# **Jonathan Charest**

Centre for Sleep & Human Performance 106, 51 Sunpark Drive SE Calgary, Alberta T2X 3V4 Cell: 514-442-0125 Jcharest@centreforsleep.com

#### Current Position Director of Athlete Sleep Services, Centre for & and Human Performance Behavioral Sleep Medicine Specialist, Centre for Sleep & Human Performance Adjunct Professor – School of Psychology – Université Laval Postdoctoral Fellow – Kinesiology – University of Calgary

#### **Research and Clinical Interests**

Broad application of Behavioral Sleep Medicine, including studies of sleep and health, and the development and implementation of behavioral interventions for insufficient sleep. Specific areas of focus include: (1) Mechanisms linking sleep and athletic/physical performance, (2) Contextual social, behavioral, and biological determinants of habitual sleep duration, insufficient sleep, and poor sleep quality, and (3) Development and implementation of behavioral and other non-invasive interventions (e.g., tDCS) for sleep and physical/mental performance.

Education		
2016-2020	Ph.D.	Université Laval Doctoral program in psychology (sleep and athletic performance)
2014-2017	M.A.	Université de Sherbrooke Master in gerontology (sleep and chronic pain)
2012-2014	B. Sc.	Université de Sherbrooke Bachelor in psychology
2011-2012	Cert.	Université de Sherbrooke Certificate in psychology
Internships		
2018	Research inte	f Arizona (College of medicine) ernship in psychology, sleep, and athletic performances hology with NCAA teams
2016		f Calgary eep and Human Performance anadian Olympic and NHL team

## Academic Positions

2021-Present	Adjunct Professor School of Psychology, Université Laval
2016-2020	<ul> <li>Ph.D in Psychology</li> <li>School of Psychology, Université Laval</li> <li>Thesis: Improving Sleep in Student-Athletes Using Transcranial Direct Current Stimulation (tDCS)</li> </ul>
2016	<b>Teaching Assistant</b> School of psychology, Université Laval Group Therapies, PSY-8021
2014-2016	<ul> <li>Research Assistant (Doctor Lorrain)</li> <li>Centre de recherche sur le sommeil, Université de Sherbrooke</li> <li>Project: Quebec's Consortium to Identify Prodromal Alzheimer's Disease (CIMA-Q)</li> <li>Conducting neuropsychological tests</li> <li>Functional magnetic resonance imaging training (fMRI)</li> </ul>
2014-2016	<ul> <li>Research Assistant (Doctor Lorrain)</li> <li>Centre de recherche sur le sommeil, Université de Sherbrooke</li> <li>Project: <i>Study on the architectural modification of sleep and cognition among elderly.</i></li> <li>Electroencephalography (EEG) analysis</li> <li>Passing neuropsychological tests</li> </ul>
2014-2016	<ul> <li>Research Assistant (Doctor Plourde)</li> <li>Centre de recherche sur le sommeil, Université de Sherbrooke</li> <li>Project: <i>Study on omega-3 fish oils and the memory, attention and reasoning in the elderly.</i></li> <li>Passing neuropsychological tests</li> </ul>

## Membership and Service in Academic/Professional Organizations

2021- Present	Sleep Research Society (SRS) Member, Sleep and Behavior Section
2019	World Sleep Society (WSS)
	Organizing member of the trainee day of the Canadian Sleep Society at the
	World Sleep Society convention in Vancouver.

2017-Present	<b>Canadian Sleep Society (CSS)</b> Member Board member, Media and Advocacy Student representative (2017-2019)
2015	<b>Centre for Research on Aging (CDRV)</b> Organizing member of the scientific day and gerontoclub Université de Sherbrooke

## **Professional Positions**

2020-Present	<b>Board Member – Media &amp; Advocacy</b> Canadian Sleep Society (CSS)
2020-Present	<b>External Consultant – Mental Health and Athletes</b> ActiveCITY playbook for the Calgary City
2019-Present	<b>Director of Athlete Sleep Services</b> Centre for Sleep & Human Performance
2019-Present	Behavioral Sleep Medicine Specialist Centre for Sleep & Human Performance
2018-2020	<b>Board member – Canadian Student rep.</b> Canadian Sleep Society (CSS)
2017-2020	<ul> <li>Sleep and performance specialist</li> <li>Excellence Sportive Québec-Lévis (ESQL)</li> <li>Writing sports content related to sleep and performance</li> <li>Conferences</li> </ul>
2014-2016	<ul> <li>Specialist in sport psychology</li> <li>Vert et Or track and field team, Université de Sherbrooke</li> <li>Helping athletes managing pre and post competition stress</li> <li>Psychological support during competitions and training</li> </ul>
Grants	
2021	Mitacs Accelerate – Postdoctoral Fellow Validation of the Athlete Sleep Screening Questionnaire (ASSQ) in a student-athlete population: 165,000\$
2019	Herrenhausen Symposium, Volkswagen, Hannover Germany Travel award for Ph.D. presentation

2018	<b>Steven M. Gooter Foundation</b> Research grant for sudden cardiac arrest risk factors in athletes ( <b>Invited student</b> )
2017	<b>Circadian Sleep Canadian Network</b> Trainee Travel Award: <b>2000</b> \$
2015	Université de Sherbrooke Student excellence award: 2000\$
2004-2006	Alliance Sports-Études Athletic excellence award: 2000\$

#### Editorial Contributions

#### Journals (Reviewer) 2020-Present British Journal of Sports Medicine 2020-Present Sports Medicine 2020-Present Brain Sciences MDPI 2020-Present Medical Hypotheses 2020-Present The Journal of General Psychology 2019-Present Medicine & Science in Sports & Exercise 2019-Present Journal of Sports Sciences 2019-Present Sports Health: Sage Journals 2018-present Sleep Health: Journal of the Sleep National Foundation

#### **Guest Lecturer**

1. **Charest, J.** (Winter, 2020). University of Calgary, Kinesiology, (Calgary) *Sleep, Concussion and Mental Health* 

### **Conference Presentations**

1. **Charest, J.** (2021, April). Presentation at Alberta Esports Association (AESA), (Calgary). *Sleep, Performance, and Esports* 

- 2. **Charest, J.** (2021, March). Presentation at Salt Flat, (Calgary) Sleep and E-athletes: The importance of recovery for Performance in E-athletes
- 3. **Charest, J.** (2020, October). Presentation at Ski Canada, (Canmore) *Sleep and elite winter athletes*
- 4. **Charest, J.** (2020, October). Presentation at Hockey Canada, (Calgary) *Sleep and strategies in adolescent hockey players*
- 5. **Charest, J.** (2020, September). Presentation at Hockey Canada (Calgary) *Sleep, Performance and Mental Health*
- 6. **Charest, J.** (2020, March). Presentation at Optimum Education, (Montreal) *Sleep, Jet Lag, Mental Health, Concussion, Jet Lag and Sleep Trackers*
- 7. **Charest, J.** (2020, February). Presentation at the Calgary Track and Field Club, (Calgary) *Sleep, Jet Lag and Mental Health*
- 8. **Charest, J.** (2019, October). Presentation at the Olympic Lab, (Toronto) *Sleep, Jet Lag and athletic performances*
- 9. **Charest, J.** (2019, September). Presentation at Herrenhausen Symposium, Volkswagen, Hannover Germany: "Insomnia Treatment for Preventing Cardiovascular Diseases and Mental Disorders". *Can a tDCS treatment enhance subjective and objective sleep among student-athletes*
- 10. **Charest, J.** (2019, September). Presentation at SPIN Summit, (Toronto) *French Validation of the Athlete Sleep Screening Questionnaire*
- Charest, J. (2019, September). Presentation at the World Sleep Congress (WSS), (Vancouver) Treating Sleep Problems and Disorders in Elite Athletes: Adaptive Solutions to Varied Clinical Challenges
- 12. **Charest, J.** (2019, August). Presentation at the Peps Clinique. Health professionals and specialist for the Rouge et Or (Quebec). *Impacts of untreated sleep in athletes*
- 13. Charest, J. (2019, July). Presentation at the Rouge et Or health professional symposium, (Quebec)
   The importance of sleep in student-athletes
- Charest, J. (2019, June). Presentation at the Rimouski health professional symposium, (Rimouski) Impacts of untreated sleep in athletes

15. **Charest, J.** (2018, August). Presentation at ESQL, (Quebec) *Basic concepts of sleep and its impact on athletes* 

#### Publications (Articles)

- 1. **Charest, J.**, Bastien, C., Ellis, J., Killgore, S., & Grandner, M., (2021). Verbal, Physical, and Sexual Assault Experiences among Student Athletes and Non-Athletes: Impact of Sleep, Mood, and Alcohol Use. *International Journal of Environmental Research and Public Health*, 18, 2883.
- 2. Singh, M., Bird, S. P., **Charest, J**., Huyghe, T., & Calleja-Gonzalez, J. (2021). From the NBA to the NHL: a parallel problem exists. *Journal of Clinical Sleep Medicine*, jcsm-9124.
- 3. Mohindra, M., Bird, S., **Charest, J.**, Huyghe, T., & Calleja-Gonzalez, J. (2020). Urgent wake up call for the NBA. *Journal of Clinical Sleep Medicine: JCSM: Official Publication of the American Academy of Sleep Medicine.*
- 4. **Charest J** & Grandner, M (2020). Sleep and Athletic Performance, Impacts on Physical Performance, Mental Performance, Injury Risk and Recovery, and Mental Health. *Sleep Medicine Clinics*, 15(1), 41-57.
- 5. Provencher T, **Charest J**, Bastien C. H. (2020). Non-Invasive Brain Stimulation for Insomnia - A Review of Current Data and Future Implications. *OBM Integrative and Complementary Medicine*, 5(1):28; doi:10.21926/obm.icm.2001001.
- 6. **Charest, J.,** Marois, A & Bastien, C., (2020). Impact of tDCS on sleep depth among student-athletes. *International Journal of Sport Psychology*. 10(1):25
- 7. **Charest, J.**, Grandner, M.A., Athey, A., McDuff, D., & Turner, R.W. (2020) Substance Use Among Collegiate Athletes Versus Non-Athletes. *Journal of American College Health*. (Under review)
- 8. **Charest, J.**, Marois, A., & Bastien, C. H. (2019). Can a tDCS treatment enhance subjective and objective sleep among student-athletes?. *Journal of American College Health*, 1-12.
- Gagnon-Hébert, A., Verrault, M., Jobin-Théberge, A., Charest, J., & Bastien, C. H. (2019). Validation francophone des questionnaires de sommeil auprès des étudiantsathlètes du Québec. *Psycause*: Revue scientifique étudiante de l'École de psychologie de l'Université Laval, 9(2), 25-26.
- 10. Bastien, C. H., Ellis, J. G., Athey, A., Chakravorty, S., Robbins, R., Knowlden, A. P., **Charest, J.**, & Grandner, M. A. (2019). Driving after drinking alcohol associated with insufficient sleep and insomnia among student athletes and non-athletes. *Brain sciences*, 9(2), 46.

Publications (Abstracts/Posters)

- 1. **Charest, J.**, Samuels, C., Bastien., C., Lawson, D., & Grandner, M. (2021). Impacts of travel distance and travel direction on back-to-back games in the National Basketball Association (NBA). Poster Presented at SLEEP (2021).
- 2. **Charest, J.**, Samuels, C., Bastien., C., Lawson, D., Greening, C., & Grandner, M. (2021). Impacts of travel and time zone differences in the National Hockey League (NHL). Poster Presented at SLEEP (2021).
- Harun, A., Killgore, S., Wills, C., Charest, J., & Grandner, Michael (2021) Changes in Physical Activity During the COVID-19 Pandemic Associated with Changes in Sleep. Poster Presented at SLEEP (2021)
- 4. Clay, M., Athey, A., **Charest, J.,** Auerbach, A., Turner, R., Killgore, WS., Wills, C., & Grandner, M. (2019). Team-Based Athletes Sleep Less and than Individual Athletes, But Do Not Report More Insomnia or Fatigue. Abstract Presented at SLEEP (2020)
- 5. **Charest, J.,** Bender, A., Bastien, C., & Samuels, C. (2017). Sleep interventions improve subjective sleep, mood, and race performance in Canadian national team speed skaters. *Sleep Medicine*, 40, e51-e52.
- 6. Bastien, C., Ellis, J., Athey, A., Chakravorty, S., Robbins, R., Knowlden, A., **Charest., J.** & Grandner, M. (2017). Driving after alcohol consumption is associated with insufficient sleep and insomnia among student athletes and non-athletes. *Sleep Medicine*, 40, e27.
- 7. Rancourt, C., **Charest, J.**, Pedneault-Drolet, M., Perusse, A., & Bastien, C. H. (2017, April). DREAM INCORPORATION OF INSOMNIA SUFFERERS AND GOOD SLEEPERS IN AN EXPERIMENTAL SETTING. In SLEEP (Vol. 40, pp. A149-A149). JOURNALS DEPT, 2001 EVANS RD, CARY, NC 27513 USA: OXFORD UNIV PRESS INC.

#### Publications (Book Chapters)

1. **Charest, J** & Grandner, M (2021). Sleep, Nutrition and Supplements: Implications for Athletes.

#### Publications (Mémoire)

1. **Charest, J. (2017).** L'effet de la stimulation transcrânienne à courant direct (tDCS) sur la douleur et le sommeil des personnes âgées souffrant de douleur musculosquelettique.

#### Publications (Thesis)

1. **Charest, J (2020).** Améliorer la qualité du sommeil des étudiants-athlètes à l'aide de la stimulation transcrânienne à courant direct (tDCS)

#### Podcasts

 Dr. Coach Frank Podcast, Episode 30 (March 6, 2021) Performance – Sommeil et Routine, Jonathan Charest. Host François Rodrigue. <u>https://drcoachfrank.com/episode-030-</u> performance-sommeil/

## Blog Posts, Newsletter Articles and Media Coverage

- 1. **Charest, J.** (2021). Le sommeil chez les athlètes Radio-Canada <u>https://ici.radio-canada.ca/ohdio/premiere/emissions/bien-</u> <u>entendu/episodes/558119/rattrapage-du-mercredi-4-aout-2021</u>
- 2. Charest, J. (2021). Why so many seniors can't sleep and how to get help. <u>https://www.theglobeandmail.com/life/article-why-so-many-seniors-cant-sleep-and-how-to-get-help/?utm\_medium=Referrer:+Social+Network+/+Media&utm\_campaign=Shared+Web+Article+Links</u>
- 3. **Charest, J.** (2021). Soigner son sommeil pour atteindre le sommet. Radio-Canada, <u>https://ici.radio-canada.ca/recit-numerique/2176/sommeil-sport-athlete-elite-entrainement-recherches-dormir</u>
- 4. **Charest, J.** (2021). Sleep Optimization in eathletes and performance. Salt Flats 2021 <u>https://www.twitch.tv/esportsalberta</u>
- 5. **Charest, J.** (2021). Tools to help you get a good night's sleep. <u>https://www.thestar.com/life/health\_wellness/2021/01/24/tools-to-help-you-get-a-good-nights-sleep.html</u>
- 6. **Charest, J**. (2020). 10 Science-Backed Ways to Get More Shut-Eye. Reader's Digest Best Health Magazine. <u>https://www.besthealthmag.ca/best-you/sleep/better-night-sleep/</u>
- 7. **Charest, J**. (2020). Cardiff Youth Services and Centre for Sleep Q & A. Cardiff Youth Blog and YouTube (<u>https://www.youtube.com/watch?v=quzp4kR\_uVI&t=446s</u>)