sleep health and strategies to enhance their sleep quality and quantity. Educators need the curriculum and resources to deliver evidence-based information to their students. Additionally, delivery of sleep health and healthy sleep practices on social media can help raise awareness of the importance of sleep and further reach Canadians of all ages. This symposium will share examples of accessible online programs that can support the widespread implementation of sleep health across the lifespan. The research that will be presented includes digital nterventions that provide direct sleep education and intervention to youth and parents of children, as well as programs that provide professional development to healthcare providers. These programs and resources are delivered

through a range of digital technologies including eHealth, eLearning, mHealth, and social media campaigns. The audience will be engaged to contribute to generating ideas for an effective sleep health program that can reach Canadians across the lifespan.

- 1. Michel Bertrand, PhD, Post-Doctoral Fellow, Dalhousie University: What is sleep education and why is it important? (10 minutes)
- 2. Penny Corkum, PhD, Clinical Psychology, Dalhousie University: Approach to development and evaluation of sleep education programs within Corkum LABS (10 minutes)
- 3. Alzena Ilie, PhD Student/Trainee, Clinical Psychology, Dalhousie University: Promoting Healthy Sleep An eLearning professional development program for healthcare providers (10 minutes) Co-Authors: Penny Corkum, PhD; Elizabeth Keys, PhD; Shelly Weiss, MD
- 4. Lindsay Rosenberg, PhD Student/Trainee, Clinical Psychology, Dalhousie University: Healthy Sleep for Healthy Schools: A sleep education program delivered by teachers to middle and high school students (10 minutes) Co-Authors: Alzena, Gabby, Alissa
- 5. Ana Jemcov, PhD Student/Trainee, Clinical Psychology, Dalhousie University: ABCs of Sleeping: A smartphone app to increase sleep health in school-aged children (10 minutes) Co-Authors Kate Lamont; Dr. Penny Corkum.
- 6. Katie Vaughan, MPlan, Research Manager, Dalhousie University: Using social media to Improve sleep education and knowledge translation (10 minutes) No co-authors
- 7. Shelly Weiss, MD, FRCPC, Department of Neurology, Sick Kids Hospital/University of Toronto: Update on Physician Education in Sleep Disorder Medicine in Canada
- 8. Penny Corkum (Moderator): Discussion focused on the need for sleep education across the lifespan and how to make this a reality (20 minutes)

### LEARNING OBJECTIVES

By Participating in this session, participants will be able to:

- 1. Explain the need for digital sleep education and interventions, and the potential impact of enhancing sleep health for Canadians.
- Describe the development and evaluation of the suite of online programs developed within Corkum LABS to deliver accessible and evidence-based sleep education and interventions for pediatric insomnia.
- 3. Discuss needs for digital sleep education and interventions across the lifespan and how to make this a reality.

### **LUNCH AND EXHIBITS OPEN**

DATE: 04/29/2023

START TIME: 12:45 pm END TIME: 2:00 pm



### POSTER SESSION & POSTER TOUR - SESSION 2

DATE: 04/29/2023

START TIME: 1:15 pm END TIME: 2:00 pm

DESCRIPTION: Starting at 1:15 PM, Poster Presenters will be at their posters for discussion and

questions. There will also be an organized poster tour with identified posters

participating in this review which will includes awards for several categories.

Best Poster (as judged by the poster tour)

Best Poster PresentationPeople's Choice Award

SPONSORED BY: Paladin

### ORAL SESSION 4: SLEEP AND MEDICAL CONDITIONS

DATE: 04/29/2023

START TIME: 11:15 am END TIME: 12:45 pm

CHAIRPERSON: Marta Kaminska, McGill University Health Centre (MUHC)

ABSTRACTS TO BE PRESENTED:

12	Respiratory Safety of Lemborexant in Adult and Elderly Subjects with Mild to Severe Obstructive Sleep Apnea
29	Exploratory Analyses of Obstructive Sleep Apnea Outcomes and Sleep Structure in Parkinson's Disease Motor Subtypes
37	Investigating the Impact of CPAP on Cognition in a Retrospective Cohort of Cognitively Impaired Patients
52	Effect of Lemborexant on Sleep Onset and Maintenance in Patients with Comorbid Insomnia Disorder and Mild Obstructive Sleep Apnea
78	Impact of Sleep Chronotype on In-Laboratory Polysomnography Parameters
129	Examining Links between General Fatigue in Myasthenia Gravis with Objectively Measured Sleep
136	Positive Airway Pressure Therapy Usage for Obstructive Sleep Apnea in the Lung Transplant Population
150	Data-driven phenotyping of central disorders of hypersomnolence with unsupervised clustering: toward more reliable diagnostic criteria
173	Comorbid Insomnia and Obstructive Sleep Apnea: How Sleepiness and Objective Sleep Quality with Odds Ratio Product Changes by Diagnosis

Abstracts are in numerical order, not necessarily in presentation order.



# SYMPOSIUM 11: BRIDGING TIERS OF SERVICE USING A MULTI-DISCIPLINARY APPROACH TO ADDRESS WAIT TIMES FOR CANADIAN PAEDIATRIC SLEEP SERVICES. A PRIORITY SETTING DISCUSSION.

DATE: 04/29/2023

START TIME: 2:00 pm END TIME: 3:30 pm

CHAIRPERSON: Elizabeth Keys

Ipsiroglu, Osman¹; Wensley, David¹,²; Keys, Elizabeth³; Weiss, Shelly⁴,⁵

<sup>1</sup>BC Children's Hospital, <sup>2</sup>Department of Pediatrics, Faculty of Medicine, University of British Columbia; <sup>3</sup>University of British Columbia; <sup>4</sup>Toronto Hospital for Sick Kids; <sup>5</sup>Department of Paediatrics, University of Toronto

**DESCRIPTION:** With the increasing recognition of sleep as a public health emergency and increasing interest in improving the sleep in the public, there is a continued need to provide publicly funded health services for children's sleep concerns. This need is exacerbated by the COVID-19 pandemic, which led to disruptions in healthcare delivery and worsening mental health, including sleep problems. Moreover, publicly funded pediatric sleep services are not universally accessible across Canada. In areas where pediatric services are available, the need for services often far exceeds capacity, resulting in long wait times and missed opportunities for early intervention. With over 1000 patients on the waitlist for the pediatric sleep service at British Columbia Children's Hospital (BCCH), our interdisciplinary team has developed and evaluated a structured model to improve the process of intake, screening, and initial assessment. The aim of this symposium will be to discuss these findings with other pediatric service providers to build consensus about best practices and approaches to address this care gap in Canadian pediatric sleep services. We will first describe the current context facing Canadian pediatric sleep services and clinical laboratories. Findings from an environmental scan of Canadian pediatric sleep services and laboratories will also be presented, including common challenges and opportunities. Next, we will describe the structured intake, screening, and assessment process that has been developed and implemented at BCCH. Using a case study, we will demonstrate the steps of this process, as well as the interdisciplinary training tools used. Findings evaluating the implementation of this process will be presented. These findings will include the barriers and facilitators of the process, as well as parentreported outcomes and perceptions of the quality of care. Lastly, our invited discussants will share their insights about future priorities and the scalability of this approach.

- Dr. David Wensley: An overview of challenges and opportunities of Canadian paediatric sleep services and labs.
- 2. Dr. Osman Ipsiroglu: Mind the Gap & Care While you Wait: Expedited Intake Process a Community/Academia Collaboration.
- 3. Dr. Elizabeth Keys: Barriers, facilitators, and outcomes of an adapted interdisciplinary and structured eHealth intake system to improve pediatric sleep care in British Columbia.
- 4. Dr. Shelly Weiss: A Critical Discussion: Future priorities for Canadian paediatric sleep services and providers.



### LEARNING OBJECTIVES

By Participating in this session, participants will be able to:

- 1. Describe waitlist challenges that Canadian paediatric sleep programs/clinics are experiencing.
- 2. Discuss opportunities to use a structured intake screening and assessment process.
- 3. Identify barriers and facilitators to adopting an interdisciplinary approach within pediatric sleep health services.

# SYMPOSIUM 12: NOVEL TECHNOLOGIES FOR ASSESSING NIGHT-TO-NIGHT VARIABILITY IN NORMAL SLEEP AND SLEEP DISORDERS

DATE: 04/29/2023

START TIME: 2:00 pm END TIME: 3:30 pm

CHAIRPERSON: Amy Bender

Morris, Jonna<sup>1</sup>; Lechat, Bastien<sup>2</sup>; Mazzotti, Diego<sup>3</sup>; Bender, Amy<sup>4</sup>

<sup>1</sup>University of Pittsburgh; <sup>2</sup>Adelaide Institute for Sleep Health; <sup>3</sup>University of Kansas Medical Center; <sup>4</sup>Clinical Sleep Science, Cerebra

**DESCRIPTION:** Sleep has been primarily studied in laboratory settings for typically only one night. Yet we know sleep quality can vary from night to night, especially in the home where we are exposed to environmental, family, and lifestyle factors. During this symposium, we will cover how sleep can vary across multiple nights in samples of healthy sleep and sleep disorders. Dr. Jonna Morris will give a brief overview of how sleep can vary across multiple nights and various ways to assess sleep in the home. Dr. Amy Bender will discuss night-to-night variability across a healthy sample of sleepers who wore in-home PSG for 22 nights and what factors played a role in sleep variability. Dr. Bastien Lechat will discuss AHI variation and associations with hypertension during in-home monitoring of 12,287 participants from over 170 nights per participant using a validated under-the-mattress sleep sensor. Finally, Dr. Diego Mazzotti will estimate sleep-disordered breathing severity using physiological signals.

- 1. Jonna Morris, PhD, RN: An overview of night-to-night variability and how it can be measured
- 2. Amy Bender, PhD, MS: Night-to-night variability in ORP sleep quality across 22 nights of inhome PSG
- 3. Bastien Lechat, PhD: Multi-night assessment of obstructive sleep apnoea and associations with hypertension
- 4. Diego Mazzotti, PhD: Estimating night-to-night variability in sleep-disordered breathing severity using physiological signals



### LEARNING OBJECTIVES

By Participating in this session, participants will be able to:

- 1. Identify new technologies of measuring sleep long-term.
- 2. Describe how certain factors contribute to sleep variability across nights.
- 3. Explain sleep disordered breathing and disease classification changes with long-term monitoring.

# SYMPOSIUM 13: PERSISTENT POST CONCUSSION SYMPTOMS (PPCS) & SLEEP: HOW TO INTEGRATE A CLINICAL SLEEP SCREENING IN CONCUSSION MANAGEMENT?

DATE: 04/29/2023

START TIME: 2:00 pm END TIME: 3:30 pm

CHAIRPERSON: Jacqueline Purtzki

Purtzki, Jacqueline<sup>1,2</sup>; Owen Yeates, Keith<sup>4,5</sup>; Zemek, Roger<sup>3</sup>; Kou, Calvin<sup>4</sup>; Ipsiroglu, Osman<sup>6</sup>

<sup>1</sup>Vancouver Health Network, <sup>2</sup>GF Strong Rehabilitation Centre, Department of Pediatrics, Faculty of Medicine, University of British Columbia; <sup>3</sup>Pediatric Brain Injury, Department of Psychology, Pediatrics and Clinical Neurosciences, University of Calgary; <sup>4</sup>Department of Pediatrics and Emergency Medicine, University of Ottawa, <sup>5</sup>Clinical Research Unit, Children's Hospital of Eastern Ontario. <sup>6</sup>Divisions of Child & Youth Psychiatry/Developmental Pediatrics/Respirology, Department of Pediatrics, University of British Columbia.

### **Submission ID** 116

Short Description (300 words) Despite the known neurocognitive effects, the role of mild traumatic brain injury (mTBI) on sleep health and subsequent recovery has largely been overlooked. While the majority of youth recover within four weeks, research consistently shows that up to 30% of patients will experience prolonged symptoms beyond one month. The cause for these prolonged symptoms is likely multifactorial; however, sleep disturbances are a significant complaint of patients with persistent post concussion symptoms (PPCS), who complain of "restlessness", "fatigue," and "irritability" at day- and nighttime and affected sleep quality. The limitations towards a timely identification of restlessness in children with PPCS stems from the current tools for identifying restlessness. Quantitative measurements of nighttime restlessness involve polysomnography and a functional sleep lab, for observing and counting the periodic limb movements that are characteristic of underlying restlessness. On the other hand, daytime restlessness is often associated with ADHD. While melatonin is considered standard of care, conditions involving restlessness like Restless Legs Syndrome (RLS), Restless Sleep Disorder (RSD), and Periodic Limb Movements in Sleep (PLMs) are common clinical diagnoses but usually overseen. In this symposium, we are reviewing mTBI presentations and how chronic sleep symptoms that require treatment and management can be screened and treated. Primary target audience: Professionals that encounter mild traumatic brain injuries, including but not limited to: pediatricians, psychiatrists, psychologists, emergency physicians, occupational therapists, physician therapists, community based physicians and health care providers.



# SYMPOSIUM 14: SHORT AND LONG-TERM IMPACTS OF COVID ON SLEEP AND ALERTNESS

DATE: 04/29/2023

START TIME: 2:00 pm END TIME: 3:30 pm

CHAIRPERSON: Diane B Boivin, MD, PhD

Boivin, Diane B<sup>1,2</sup>; Robillard, Rebecca<sup>3,4</sup>; Gosselin, Nadia<sup>5,6</sup>

¹McGill University, ²Centre for Study and Treatment of Circadian Rhythms, Douglas Mental Health University Institute, Montréal, QC; ³School of Psychology, University of Ottawa, ⁴Clinical Sleep Research Platform Sleep Research Unit, Royal Ottawa Institute of Mental Health Research, ⁵Department of Psychology, Université de Montréal, ⁶Centre d'études avancées en médecine du sommeil Hôpital du Sacré-Coeur de Montréal CIUSSS du Nord de l'Île-de-Montréal

**DESCRIPTION:** With the growing human toll and several waves of the pandemic, society is facing unusually stressful situations that affect people both personally and professionally. Several surveys worldwide and systematic reviews point out to a clear increase in sleep complaints and mental health symptoms during the pandemic in the general population and, even more so, in front line health care workers. Factors contributing to these are numerous and there is a clear need for longitudinal data to ascertain how certain risk factors impact sleep over time when humans are exposed to stressful situations. The aim of the present symposium is to bring together sleep experts who carried out innovative studies in Canada during the pandemic. Presentations will cover sleep and mental health disturbances during various phases of the pandemic, as well as the negative impacts of long COVID on sleep-wake states. It is hoped that a better understanding of the factors contributing to sleep-wake disturbances will lead to specific initiatives to mitigate their negative health consequences during sanitary crises such as the present one.

- 1. Diane B Boivin, MD, PhD: Sleep during the pandemic (5 min)
- 2. Rebecca Robillard, PhD: The course of sleep changes across multiple phases of the COVID-19 pandemic and their interactions with stress, anxiety and depression symptoms (25 min)
- 3. Diane B Boivin, MD, PhD: Sleep and fatigue of frontline healthcare workers during the COVID-19 pandemic (25 min)
- 4. Nadia Gosselin, PhD: Sleep-wake disturbances in the post COVID-19 condition (long COVID) (25 min)
- 5. General panel discussion (10 min)

### LEARNING OBJECTIVES

- 1. Discuss the impact of the COVID-19 pandemic on sleep in the general population and in front line health care workers and factors associated with sleep complaints
- 2. Explain the persistence of sleep difficulties and their mental health correlates during several phases of the pandemic
- 3. Recognize the impact of long COVID on sleep-wake disturbances



### **HEALTH BREAK**

DATE: 04/29/2023

START TIME: 3:30 pm END TIME: 3:45 pm

### 2023 ICRH/CSS LECTURER - DISTINGUISHED LECTURER AWARD IN SLEEP SCIENCES

MECHANISMS OF SLEEP AND BREATHING REVEAL THERAPEUTIC TARGETS

PRESENTER: Dr Richard Horner PhD, FCAHS

AFFILIATION: University of Toronto

DATE: 04/29/2023

START TIME: 3:45 pm END TIME: 4:30 pm

DESCRIPTION: This presentation will identify key physiological mechanisms underpinning the control

of sleep and breathing. The rationale and major targets for sleep apnea pharmacotherapy will be a particular focus.

LEARNING OBJECTIVES

By Participating in this session, participants will be able to:

1. Identify mechanisms of pharyngeal muscle control in sleep.

2. Employ strategies for reactivation of pharyngeal muscles in sleep.

3. Summarize the physiological rationale and key targets for sleep apnea pharmacotherapy including in recent human trials, with emphasis on current assumptions, unknowns, and future directions.

### **CONFERENCE WRAP-UP AND PRIZES**

PRESENTER: Dr Célyne Bastien PhD

AFFILIATION: School of Psychology, Laval University, Chercheure, CERVO

DATE: 04/29/2023

START TIME: 4:30 pm END TIME: 5:00 pm

# 2023 Canadian Sleep Society Conference

PHYSICIAN CME PROGRAM APRIL 27, 2023

# PRIMARY CARE | PHYSICIAN CME PROGRAM AT A GLANCE

			Society du Sommeil
27 APRIL 2023	This is a 1-day course designed for family physicians who want to learn more about sleep disorders and related treatments. Presented in english only	learn more ab	out sleep disorders and related treatments. Presented in englisi
7:45 AM - 7:55 AM	Welcome & Introduction Dr. Reshma Amin, University of Toronto	12:30 PM - 3:30 PM	CBT-I for Family Physicians Program Dr. Colleen Carney, Toronto Metropolitan University
7:55 AM - 8:40 AM	Adult OSA: Diagnosis, Cardiovascular Risk, and Treatment Dr. John Kimoff, McGill University	3:40 PM - 3:55 PM	Closing Remarks Dr. Reshma Amin, University of Toronto
8:40 AM - 9:25 AM	Normal Sleep Across the Lifespan Dr. Mark Boulos, University of Toronto		
9:25 AM - 10:20 AM	INSOMINIA: What's the cause? Dr. Colleen Carney, Toronto Metropolitan University		TEMERTY FACULTY OF MEDICINE
10:20 AM -	Break		UNIVERSITY OF TORONIO Continuing Pedessional Development
10:30 AM - 11:15 AM	Essential Principles of Cognitive Behavioral Therapies for Insomnia in Primary Care Dr. Charles Morin, Laval University	This o	College or ramily fritysicians or Canada – Mainpro+: This one-credit-per-hour Group Learning program meets the certification criteria of the College of Family Physicians of Canada and has been
11:15 AM -	Novel Technologies for OSA Assessment in the Perioperative Setting Dr. Mandeep Singh, University of Toronto	certifie	certified by Continuing Professional Development, Temerty Faculty of Medicine, University of Toronto for up to <b>7.0 Mainpro+ credits.</b>
12:00 PM - 12:30 PM	Lunch		
12:30 PM - 1:15 PM	Pediatric Management of OSA Dr. Indra Narang, Hospital for Sick Children		



### PRIMARY CARE | PHYSICIAN CME PROGRAM DETAIL

### Welcome & Introduction

PRESENTER: Dr Reshma Amin MD, M.Sc., FRCPC

AFFILIATION: The Hospital for Sick Children (SickKids), University of Toronto

AFFILIATION: McGill University, Montreal Neurological Institute and Hospital, Montreal Neurological

Institute and Hospital

DATE: 04/27/2023

START TIME: 7:45 am END TIME: 7:55 am

Adult OSA: Diagnosis, Cardiovascular Risk, and Treatment

PRESENTER: Dr John Kimoff MD, FRCP(C)
AFFILIATION: McGill University Health Centre

DATE: 04/27/2023

START TIME: 7:55 amEND TIME: 8:40 am

DESCRIPTION: This session will provide an overview of recent advances in the diagnosis,

cardiovascular and other complications, and treatment strategies for obstructive sleep apnea-hypopnea (OSAH) in adults. The session will be aimed at primary care

physicians and will focus on priority issues for clinical practice and practical

approaches to improving patient health and well-being.

### **LEARNING OBJECTIVES:**

By Participating in this session, participants will be able to:

- 1. Describe current data on the prevalence and approaches to diagnosis of obstructive sleep apnea-hypopnea.
- 2. Discuss the current state of knowledge regarding the cardiovascular risk associated with OSAH.
- 3. Describe the indications for and current approaches to treatment of OSA.

### Normal Sleep Across the Lifespan

PRESENTER: Dr. Mark Boulos MD FRCPC CSCN(EEG) MSc

AFFILIATION: Department of Medicine, University of Toronto, Sunnybrook Health Sciences Centre

DATE: 04/27/2023

START TIME: 8:40 am END TIME: 9:25 am

DESCRIPTION: This session will provide an overview of the latest advances in our knowledge of how

normal sleep changes according to age and sex. The session will be aimed at primary care physicians and will focus on priority issues for clinical practice and practical

approaches to enhancing patient health and well-being.

### LEARNING OBJECTIVES

- 1. Identify how normal sleep macrostructure changes across the lifespan.
- 2. Describe sleep microstructure changes across the lifespan.
- 3. Compare sex-dependent differences in sleep macro-and microstructure.



### INSOMNIA: What's the cause?

PRESENTER: Dr Colleen Carney PhD, C.Psych AFFILIATION: Toronto Metropolitan University

DATE: 04/27/2023

START TIME: 9:25 am END TIME: 10:20 am

DESCRIPTION: There are as many causal factors for a night of insomnia, as there are people. A

sleepless night is something everyone faces at one point or another, but what causes insomnia to become chronic? Many people mistakenly believe sleep hygiene is to blame when sleep hygiene does not differ between good and poor sleepers. This workshop will discuss: 1) how a symptom can become a disorder, 2) how Insomnia Disorder is maintained by three causal factors, and importantly, 3) what treatment

strategies address each of the three causal factors.

### LEARNING OBJECTIVES

By Participating in this session, participants will be able to:

1. Identify the three maintaining factors in insomnia disorder.

2. Explain conditioned arousal.

3. Match the three causal factors to treatments.

Break

DATE: 04/27/2023

START TIME: 10:20 am END TIME: 10:30 am

### Essential Principles of Cognitive Behavioral Therapies for Insomnia in Primary Care

PRESENTER: Dr Charles Morin PhD

AFFILIATION: School of Psychology, Laval University

DATE: 04/27/2023

START TIME: 10:30 am END TIME: 11:15 am

DESCRIPTION: Insomnia is a prevalent complaint in medical practice but often remains undiagnosed

and untreated. When treatment is initiated, it is typically limited to medication management, although cognitive behavioural therapy is recognized as first-line therapy in all clinical practice guidelines. After summarizing key clinical features of insomnia disorder and its assessment, this lecture will review essential principles of cognitive behavioural therapy for insomnia (CBTi) that can be implemented successfully in primary care settings. Issues regarding combining CBTi with

medication, and how to discontinue hypnotic medication, will also be discussed.

### **LEARNING OBJECTIVES:**

- 1. Recognize key clinical features of insomnia disorder.
- 2. Summarize key considerations in the assessment of insomnia complaints.
- 3. Review essential features of cognitive behavioural therapy.



### Novel Technologies for OSA Assessment

PRESENTER: Dr Mandeep Signh MBBS, MD, MSc, FRCPC

AFFILIATION: Women's College Hospital, Toronto Western Hospital, University Health Network and

University of Toronto

DATE: 04/27/2023

START TIME: 11:15 am END TIME: 12:00 pm

DESCRIPTION: Perioperative OSA management is complicated by the high prevalence of the

condition, however, a significant proportion of patients either remain undiagnosed, or untreated. Barriers to timely diagnosis and treatment adherence include limited time for identification, cumbersome in-laboratory sleep studies, and lack of access to PAP therapy in time for the completion of the surgical procedure. In this session, we will discuss OSA phenotypes and perioperative implications. This will be followed by talks on relevant technologies that can be useful for diagnosis and evaluating the pathophysiological changes occurring in OSA patients in the perioperative setting.

### **LEARNING OBJECTIVES:**

By Participating in this session, participants will be able to:

- 1. Recognize OSA phenotypes, and how they relate to the perioperative setting.
- 2. Explain advances in technology into monitoring the patho-physiology of OSA in the perioperative setting.
- 3. Describe various analytical approaches such as artificial intelligence, and point-of-care ultrasound (POCUS) for OSA evaluation.

### Lunch

DATE: 04/27/2023

START TIME: 12:00 pm END TIME: 12:30 pm

### **CBT-I for Family Physicians**

PRESENTER: Dr Colleen Carney PhD, C.Psych AFFILIATION: Toronto Metropolitan University

DATE: 04/27/2023

START TIME: 12:30 pm END TIME: 3:30 pm

DESCRIPTION: Studies have shown that the number one treatment strategy offered to patients is

sleep hygiene, however, sleep hygiene is an ineffective monotherapy which the American Academy of Sleep Medicine advocates against using. The behavioural components of CBT-I that ARE recommended can be delivered in a single session with a brief follow-up. This type of delivery has been tested in primary and family care settings, and been shown to be effective. This workshop will teach brief behavioural therapy for medical settings and how to use it to help patients discontinue their hypnotic medication.

### LEARNING OBJECTIVES

- 1. Deliver conditioned arousal psychoeducation and stimulus control rules.
- 2. Employ sleep drive psychoeducation and collaborate on a sleep schedule.
- 3. Use CBT-I to help patients discontinue hypnotic medication.



Closing Remarks: Session Chairs and Evaluation

PRESENTER: Dr Reshma Amin MD, M.Sc., FRCPC

DATE: 04/27/2023

START TIME: 3:30 pm END TIME: 3:45 pm

### **CONFERENCE OPENING AND AWARDS**

DATE: 04/27/2023

START TIME: 4:00 pm END TIME: 4:30 pm

### KEYNOTE 1A: REM Sleep in Health and Disease

PRESENTER: Dr John Peever PhD AFFILIATION: University of Toronto

DATE: 04/27/2023

START TIME: 4:30 pm END TIME: 5:15 pm

# KEYNOTE 1B: Cognitive Behavioral Therapy for Insomnia: from Clinical Trials to Practice Guidelines, Dissemination and Implementation.

PRESENTER: Dr Charles Morin PhD

AFFILIATION: School of Psychology, Laval University

DATE: 04/27/2023

START TIME: 5:15 pm END TIME: 6:00 pm

### CSS ANNUAL GENERAL MEETING

DATE: 04/27/2023

START TIME: 6:00 pm END TIME: 7:00 pm

### Welcome Reception in the Exhibit Hall

DATE: 04/27/2023

START TIME: 6:00 pm END TIME: 8:00 pm

See Scientific Program for Session Descriptions

## 2023 Canadian Sleep Society Conference

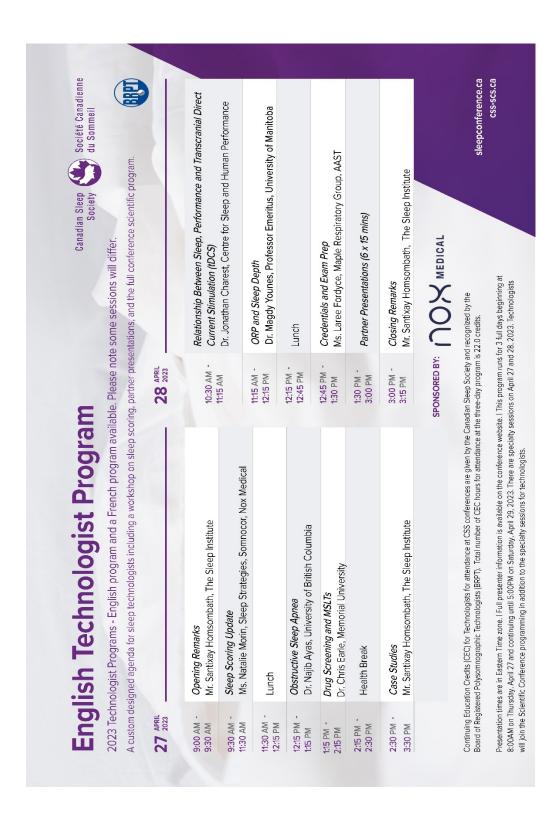
# TECHNOLOGIST PROGRAM ENGLISH APRIL 27-29, 2023

Sponsored by



# ENGLISH TECHNOLOGIST PROGRAM AT A GLANCE | APRIL 27-28, 2023

See Scientific Program for session informaiton for Saturday, April 29, 2023





### ENGLISH TECHNOLOGIST PROGRAM DETAIL | THURSDAY, APRIL 27, 2023

### Welcome, Opening Remarks, Awards

PRESENTER: Santixay Homsombath BSc, RPSGT, RST, CCSH

AFFILIATION: The Sleep Institute

DATE: 04/27/2023

START TIME: 9:00 am END TIME: 9:30 am

### Sleep Scoring Update (EN/FR)

PRESENTER: Natalie Morin RPSGT

AFFILIATION: Sleep Strategies, Somnocor, Nox Medical

DATE: 04/27/2023

START TIME: 9:30 am END TIME: 11:30 am

DESCRIPTION: Interactive session to understand the AASM sleep scoring rules during challenging studies. Review the latest AASM scoring guidelines for staging, arousals, respiratory and limb movements scoring. This session will assist with updating your adult scoring skills. Adult sleep study scoring basics as well as the scoring rules will be reviewed in an interactive format. Designed for beginning or advanced level sleep technologists interested in understanding and improving scoring skills. After completing the course, participants will have reviewed scoring rules, stage and event recognition and discussed scoring strategies.

### Lunch

DATE: 04/27/2023

START TIME: 11:30 am END TIME: 12:15 pm

### Obstructive Sleep Apnea/COPD overlap

PRESENTER: Dr. Najib Ayas MD, MPH

AFFILIATION: University of British Columbia

DATE: 04/27/2023

START TIME: 12:15 pm END TIME: 1:15 pm

DESCRIPTION: In this presentation, Dr. Ayas will discuss the pathophysiology, epidemiology, and

therapy of the OSA/COPD Overlap syndrome. The concomitant presence of both

COPD and OSA leads to worse health, and potential hypercapnia.

### **Drug Screening and MSLTs**

PRESENTER: Dr Chris Earle MD, FRCPC

AFFILIATION: Psychiatry and Sleep Disorders Medicine, Memorial University

DATE: 04/27/2023

START TIME: 1:15 pm END TIME: 2:15 pm

DESCRIPTION: Many medications and substances of abuse affect sleep architecture and may impact polysomnography results. Current practice parameters support use of urine drugs screening for MSLT and MWT when clinically indicated. (1) Drug screening provides vital clinical information that may assist with test interpretation and subsequent patient diagnosis, particularly in high risk circumstances (medication

seeking behaviour, legal implications of diagnosis, driving safety).(2)



### This session will:

- Review the influence of medications and substances of abuse on sleep physiology and polysomnography results.
- Discuss the use of drug screening in sleep investigations, including strengths and limitations of current testing methods.
- Review best practices in collection, storage, and transportation of urine drug samples.
- Describe common interfering substances and methods of sample tampering detection 5. Identify factors to consider when interpreting positive and negative drug screens.

### References

1. Littner MR, Kushida C, Wise M, G. Davila D, Morgenthaler T, Lee-Chiong T, Hirshkowitz M, Loube DL, Bailey D, Berry RB, Kapen S. Practice parameters for clinical use of the multiple sleep latency test and the maintenance of wakefulness test. Sleep. 2005 Jan 1;28(1):113-21.

2. Anniss AM, Young A, O'Driscoll DM. Importance of urinary drug screening in the multiple sleep latency test and maintenance of wakefulness test. Journal of Clinical Sleep Medicine. 2016 Dec 15;12(12):1633-40.

### Break

DATE: 04/27/2023

START TIME: 2:15 pm END TIME: 2:30 pm

### **Case Studies**

PRESENTER: Santixay Homsombath BSc, RPSGT, RST, CCSH

AFFILIATION: The Sleep Institute

DATE: 04/27/2023

START TIME: 2:30 pm END TIME: 3:30 pm

**DESCRIPTION: COMING SOON** 

### **CONFERENCE OPENING AND AWARDS**

DATE: 04/27/2023

START TIME: 4:00 pm END TIME: 4:30 pm

### KEYNOTE 1A: REM Sleep in Health and Disease

PRESENTER: Dr John Peever PhD AFFILIATION: University of Toronto

DATE: 04/27/2023

START TIME: 4:30 pm END TIME: 5:15 pm

# KEYNOTE 1B: Cognitive Behavioral Therapy for Insomnia: from Clinical Trials to Practice Guidelines, Dissemination and Implementation.

PRESENTER: Dr Charles Morin PhD

AFFILIATION: School of Psychology, Laval University

DATE: 04/27/2023

START TIME: 5:15 pm END TIME: 6:00 pm

### CSS ANNUAL GENERAL MEETING

DATE: 04/27/2023

START TIME: 6:00 pm END TIME: 7:00 pm



### Welcome Reception in the Exhibit Hall

DATE: 04/27/2023

START TIME: 6:00 pm END TIME: 8:00 pm

See Scientific Program for Session Descriptions

### ENGLISH TECHNOLOGIST PROGRAM DETAIL | FRIDAY, APRIL 28, 2023 |

### Sponsored Symposium: New Developments in the Diagnosis and Management of

Narcolepsy

PRESENTER: Dr. Yves Dauviliers, MD, PhD AFFILIATION: University of Montpellier, France

PRESENTER: Dr. Atul Khullar, MD, MSc, FRCPC, DABPN AFFILIATION: Northern Alberta Sleep Clinic in Edmonton

PRESENTER: Dr. Emmanuel Mignot, MD, PhD

AFFILIATION: Craig Reynolds Professor of Sleep Medicine, Stanford University

DATE: 04/28/2023

START TIME: 7:00 am (doors open at 6:30) END TIME: 8:15 am

DESCRIPTION: Expert panel discussion with Dr. Dauvilliers, Dr. Khullar, and Dr. Mignot on the clinical

features and diagnosis of narcolepsy, and on the recent developments in the

pharmacologic management of narcolepsy.

Sponsored by PALADIN

# Healthy Sleep, Healthy Brain: Neuropathological and Cellular Correlates of Sleep and Circadian Disruption in the Aging Human Brain

PRESENTER: Dr Andrew Lim MD, FRCPC AFFILIATION: University of Toronto

DATE: 04/28/2023

START TIME: 8:30 am END TIME: 9:15 am

### Sleeping Through the Night: How, When, and Why?

PRESENTER: Dr Marie-Hélène Pennestri PhD

AFFILIATION: Department of Educational and Counselling Psychology, McGill University

DATE: 04/28/2023

START TIME: 9:15 am END TIME: 10:00 am

### Health Break

DATE: 04/28/2023

START TIME: 10:00 am END TIME: 10:30 am



# Relationship Between Sleep, Performance and Transcranial Direct Current Stimulation (tDCS)

PRESENTER: Dr. Jonathan Charest Ph.D.

AFFILIATION: Center for Sleep & Human Performance, University of Calgary, Laval University

DATE: 04/28/2023

START TIME: 10:30 am END TIME: 11:15 am

DESCRIPTION: Sleep is an important determinant of athlete and student-athlete performance,

physical and mental health and wellbeing. Sleep health has been recognized across the scientific community to be a daily challenge for athletes and student-athletes. Traditionally sleep has not been a primary focus for this population and may be neglected for several reasons including the academic competitiveness and high athletic and social demands. Institutions such as colleges, universities and sports organizations in general are well positioned to enhance the awareness regarding sleep health. However, the lack of sleep health resources, valid sleep screening tools and general awareness of sleep health represents a crucial gap into the evaluation and proactive care that these institutions can provide to their athletes and student-athletes.

The population of elite and student-athletes is particularly susceptible to sleep inadequacies which is typically characterized by short sleep and poor sleep quality. With the well-known detrimental impact of inadequate sleep on athletic performances and health, a better understanding of the real-world scenario of elite and student-athletes would be warranted. For example, athletes and student-athletes are influenced by sport specificity and culture (early morning training, travel and competition schedules) as well as non-sport factors (gender, stress, anxiety and depression).

Therefore, a proper sleep assessment could also help reduce the burden of mental health in this vulnerable population with an adequate preseason screening strategy. The purpose of this session is to provide sleep clinicians with the resources and evidence to assist sport organizations in their countries to address sleep health and sleep related issues in this unique population.

### ORP and Sleep Depth

PRESENTER: Dr Magdy Younes MD, FRCPC, PhD, Distinguished Professor Emeritus

AFFILIATION: University of Manitoba

DATE: 04/28/2023

START TIME: 11:15 am END TIME: 12:15 pm

**DESCRIPTION: COMING SOON** 

Lunch

DATE: 04/28/2023

START TIME: 12:15 pm END TIME: 12:45 pm



### **Credentials and Exam Preparation**

PRESENTER: Laree Fordyce MS, CCSH, RPSGT, RST, CCRP, FAAST

AFFILIATION: Maple Respiratory Group (MRG); AAST

DATE: 04/28/2023

START TIME: 12:45 pm END TIME: 1:30 pm

DESCRIPTION: This session will discuss the importance of Credentialing in Sleep Technology and

what exams are available. It will also review how to prepare and what to study, for

the certification and registry exams.

### Partner Presentations (6 X 15mins)

DATE: 04/28/2023

START TIME: 1:30 pmEND TIME: 3:00 pm

### **Closing Remarks**

PRESENTER: Santixay Homsombath BSc, RPSGT, RST, CCSH

AFFILIATION: The Sleep Institute

DATE: 04/28/2023

START TIME: 3:00 pm END TIME: 3:15 pm

### Health Break

DATE: 04/28/2023

START TIME: 3:00 pm END TIME: 3:30 pm

### Mental Health and Sleep Health: Progress Made and Challenges Ahead

PRESENTER: Dr Allison Harvey PhD

AFFILIATION: Berkeley, University of California

DATE: 04/28/2023

START TIME: 3:30 pm END TIME: 4:15 pm

### Dissecting the Heterogeneity of Obstructive Sleep Apnea

PRESENTER: Dr Susan Redline MD, MPH

AFFILIATION: Peter C. Farrell Professor of Sleep Medicine, Professor of Epidemiology, Harvard T.H.

Chan School of Public Health, Harvard University, Boston, MA

DATE: 04/28/2023

START TIME: 4:15 pmEND TIME: 5:00 pm

### CSS-JAZZ RESEARCH PROJECT COMPETITION

DATE: 04/28/2023

START TIME: 5:15 pm END TIME: 6:45 pm

### SOCIAL EVENT: BLACK AND WHITE GALA (\$)

DATE: 04/28/2023

START TIME: 7:30 pm END TIME: 10:00 pm

### ENGLISH TECHNOLOGIST PROGRAM | SATURDAY, APRIL 29, 2023

Technologists will participate in the regular scientific program on Saturday, April 29, 2023. See General Scientific Program for details.

## 2023 Canadian Sleep Society Conference

# TECHNOLOGIST PROGRAM FRENCH APRIL 27-29, 2023

Sponsored by



# FRENCH TECHNOLOGIST PROGRAM AT A GLANCE | APRIL 27-28, 2023

See Scientific Program for session informaiton for Saturday, April 29, 2023





### FRENCH TECHNOLOGIST PROGRAM DETAIL | THURSDAY, APRIL 27, 2023

### Welcome, Opening Speeches, Awards Ceremony

PRESENTER: Élyse Chevrier

AFFILIATION: Sleep Disorders Clinic at Rivière-des-Prairies Hospital

DATE: 04/27/2023

START TIME: 9:00 am END TIME: 9:30 am

### Sleep Scoring Update (EN/FR)

PRESENTER: Natalie Morin RPSGT

AFFILIATION: Sleep Strategies, Somnocor, Nox Medical

DATE: 04/27/2023

START TIME: 9:30 am END TIME: 11:30 am

DESCRIPTION: Interactive session to understand the AASM sleep scoring rules during challenging studies. Review the latest AASM scoring guidelines for staging, arousals, respiratory and limb movements scoring. This session will assist with updating your adult scoring skills. Adult sleep study scoring basics as well as the scoring rules will be reviewed in an interactive format. Designed for beginning or advanced level sleep technologists interested in understanding and improving scoring skills. After completing the course, participants will have reviewed scoring rules, stage and event recognition and discussed scoring strategies

### Lunch

DATE: 04/27/2023

START TIME: 11:30 am END TIME: 12:15 pm

### Klein Levine Syndrome

PRESENTER: Milan Nigam

AFFILIATION: Center for Advanced Studies in Sleep Medicine; Sacré-Coeur Hospital of Montreal

DATE: 04/27/2023

START TIME: 12:15 am END TIME: 1:15 pm

Objectives – By participating in this program, participants will be able to:

- Describe the spectrum of clinical manifestations associated with Kleine-Levin syndrome (SKL).
- Discuss advances in the etiology and pathogenesis of KLS.
- List diagnostic approaches and management principles used in the clinic.

# Sleep Homeostasis and its Electrophysiological Markers and their Molecular Determinants.

PRESENTER: Valérie Mongrain PhD

AFFILIATION: Department of Neuroscience, Université de Montréal, CRCHUM, CÉAMS

DATE: 04/27/2023

START TIME: 1:15 pm END TIME: 2:15 pm

DESCRIPTION: The lecture will focus on sleep homeostasis. It will mainly cover electrophysiological

markers (mainly electroencephalogram) of sleep homeostasis. Several recently discovered molecular determinants of sleep homeostasis will also be presented and

their relevance to brain health will be discussed.



**Break** 

DATE: 04/27/2023

START TIME: 2:15 pm END TIME: 2:30 pm

The Potential Role of Poor Sleep in the Development of Alzheimer's Disease

PRESENTER: Dr Andrée-Ann Baril PhD

AFFILIATION: Université McGill; Institut Universitaire en Santé Mentale Douglas

DATE: 04/27/2023

START TIME: 2:30 pm END TIME: 3:30 pm

DESCRIPTION: It has long been known that people with dementia such as Alzheimer's disease

frequently have sleep disturbances and sleep disorders. Recently, sleep disturbances in cognitively healthy adults have been associated with a higher incidence rate of dementia and Alzheimer's disease, suggesting that poor sleep quality may be a risk factor for neurodegeneration. Since Alzheimer's disease is still incurable and

irreversible, it is important to understand the factors that contribute to its development in order to facilitate its prevention and understand its causes. This presentation will focus on the bidirectional relationship between sleep and

Alzheimer's disease.

**CONFERENCE OPENING AND AWARDS** 

DATE: 04/27/2023

START TIME: 4:00 pm END TIME: 4:30 pm

KEYNOTE 1A: REM Sleep in Health and Disease

PRESENTER: Dr John Peever PhD AFFILIATION: University of Toronto

DATE: 04/27/2023

START TIME: 4:30 pm END TIME: 5:15 pm

KEYNOTE 1B: Cognitive Behavioral Therapy for Insomnia: from Clinical Trials to

Practice Guidelines, Dissemination and Implementation.

PRESENTER: Dr Charles Morin PhD

AFFILIATION: School of Psychology, Laval University

DATE: 04/27/2023

START TIME: 5:15 pm END TIME: 6:00 pm

CSS ANNUAL GENERAL MEETING

DATE: 04/27/2023

START TIME: 6:00 pm END TIME: 7:00 pm

Welcome Reception in the Exhibit Hall

DATE: 04/27/2023

START TIME: 6:00 pm END TIME: 8:00 pm

See Scientific Program for Session Descriptions



### FRENCH TECHNOLOGIST PROGRAM DETAIL | FRIDAY, APRIL 28, 2023

# Sponsored Symposium: New Developments in the Diagnosis and Management of Narcolepsy

PRESENTER: Dr. Yves Dauviliers, MD, PhD

AFFILIATION: University of Montpellier, France

PRESENTER: Dr. Atul Khullar, MD, MSc, FRCPC, DABPN AFFILIATION: Northern Alberta Sleep Clinic in Edmonton

PRESENTER: Dr. Emmanuel Mignot, MD, PhD

AFFILIATION: Craig Reynolds Professor of Sleep Medicine, Stanford University

DATE: 04/28/2023

START TIME: 7:00 am (doors open at 6:30 am) END TIME: 8:15 am

Sponsored by PALADIN

# Healthy Sleep, Healthy Brain: Neuropathological and Cellular Correlates of Sleep and Circadian Disruption in the Aging Human Brain

PRESENTER: Dr Andrew Lim MD, FRCPC AFFILIATION: University of Toronto

DATE: 04/28/2023

START TIME: 8:30 am END TIME: 9:15 am

### Sleeping Through the Night: How, When, and Why?

PRESENTER: Dr Marie-Hélène Pennestri PhD

AFFILIATION: Department of Educational and Counselling Psychology, McGill University

DATE: 04/28/2023

START TIME: 9:15 am END TIME: 10:00 am

### Health Break

DATE: 04/28/2023

START TIME: 10:00 am END TIME: 10:30 am

### Adolescence and Sleep

PRESENTER: Roger Godbout

AFFILIATION: Department of Psychiatry, University of Montreal

DATE: 04/28/2023

START TIME: 10:30 am END TIME: 11:30 am

DESCRIPTION: Adolescence presents important biological, psychological and social changes. Sleep is

no exception in this regard! Changes in sleep schedules, for example, are

incompatible with the prevailing social schedule. Thus, the biological rhythms of 12-18 year olds show signs of shift, with late bedtimes and late rising times. The structure of sleep itself also shows variations that interfere with optimal daytime functioning,

especially in neurocognitive (attention, memory...) and affective

(irritability/indifference, impulsivity...) terms.



This presentation will review the most recent knowledge about sleep, its links with daytime functioning and the particular case of adolescents.

### Becoming a Parent: Challenges and Realities of Infant Sleep

PRESENTER: Dr Marie-Hélène Pennestri PhD

AFFILIATION: Department of Educational and Counselling Psychology, McGill University

DATE: 04/28/2023

START TIME: 11:30 am END TIME: 12:30 pm

DESCRIPTION: The transition to parenthood is a significant time in life. Mental health problems

following the birth of a child have a major impact on infants and their parents. Among the various factors associated with mental health, sleep fragmentation in the postpartum period has been shown to be associated with symptoms of depression and anxiety in both mothers and their partners. However, although new parents are frequently sleep deprived, not all of them will suffer from mental health problems. Therefore, there are protective factors that need to be identified. While there is a great deal of information about sleep in early childhood, the advice is too often contradictory and leads to unrealistic expectations on the part of parents. In general, unrealistic expectations have been identified as a risk factor for parents in their transition to parenthood. This presentation will address the process of infant sleep consolidation, commonly referred to as "sleeping through the night", from a family perspective. Parents' sleep will also be discussed as well as their expectations of their child's sleep. Finally, several factors and behaviors associated with infant sleep patterns, such as breastfeeding and bedsharing, will be considered from a

developmental, family and cultural perspective.

### Lunch and Exhibit Hall

DATE: 04/28/2023

START TIME: 12:30 pm END TIME: 1:30 pm

### POSTER SESSION & POSTER TOUR - SESSION 1

PRESENTER: AFFILIATION:

DATE: 04/28/2023

START TIME: 12:30 pm END TIME: 1:30 pm

### Partner Presentations (6 X 15mins)

DATE: 04/28/2023

START TIME: 1:30 pmEND TIME: 3:00 pm

### Seeing the sleep EEG differently: what are ORPs?

PRESENTER: Dr Célyne Bastien PhD

AFFILIATION: School of Psychology, Laval University, Chercheure, CERVO

DATE: 04/28/2023

START TIME: 3:00 pm END TIME: 3:45 pm



DESCRIPTION: This session will present different ways to look at the sleep EEG. The ODD Ratio

Products (ORP) allow to measure the depth and quality of sleep in a different way than by coding sleep stages. With this measurement, it is possible to identify different clinical subtypes of people with insomnia, apnea. The session will include interactive segments while attempting to identify the limitations of the current PSG coding in order to state the use of artificial intelligence to look at the EEG differently.

Mental Health and Sleep Health: Progress Made and Challenges Ahead

PRESENTER: Dr Allison Harvey PhD

AFFILIATION: Berkeley, University of California

DATE: 04/28/2023

START TIME: 3:30 pm END TIME: 4:15 pm

**Final Remarks** 

PRESENTER: Élyse Chevrier

AFFILIATION: Sleep Disorders Clinic at Rivière-des-Prairies Hospital

DATE: 04/28/2023

START TIME: 3:45 pm END TIME: 4:00 pm

Dissecting the Heterogeneity of Obstructive Sleep Apnea

PRESENTER: Dr Susan Redline MD, MPH

AFFILIATION: Peter C. Farrell Professor of Sleep Medicine, Professor of Epidemiology, Harvard T.H.

Chan School of Public Health, Harvard University, Boston, MA

DATE: 04/28/2023

START TIME: 4:15 pm END TIME: 5:00 pm

See Scientific Program for Session Descriptions

CSS-JAZZ RESEARCH PROJECT COMPETITION

DATE: 04/28/2023

START TIME: 5:15 pm END TIME: 6:45 pm

SOCIAL EVENT: BLACK AND WHITE GALA (\$)

DATE: 04/28/2023

START TIME: 7:30 pm END TIME: 10:00 pm

FRENCH TECHNOLOGIST PROGRAM DETAIL | SATURDAY, APRIL 29, 2023

See General Scientific Program for Saturday Programming – Note: Saturday programming is in English

only

### 2023 Canadian Sleep Society Conference

### CIHR-ICRH/CSS CAPACITY DEVELOPMENT WORKSHOP FOR TRAINEES AGENDA APRIL 27-29, 2023



### CIHR-ICRH/CSS CAPACITY DEVELOPMENT WORKSHOP

PROGRAM | THURSDAY, APRIL 27, 2023

CIHR-ICRH/CSS CAPACITY DEVELOPMENT WORKSHOP for Trainees is a daylong event that has been designed by trainees for trainees in sleep research. The program will be relevant to a wide range of trainees, and is planned to achieve scientific integrity, objectivity, and balance. Participation is encouraged from trainees at all levels, from undergraduate, graduate students and postdoctoral fellows working in basic and clinical research fields. The program will include hands-on skill development workshops, career talks, trainee presentations, and conclude with a social 'data blitz'-fast talks of trainee research followed by cocktails and networking. Program is scheduled for Thursday April 27, 2023, from 09:00 to 16:00.

### Welcome and Opening Remarks

DATE: 04/27/2023

START TIME: 9:00 am END TIME: 9:15 am

### Ethics and Applications of Artifical Intelligence & ChatGPT

DATE: 04/27/2023

START TIME: 9:15 am END TIME: 10:15 am

DESCRIPTION: An explosion of interest has been observed in AI and specifically ChatGPT, and OpenAI overall. As a graduate student in research and psychology backgrounds, it's important to stay up to date on the latest developments in AI and understand its applications, limitations, and ethical considerations. Join us for a panel discussion on the topic, featuring experts in the field who will share their insights and experience with AI in psychology research. Don't miss out on this opportunity to learn about cutting-edge AI techniques and discuss ethical considerations for AI development and use. We hope to see you there! (This was written by ChatGPT itself!)

### Career Panel

DATE: 04/27/2023

START TIME: 10:15 am END TIME: 10:45 am

DESCRIPTION: Questions and answers with panel of professionals about career options post-

graduate studies.

### Health Break

DATE: 04/27/2023

START TIME: 10:45 am END TIME: 11:00 am

### CBT-I Talk: Insomnia management in primary care: Enabling CBTi use and sedative deprescribing

DATE: 04/27/2023

START TIME: 11:00 am END TIME: 12:00 pm

DESCRIPTION: David Gardner (PharmD) is a professor with the Department of Psychiatry at Dalhousie University. He is interested in improving the care and health of people living with mental illness through safe and effective use of psychiatric medications, through improving physical health



care to people with mental illness, and increasing the capacity of care in the community. His research ranges from pharmacoepidemiological studies to program implementation and evaluation.. In 2017 Dr. Gardner was a National receipient of the Centre for Addictions and Mental Health (CAMH) Difference Maker award. Dr. Gardner co-leads the Sleepwell website, which aims to help individuals with insomnia to sleep without medications, primarily through cognitive behavioural therapy for insomnia (CBT-I).

### Lunch

DATE: 04/27/2023

START TIME: 12:00 pm END TIME: 1:00 pm

### Video Capsule - Public Speaking Tips

DATE: 04/27/2023

START TIME: 1:00 pm END TIME: 1:15 pm

### Presentation by CSS Top Abstract Award

DATE: 04/27/2023

START TIME: 1:15 pm END TIME: 1:45 pm

### Presentations by Experimental Sleep Research & Clinical Sleep Research Students

DATE: 04/27/2023

START TIME: 1:45 pm END TIME: 2:45 pm

### Health Break

DATE: 04/27/2023

START TIME: 2:45 pm END TIME: 3:00 pm

### Data Blitz, Vote, and Cocktail Social

DATE: 04/27/2023

START TIME: 3:00 pm END TIME: 4:00 pm

### CIHR-ICRH/CSS CAPACITY DEVELOPMENT WORKSHOP PROGRAM JOINS SCIENTIFIC PROGRAM

### CONFERENCE OPENING AND AWARDS

DATE: 04/27/2023

START TIME: 4:00 pm END TIME: 4:30 pm

### KEYNOTE 1A: REM Sleep in Health and Disease

PRESENTER: Dr John Peever PhD AFFILIATION: University of Toronto

DATE: 04/27/2023

START TIME: 4:30 pm END TIME: 5:15 pm



### KEYNOTE 1B: Cognitive Behavioral Therapy for Insomnia: from Clinical Trials to Practice Guidelines, Dissemination and Implementation.

PRESENTER: Dr Charles Morin PhD

AFFILIATION: School of Psychology, Laval University

DATE: 04/27/2023

START TIME: 5:15 pm END TIME: 6:00 pm

### **CSS ANNUAL GENERAL MEETING**

DATE: 04/27/2023

START TIME: 6:00 pm END TIME: 7:00 pm

### Welcome Reception in the Exhibit Hall

DATE: 04/27/2023

START TIME: 6:00 pm END TIME: 8:00 pm

See Scientific Program for Session Descriptions

Trainees registered for the full conference join the regular conference programming starting at 4 pm on April 27 – April 29 at 5 pm.

### 2023 Canadian Sleep Society Conference

DENTAL CME PROGRAM APRIL 29, 2023

# DENTAL CME PROGRAM – AT A GLANCE | SATURDAY, APRIL 29, 2023

Société Canadienne du Sommeil										sleepconference.ca css-scs.ca
Canadian Sleep Society	orders and the related therapies.	Year in review for OAT Dr. Jean-François Massé, Laval University	What are the Uses for CBCT in OSA? Dr. Carlos Flores-Mir, University of Alberta	Health Break	The Future of Combination Therapy; The Choice Trial Dr. Mona Hamoda, University of British Columbia	Conference Wrap-up and Prizes Dr. Célyne Bastien, Laval University	Learning Objectives: By participating in this Dental CME program, attendees will be able to:	Describe dental sleep medicine treatments for sleep disorders among various groups.	Review the latest evidence on oral appliance therapy.	Explain the future or combined meraples in Dental Steep Medicine and OSA,
	o better understand sleep dis	2:00 PM - 2:45 PM	2:45 PM - 3:30 PM	3:30 PM - 3:45 PM	3:45 PM - 4:30 PM	4:30 PM - 5:00 PM	Learning Objectives: By attendees will be able to:	Describe der disorders am	Review the land	Explain me future or com Sleep Medicine and OSA.
Dental CME Program Presented in english only	This program is purpose built by sleep dental experts for dentists who want to better understand sleep disorders and the related therapies.	Pediatric Update on Therapeutics for Management of OSA Dr. Indra Narang, The Hospital for Sick Children	Keynote 6: Sleep and Pain Interaction with Placebo Analgesia Dr. Gilles Lavigne, University of Montreal	Keynote 7: Diet & Sleep; Vicious or Healthful Cycle? Dr. Marie-Pierre St-Onge, Columbia University	Health Break	Symposium 9: An Evidence-Based Update of Surgery for OSA in Children and Adults	Dr. filla websalli, University of Toronto Dr. Losie Xu, North York General Hospital	Lunch	Poster Session and Poster Tour - Session 2	Presentation times are in Eastern Time zone. Full presenter information is available on the conference website.
en sented i	29 APRIL 29 2023	8:30 AM - 9:15 AM	9:15 AM - 10:00 AM	10:00 AM -	10:45 AM - 11:15 AM	1115 AM -	12:45 PM	12:45 PM - 2:00 PM	1:15 PM - 2:00 PM	esentation tir



### DENTAL CME PROGRAM - DETAILED | SATURDAY, APRIL 29, 2023

### **GREAT CANADIAN SLEEPWALK**

DATE: 04/29/2023

START TIME: 7:00 am END TIME: 8:00 am

### Pediatric Update on Therapeutics for Management of OSA

PRESENTER: Dr. Indra Narang BMEDSci, MBBCH, MD,

AFFILIATION: Research Institute; University of Toronto Hospital for Sick Children

DATE: 04/29/2023

START TIME: 8:30 am END TIME: 9:15 am

DESCRIPTION: This session will first describe our current strategies and challenges for the

management of OSA in children. Following this, emerging novel therapeutics for the management of children with OSA particularly with medical complexity and /or

obesity will be discussed.

### Sleep and Pain Interaction with Placebo Analgesia

PRESENTER: Dr Gilles Lavigne DMD, PhD, FRCD (oral med)

AFFILIATION: Université de Montréal

DATE: 04/29/2023

START TIME: 9:15 am END TIME: 10:00 am

### Diet & Sleep: Vicious or Healthful Cycle?

PRESENTER: Dr Marie-Pierre St-Onge PhD

AFFILIATION: Center of Excellence for Sleep & Circadian Research at Columbia University Irving

**Medical Center** 

DATE: 04/29/2023

START TIME: 10:00 am END TIME: 10:45 am

### Health Break

DATE: 04/29/2023

START TIME: 10:45 am END TIME: 11:15 am

### SYMPOSIUM 9: An Evidence-Based Update of Surgery for OSA in Children and Adults

DATE: 04/29/2023

START TIME: 11:15 am END TIME: 12:45 pm

See Scientific Program for session details

### Lunch and Exhibit Hall

DATE: 04/29/2023

START TIME: 12:45 pm END TIME: 2:00 pm



### POSTER SESSION & POSTER TOUR - SESSION 2

DATE: 04/29/2023

START TIME: 1:15 pm END TIME: 2:00 pm

DESCRIPTION: Starting at 1:15 PM, Poster Presenters will be at their posters for discussion and

questions. There will also be an organized poster tour with identified posters participating in this review which will includes awards for several categories.

### Year in Review for OAT

PRESENTER: Dr Jean-François Masse DMD, M Sc.

AFFILIATION: Université Laval, Institut universitaire de cardiologie et de pneumologie de Québec

DATE: 04/29/2023

START TIME: 2:00 pm END TIME: 2:45 pm

DESCRIPTION: A review of some of the best scientific papers regarding Dental Sleep Medicine

published in the past year.

### What are the Uses for CBCT in OSA?

PRESENTER: Carlos Flores-Mir AFFILIATION: University of Alberta

DATE: 04/29/2023

START TIME: 2:45 pm END TIME: 3:30 pm

DESCRIPTION: This session will discuss the potential use of CBCT imaging in the screening, diagnosis,

and monitoring of OSA. The discussion will start with assessing our current

knowledge about the portrayed link between craniofacial characteristics and OSA. Then the focus will shift to using CBCT imaging to screen for hypertrophic adenoids and to assess upper airway volumetric changes after orthodontic management. Finally, the need to focus on phenotyping to identify those OSA cases that would more likely benefit from orthodontic interventions vs. blank intervention of any residual OSA that did not respond to T&A surgery (children and adolescents' first line

of action) or as the first line of action for mild adult OSA cases.

### Health Break

DATE: 04/29/2023

START TIME: 3:30 pm END TIME: 3:45 pm



### The Future of Combination Therapy; The Choice Trial

PRESENTER: Dr Mona Hamoda BDS, MS (Ortho), MHSC, PHD/Dip. in Orthodontics

AFFILIATION: Faculty of Dentistry, University of British Columbia

DATE: 04/29/2023

START TIME: 3:45 pm END TIME: 4:30 pm

DESCRIPTION: Obstructive sleep apnea (OSA) is a chronic condition, and management requires life-

long adherence to therapy. Continuous Positive Airway Pressure (CPAP) and

Mandibular Advancement Splints (MAS) are disease-specific therapies for OSA, with CPAP being the first-line treatment. Treatment typically involves either CPAP or MAS

however, the effect of combining the two therapies has not been previously

thoroughly investigated. This presentation will answer the following questions: How does the effectiveness of MAS compare to that of CPAP based on an objective assessment of adherence to both? How does the combination of both therapies compare to having only one therapy in terms of adherence, effect on blood pressure, quality of life and overall effectiveness? Can combination therapy be part of the

clinician's toolbox, and could it play a role in the long-term management of OSA?

### Conference Wrap-up and Prizes

DATE: 04/29/2023

START TIME: 4:30 pm END TIME: 5:00 pm

See Scientific Program for Keynote and Symposium Session Descriptions



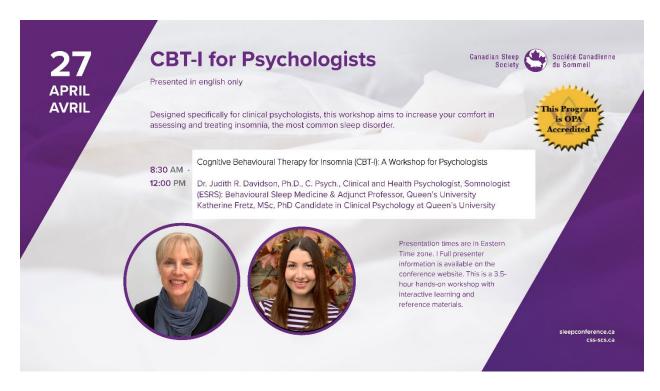
2023 Canadian Sleep Society Conference

COGNITIVE BEHAVIOURAL THERAPY PROGRAM FOR PSYCHOLOGISTS

APRIL 27, 2023



### **CBT-I FOR PSYCHOLOGISTS**



### Cognitive Behavioural Therapy for Insomnia (CBT-I): A Workshop for Psychologists (ENGLISH ONLY)

PRESENTER: Dr Judith Davidson Ph.D., C.Psych., Somnologist (ESRS)

AFFILIATION: Queen's University

PRESENTER: Katherine Fretz, MSc, PhD Candidate in Clinical Psychology

AFFILIATION: Queen's University

DATE: 04/27/2023

START TIME: 8:30 am END TIME: 12:00 pm

DESCRIPTION: Designed specifically for clinical psychologists, this workshop aims to increase your

comfort in assessing and treating insomnia, the most common sleep disorder. A highly effective intervention, cognitive behavioural therapy for insomnia (CBT-I) is one of the most robust and rewarding treatments that you can offer. CBT-I not only leads to sleep satisfaction but also to mood improvement. The workshop will introduce you to the main tools used in the assessment of insomnia, the biological and psychological underpinnings of the components of CBT-I; and we will show you how to guide your clients in sleep scheduling and de-arousal techniques. You will be encouraged to consider how you might integrate CBT-I into your practice.

### **CONTINUING PROFESSIONAL DEVELOPMENT FOR PSYCHOLOGISTS**

This program has been approved by the Ontario Psychological Association to offer continuing education for psychologists and psychological associates. This program meets the criteria for 3.0 continuing education credits.





### **CONFERENCE OPENING AND AWARDS**

DATE: 04/27/2023

START TIME: 4:00 pm END TIME: 4:30 pm

KEYNOTE 1A: REM Sleep in Health and Disease

PRESENTER: Dr John Peever PhD AFFILIATION: University of Toronto

DATE: 04/27/2023

START TIME: 4:30 pm END TIME: 5:15 pm

KEYNOTE 1B: Cognitive Behavioral Therapy for Insomnia: from Clinical Trials to

Practice Guidelines, Dissemination and Implementation.

PRESENTER: Dr Charles Morin PhD

AFFILIATION: School of Psychology, Laval University

DATE: 04/27/2023

START TIME: 5:15 pm END TIME: 6:00 pm

### CSS ANNUAL GENERAL MEETING

DATE: 04/27/2023

START TIME: 6:00 pm END TIME: 7:00 pm

### Welcome Reception in the Exhibit Hall

DATE: 04/27/2023

START TIME: 6:00 pm END TIME: 8:00 pm

See Scientific Program for Session Descriptions





### PROGRAM ACCREDITATION: CME, CEC AND CDE INFORMATION

### CME Credit Information for Primary Care Physicians and General Scientific Programs

This continuing professional development activity was held under the auspices of Continuing Professional Development, Temerty Faculty of Medicine, University of Toronto and the Canadian Sleep Society.



### FOR PARTICIPANTS IN THE PRIMARY CARE PHYSICIANS PROGRAM:

CFPC CERT+ # 199418-001

### COLLEGE OF FAMILY PHYSICIANS OF CANADA – MAINPRO+:

This one-credit-per-hour Group Learning program meets the certification criteria of the College of Family Physicians of Canada and has been certified by Continuing Professional Development, Temerty Faculty of Medicine, University of Toronto for up to 7.0 Mainpro+credits.

### FOR PARTICIPANTS IN THE GENERAL SCIENTIFIC PROGRAM: CFPC CERT+ # 199419-001

### ROYAL COLLEGE OF PHYSICIANS AND SURGEONS OF CANADA - SECTION 1

This event is an Accredited Group Learning Activity (Section 1) as defined by the Maintenance of Certification Program of the Royal College of Physicians and Surgeons of Canada, approved by Continuing Professional Development, Temerty Faculty of Medicine, University of Toronto. You may claim a maximum of 13.0 hours.

### THE AMERICAN MEDICAL ASSOCIATION - AMA PRA CATEGORY 1

Through an agreement between the Royal College of Physicians and Surgeons of Canada and the American Medical Association, physicians may convert Royal College MOC credits to AMA PRA Category 1 Credits™. Information on the process to convert Royal College MOC credit to AMA credit can be found at: <a href="https://www.ama-assn.org/education/ama-pra-credit-system/agreement-royal-college-physicians-surgeons-canada">https://www.ama-assn.org/education/ama-pra-credit-system/agreement-royal-college-physicians-surgeons-canada</a>

### **EUROPEAN UNION FOR MEDICAL SPECIALISTS (EUMS) ECMEC**

Live educational activities, occurring in Canada, recognized by the Royal College of Physicians and Surgeons of Canada as Accredited Group Learning Activities (Section 1) are deemed by the European Union of Medical Specialists (UEMS) eligible for ECMEC®."

### **CEC CREDIT INFORMATION FOR TECHNOLOGISTS**

Continuing Education Credits (CEC) for Technologists for attendance at CSS conferences are given by the Canadian Sleep Society and recognized by the Board of Registered Polysomnographic Technologists (BRPT).



Total number of CEC hours for attendance at the three-day program is 22.0 credits and it breaks down by day:

CREDITS AVAILABLE	Thursday	Friday	Saturday	TOTAL
TECHNOLOGIST	6.5 credits	7.0 credits	7.5 credits	22.0 credits

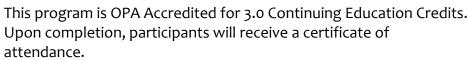
### **CDE CREDIT INFORMATION FOR DENTISTS**

The Dental CME program has been approved for continuing education credits by the by the Canadian Sleep Society.

This activity will be eligible for a maximum 6.0 dental continuing educations credit.

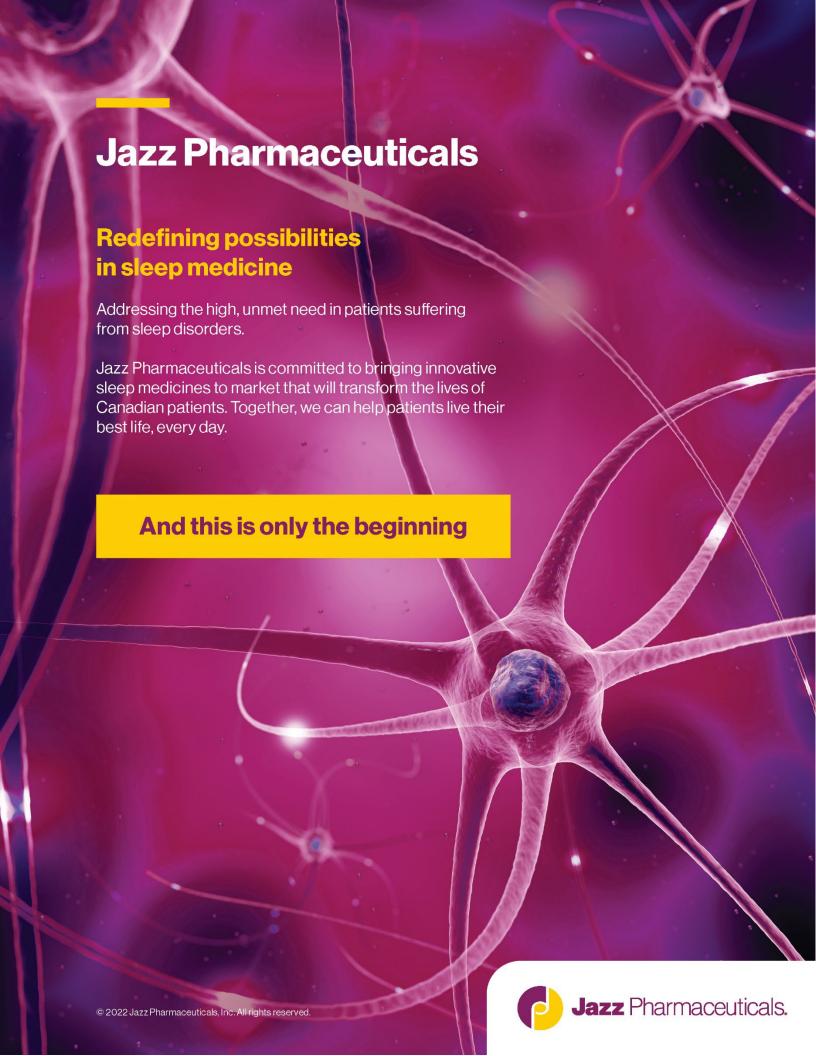
### **CBT-I FOR PSYCHOLOGISTS**

### **CONTINUING PROFESSIONAL DEVELOPMENT FOR PSYCHOLOGISTS**











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Booth 601

Oral appliance therapy

Insomnia & poor sleep

Dietitian services for sleep



In-home PSG

Join us!

Debunking Sleep Apnea Myths:

An Industry Perspective

Apri 28, 1:30 PM- 3:00 PM

Odds Ratio Product

Autoscoring



### **2023 STRATEGIC SLEEP PARTNERS:**







### **2023 SLEEP ADVOCATE PARTNERS:**





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