

ADHD Research Digest

### Message from the Chair



Welcome to the fall edition of the CADDRA ADHD Research Digest.

We would like to thank all delegates who traveled to St. John's, Newfoundland to attend the 9<sup>th</sup> Annual CADDRA ADHD Research Day. We were delighted to see everyone IN PERSON again, and to experience such a variety of enriching and informative

events together and the wonderful sunny weather was a bonus!

For more information on the successful day, see pgs. 2-5.

We look forward to continuing to see everyone in person at future events. Remember to schedule the 10<sup>th</sup> Annual Research Day on Friday, September 29th in Montreal in your 2023 calendar.

Maggi Toplak Ph.D., C.Psych. CADDRA Research Committee Chair



#### In This Issue

- 9th Annual ADHD Research Day, pages 2-5
- Researcher Spotlight, page 6
- Member News, page 6
- CADDRA Member Research Achievements, page 7
- Upcoming Events, page 7
- ADHD Research in the News, page 8
- CADDRA Research News. page 8
- Study Recruitments, page 9
- Student Corner, page 9

Editors. Anne-Claude Bedard Ph.D. Brandy Callahan Ph.D., R.Psych.

### CADDRA Research Committee

The committee oversees the planning of Research Day and the implementation of CADDRA's mission and research agenda identified as part of CADDRA's overall strategic plan.

Anne-Claude Bedard Ph.D. Debra Butt M.Sc., M.D., C.C.F.P. Brandy Callahan Ph.D., R.Psych. Emma A Climie Ph.D., R.Psych. Penny Corkum Ph.D., R.Psych. Jennifer Crosbie Ph.D., C.Psych.

Natalie Grizenko M.D., F.R.C.P.C. Lily Hechtman M.D., F.R.C.P. Jacqueline B Hesson Ph.D., R.Psych. Nair Rajesh MRCPsych Yuanyuan Jiang Ph.D., C.Psych. Martin Katzman M.D., F.R.C.P.C. Carlin J Miller Ph.D., C.Psych.

Heather Paul M.Ed. Sarah Pickett Ph.D., R.Psych. Maria Rogers Ph.D., C.Psych. Maggie Toplak Ph.D., C.Psych.

Fall 2022, Issue 7



### 9th Annual ADHD Research Day

The in-person event was a success with over 160 delegates in attendance!



The day kicked off with an opening welcome by Research Day co-chairs Drs. Jacqueline Hesson and Maggie Toplak.

Keynotes were presented by by Dr. Dora Wynchank on ADHD and the reproductive cycle, and by Dr. Margaret Sibley on patterns of remission in the Multimodal Treatment of Attention Deficit Hyperactivity Disorder (MTA) Study.

Attendees said:



Dr. Wynchank was fantastic! She was very easy to listen to and her passion for ADHD was infectious.



Excellent presentation of recent, and important findings. Very helpful for clinical practice. (re: Dr. Sibley's presentation)

Keynote speakers were excellent. Interesting and relevant topics, engaging speakers and very knowledgeable.

#### Posters

Thirty-six posters were presented, some in person and all were available virtually.

Every student received a KBHN/ CADDRA Registration Award.

The following also received a \$500 KBHN/CADDRA Junior Researcher Travel Award:

- Samantha Ayers-Glassey
- Brittany Burek
- Leigh Dunn
- Shir Kay
- Himayini Sharma
- Himanthri Weerawardhena
- Sydney Wells
- Jan Wozniak



Posters are listed over the next few pages.

Click here to view a listing with links to each abstract.

### 9th Annual ADHD Research Day

- Getting us all back in the swing of in-person conferences was so important.
  - Having multiple mental health professions represented in the speakers and the audience with lots of opportunity for discussion across the disciplines
    this will surely support increased collaboration.
  - I loved getting to chat with fellow researchers/ trainees and hear about their experiences and future directions.
  - All presentations in one room. Made efficient use of time for such a quantity of information
  - Relevant and exciting new developments in ADHD research presented
  - The whole day was really interesting and informative. It is hard to single out any one thing.



Five research presentations were given by Drs. Debra Butt, Jennifer Crosbie, Martin Gignac, YuanYuan Jiang, and Russell Schachar.

A range of topics on ADHD were covered, including the ongoing impact of COVID-19, medication and risk of negative outcomes, neurocognitive differences between ADHD and ASD, and Ontario prevalence trends in children.

A panel discussion titled **Getting the Grant: Key Considerations** for Success in the Current Canadian Research Funding

**Landscape** featured Drs. Debra Butt, Brandy Callahan, and Maggie Toplak in-person and Drs. Jennifer Zwicker and Christine Chambers by video recording.

Watch Dr. Zwicker's recording



#### Poster Listing

Assessment and Management Catherine Paquette; Université du Québec en Outaouais

Identifying Reciprocated Friendships in Children with ADHD: A Comparison of Categorical and Dimensional Methods

Shir Kay; York University Assessment and Management

Does Degree of Structure in Cognitive Performance-Based Tasks Explain Performance Variability in ADHD?

Clinical Considerations & Symptoms Leigh Dunn; Memorial University of Newfoundland

Emotion Dysregulation and ADHD Symptoms: A Comparison of Positive and Negative Emotions

Fiona Trend-Cunningham; Fielding Graduate University

Prevalence of Attention Deficit and Hyperactivity Disorder in the Transgender Population

Jaidon MacLean; Carleton University Have ADHD Symptoms Increased during the Covid-19 Pandemic? A Rapid Review of Studies

Cognitive/Neuropsychological Profiles Himanthri Weerawardhena; University of Calgary

Attention-Deficit/Hyperactivity Disorder, Personality Traits, and Executive Functions Associated with Functional Outcomes in Adults

Community & School-Based Approaches

Sarah Campbell; Horizon Health Network Identification of Barriers to Care for Social, Academic and Behavioural Pediatric Referrals

Jean-Francois Lemay; University of Calgary Faculty of Medicine

Impact of a Virtual Behavioural Support Intervention on Improving behaviour, Mental health, and Academic Engagement and Motivation for Children with Adhd and Their families: A Pilot Study

Theresa Siemens; University of Calgary Growth and Fixed Mindsets in Children and Adolescents with ADHD: A Review

Emma Charabin; University of Calgary Taking a Positive Perspective: The Strengths and Resilience of Children with ADHD

## 9th Annual ADHD Research Day

A Conference welcome reception took place during the final poster presentation session, along with music performed by three young men called the *Salt Beef Junkies* and an appearance by a Newfoundland Dog for an authentic Newfoundland experience.





*The Salt Beef Junkies*: Alex Mercer, Luke Mercer, Ty Simms

Dr. Janine Hubbard w. Tiempo

## Other Events during CADDRA 2022

Friday September 30



ADHD 101: An Introductory Workshop was attended by 60 delegates on Friday morning.



Hosted by the Association of Psychology Newfoundland Labrador (APNL) and CADDAC, with the support of CADDRA, a public event titled Ask an Expert: All about Adult ADHD was attended by over 300 individuals on Friday evening. Standing room only!

#### Saturday & Sunday, October 1 & 2



Many Research Day attendees joined us for the 18<sup>th</sup> Annual CADDRA ADHD Conference.

#### Poster Listing

#### Comorbidities

Natalie Holtby: OISE, University of Toronto Understanding the Implications of Sluggish Cognitive Tempo for Academic Engagement: An Examination of Student-Teacher Relationship Quality as an Explanatory Factor

Sydney Wells; Memorial University of Newfoundland The Relationship Between ADHD and Sleep Trouble

Contributing/Causal Factors Michael Van Ameringen; McMaster University The Impact of COVID-19 on ADHD

Yuanyuan Jiang; Saint Paul University, University of Alberta Trajectories of Parent and Child ADHD Symptoms, Parent Cognitions, and Paren

Symptoms, Parent Cognitions, and Parent-Teacher Relationship Quality across Three Timepoints

Hawra Al-Khaz'Aly; University of Calgary Social Support Bolstering Self-Esteem is Linked with Fewer Reported ADHD Symptoms and Better Cognitive Performance in Adults

Developmental Perspectives Brooke Streeter: Dalhousie University Developmental Risk Factors, Adversity experiences and ADHD Clinical Profiles: A Naturalistic Exploratory Study

Kristina Jelinkova; University of Calgary Like Parent, like Child: The Association between Parental Self-Stigma and Youth Self-Stigma in ADHD

Courtney Miller; University of Calgary Parent and Child Identified Strengths of Children with ADHD

Equity, Diversity & Inclusion Ryan Schatz: Dalhousie University Faculty of Medicine

Perceptions of Healthcare Systems for Children Aged 8-12 with Behavioral Issues: A Focus Group Study

Gender and Sex Differences Bethany Torraville; Memorial University of Newfoundland

An Exploration of Gender Differences in Youth with Attention-Deficit Hyperactivity Disorder (ADHD): Levels of Distress and Social Support

Neuroscience, Genetics & Epigenetics Marta Novo: Neurodevelopment Center, Pediatric Department, Centro Materno Infantil do Norte, Centro Hospitalar Universitário do Porto, Portugal Turner Syndrome and Attention Deficit Hyperactivity Disorder

Fall 2022, Issue 7

Fall 2022, Issue 7

### 9th Annual ADHD Research Day in Pictures



















#### Poster Listing

### Pharmacological Treatment & Outcomes

Gurdeep Parhar; Clinical Professor, UBC Faculty of Medicine

Secondary Outcomes in a Pragmatic, Real World Evidence Study of Methylphenidate HCI (PRC-063) and Lisdexamfetamine Dimesylate for Treatment of Pediatric and Adult ADHD

Judy van Stralen; Center for Pediatric Excellence

Phase IV, Pragmatic, Open-Label, Real World Evidence Study of Methylphenidate Hydrochloride Controlled-Release Capsules (PRC-063) and Lisdexamfetamine Dimesylate for Treatment of Pediatric and Adult ADHD

Chandy Somayaji; New Brunswick Institute for Research, Data and Training, University of New Brunswick

Academic and Health Outcomes in Children Prescribed Long-Acting Stimulants for the Treatment and Management of ADHD

Cassandra Uchida; Highland Therapeutics Inc.

Higher Persistence with DR/ER-MPH over Other Extended-Release Stimulants for the Management of ADHD: Real World Evidence from a Large Us Claims Database Analysis

Psychosocial Treatments & Outcomes Phillip Ferguson; St. Michael's Hospital Academic Family Health Team, OISE/ University of Toronto Outcomes and Feasibility of a Virtual Group

Intervention for Adult ADHD in a Primary Care Setting

Jessame Gamboa; University of Calgary Mindfulness-Based Interventions and Emotion Dysregulation in Attention-Deficit/ Hyperactivity Disorder: A Systematic Review

Susan Flynn Lowry; University of Calgary How Effective Are the CanLearn Society's Adult ADHD Programs? Preliminary Results from a Program Evaluation of Non-Pharmacological Interventions

Research Developments/Future Directions Micah Saviet; Springer Institute Optimizing Outcomes for Individuals with ADHD: Contributions from the ADHD Coaching Literature

Ramona (Himayini) Sharma; University of British Columbia

'Higher' Education: A Mixed Methods Exploration of ADHD Symptoms, Cannabis Use, and Academic Success among Postsecondary Students

Fall 2022, Issue 7

### Researcher Spotlight



Debra Butt M.Sc., M.D., C.C.F.P. Dr. Butt is a family physician who has been a primary care researcher in the Department of Family and Community Medicine, University of Toronto since 2002.

Much of her research time has been spent working with large, primary care and administrative health care datasets in the province of Ontario.

In 2021, a casual meeting with CADDRA Board member Dr. Joan Flood led to a discussion on the need for Canadian ADHD prevalence research and spurred a recently completed study on ADHD prevalence and incidence trends in children and youth in Ontario, Canada using a large primary care dataset. At the recent 2022 CADDRA Research Day and CADDRA conference, Dr. Butt presented two studies on ADHD involving two different large primary care datasets. She has provided a few slides describing results from one of these studies involving the UTOPIAN database, which has been submitted for publication. The results indicate that there is much work to be done in primary care ADHD research and that family physicians will need greater resources/supports to manage the increasing demand from individuals with ADHDrelated concerns presenting to their offices. View slides

For further information on Dr. Debra Butt, her research endeavours, why she chose her current line of research, what excites her about this research and what impact she expects it to have, as well as her advice for students and trainees, Read the full Research Spotlight summary.

#### Member News



Dr. Maggie Toplak is participating in a research fellowship based out of Jerusalem from September 1 to December 31, 2022. The fellowship is being funded by the Israel Institute for Advanced Studies (IIAS). The topic of this fellowship is metareasoning, a relatively new area of research focused on the metacognitive processes which accompany reasoning and problem-solving. The topic of judgment and decision-making has become an area of growing interest in the field of ADHD, as many individuals with ADHD struggle with optimizing their decisions and choices, such as in the areas of risky decision-making and temporal discounting (also examined as delay aversion and delay of gratification).

#### We Want to Hear from You!

This digest will be published mid-month, three times a year, highlighting achievements by CADDRA members and their students.

Please submit by the first of each publication month (March, July, and November).

Email stacey.espinet@caddra.ca.

Fall 2022, Issue 7

### CADDRA Member Research Achievements

CADDRA member names are bolded.

#### Publications

Collaborative work presented at the CADDRA 2020 Research Day has just been published in Molecular Psychiatry: Ben Hamida S; Sengupta SM; Clarke E; McNicholas M; Moroncini E; Darcq E; Ter-Stepanian M; Fortier MÈ; Grizenko N; Joober R; Kieffer BL. The orphan receptor GPR88 controls impulsivity and is a risk factor for attention-deficit/ hyperactivity disorder. Molecular psychiatry.

In collaboration with Dr. Faraone (SUNY Upstate Medical University, USA), Dr. Mantosh Dewan (Distinguished Service Professor, Department of Psychiatry, and President, SUNY Upstate Medical University, USA) and Dr Alka Subramanyam (Associate Professor, Mumbai, India), Dr. Sarojini Sengupta wrote an article to help increase ADHD awareness.

#### Presentations

Nair Rajesh. *Pilot Study for Intelligent Sensing in ADHD Trial (ISAT)*. Poster presented at NCMD (Northern Centre for mood disorders) conference. Newcastle, UK. September, 30, 2022

#### Member Funding/Awards

Climie, E. A. and Callahan, B. Identifying stakeholder priorities to guide the advancement of ADHD research and services across Canada using a Delphi approach. September 1, 2022 to August 31, 2023. \$24,970

Co-Investigators: Anne-Claude V. Bedard, Brandy L. Callahan, Carlin J. Miller, Maria A. Rogers, Penny V. Corkum; Collaborators: Debra Butt, Jacqueline Hesson, Lily Hechtman, Maggie E. Toplak, Natalie Grizenko, Niamh McGarry, Stacey D. Espinet, Yuanyuan Jiang.

Project Partner: CADDAC: Centre for ADHD Awareness, Canada

Project description: The academic partners aim to gain an understanding of the themes and issues perceived as priority objectives by ADHD stakeholders across Canada using a Delphi approach. This iterative process serves to identify themes of consensus across groups of individuals who are experts by experience (individuals living with, or supporting a person living with, ADHD) or by training (educators, professionals, and researchers). Ultimately, the partners will co-author three national reports summarizing these consensus-view priorities in areas of ADHD training, resources, and knowledge, to lobby for federal funding and inform a strategic policy to fill these gaps.

### Upcoming Events

Canadian Children, Youth and Communities (CCYC) In Equity Conference Date: October 21-22 Where: Virtual Website

London and Region FASD Conference, 2022 Date: October 26th Time: 8am to 5pm ET Where: Virtual Website Register here

2022 International Mental Health Research Virtual & In-Person Symposium Date: October 28, 2022 Time: 9:00am - 12:30pm ET Where: New York, NY and virtual Register for free here

2022 Child-Bright Virtual Symposium Date: December 9 Time: 9am - 1pm PT; 12pm to 4 pm ET Where: Virtual Call for abstracts Abstract submission deadline: November 12,11:59 pm ET

APSARD 2023 Date: January 12-15, 2023 Where: Orlando, FL Website

9<sup>th</sup> World Congress on ADHD Date: May 18-21, 2023 Where: Amsterdam, Netherlands Website

## ADHD Research in the News

Infant gut microbiota, which coincides with nervous system development, is associated with ADHD development in pre-adolescents. Further studies are needed to understand mechanisms of action. Story Article

A systematic review and meta-analysis found that ADHD polygenic risk scores (PGRS) may assist with early identification of children at risk for ADHD and associated outcomes.

#### Article

This large population-based study found a positive association between infectious disease and pediatric ADHD. Prescriptions for anti-infective agents and physician visits were also higher in children with ADHD than those without.

#### Article

A population-based, longitudinal study found evidence of a directional longitudinal association between parent-reported sleep disturbances and ADHD symptoms from adolescence to early adulthood. Article

A randomized, double-blind, parallel, sham-controlled clinical trial found a clear improvement in adult ADHD symptoms after four weeks of home-based, noninvasive brain stimulation.

#### Article

ADHD treatment changes are commonly observed in children and adolescents (> 50%) and are associated with excess costs, highlighting unmet ADHD treatment needs in the US pediatric population. Article

A population-based cohort study of 10,167 children found no association between prenatal exposure to triptans, commonly used in the treatment of migraines, and ADHD diagnosis or symptoms. Article

A study found that emotion control training enhances reappraisal of negative events in individuals with high levels of self-reported ADHD symptomatology. Article

The first Australian clinical guidelines on the identification, diagnosis and treatment of individuals with ADHD have been released and include 111 recommendations. Story

### CADDRA Research News

A number of papers involving CADDRA members were published in *Brain Sciences, a special edition on Advances in ADHD*, edited by Drs. Joseph Sadek and Valérie Tourjman:

The CADDRA Guidelines group published a systematic review and meta-analysis that provides recommendations regarding the utilization of psychosocial interventions in the treatment of ADHD:

Tourjman V, Louis-Nascan G, Ahmed G, DuBow A, Côté H, Daly N, Daoud G, Espinet S, Flood J, Gagnier-Marandola E, Gignac M, Graziosi G, Mansuri Z, Sadek J. *Psychosocial Interventions for Attention Deficit/ Hyperactivity Disorder: A Systematic Review and Meta-Analysis by the CADDRA Guidelines Work GROUP.* Brain Sciences. 2022; 12(8):1023.

A review of Canadian ADHD prevalence and incidence estimates in the past 10 years was also published:

Espinet SD, Graziosi G, Toplak ME, Hesson J, Minhas P. A Review of Canadian Diagnosed ADHD Prevalence and Incidence Estimates Published in the Past Decade. Brain Sciences. 2022; 12(8):1051.

The special edition also included these articles by CADDRA members :

Age-Related Variance in Performance versus Ratings of Attention and Impulse Regulation in Children: Implications for the Assessment of ADHD

Developmental Risk, Adversity Experiences and ADHD Clinical Profiles: A Naturalistic Exploratory Study

Tolerance to Stimulant Medication for Attention Deficit Hyperactivity Disorder: Literature Review and Case Report

A Paradigm for Targeting Functional Impairment as an Outcome in Attention Deficit/Hyperactivity Disorder

Malingering and Stimulant Medications Abuse, Misuse and Diversion

Fall 2022, Issue 7

## Student Corner

This handout outlines how ADHD can contribute to executive function challenges in graduate school, and includes tips, strategies, and resources for navigating the writing demands.

The journal *Brain Sciences* (MDPI, Switzerland, ISSN 2076-3425) is inviting applications for the *Brain Sciences* 2022 "Best PhD Thesis Award". Apply here by July 31, 2023

#### Need to Recruit Study Participants?

Advertise at no cost on the CADDRA website. Complete this form to submit your information. View CADDRA's current list of research studies.



# MEMBERSHIP

## What do our members appreciate about being part of CADDRA?

"As a graduate student, I enjoy connecting with Canadian researchers through the annual ADHD conference and research day."

"Opportunities to expand and develop research with collegial members."

"Networking with professionals with similar clinical and research interests."

Join Our Network! caddra.ca/membership

## Study Recruitments

## Mind wandering and affective well-being: A study of adults with and without ADHD

Who can join this study? People with ADHD who are between the ages of 40 – 79 years old and people without ADHD who are between the ages of 30 – 79 years old.

Recruitment Deadline: May 31, 2023 Contact: ann.galbraith@ucalgary.ca Website

## Family Experiences and Neurodevelopmental Disorders

Who can join this study? Parents of children diagnosed with ASD and/or ADHD between the ages of 2 and 18 years old who are interested in completing a brief online survey investigating the strengths of these families as part of a new study. Recruitment Deadline: July 28, 2023 Contact: jen.theule@umanitoba.ca Website

The Women and ADHD Survey was discussed by Dr. Dora Wynchank at Research Day, 2022. Who can join this study? The survey is open to all women with ADHD above 18 years. Website

#### Advertise ADHD Research Jobs & Volunteer Opportunities

## Send your information to: stacey.espinet@caddra.ca

Information must be submitted by the first of each publication month (March, July, and November).



CADDRA – Canadian ADHD Resource Alliance 366 Adelaide Street East, Suite 221 Toronto, Ontario M5A 3X9 info@caddra.ca • caddra.ca • 416.637.8583