

Message from the Chair



Welcome to the second issue of the CADDRA ADHD Research Digest.

As the number of people vaccinated increases and we move closer to achieving herd immunity to COVID-19, it is a time for researchers to consider what impact the pandemic has had on research and how best to move forward. It is time to reflect on how the pandemic has affected the way we conduct research, the topics we study and the

individuals participating in our research.

- Will we incorporate new online methods or hybrid models into our research?
- Will the pandemic impact individuals with ADHD in unanticipated ways and how will we consider this impact in our research?
- In which ways have our participants been impacted by the pandemic? Are there new vulnerabilities that need to be considered around participant engagement in research?

The aim of this quarterly ADHD research digest is to facilitate these kinds of discussions relating to ADHD research and to support research innovation through knowledge exchange and connection within the Canadian ADHD research community and beyond. We invite you to work with us to build an even more vibrant and connected ADHD research community.

“ Click [here](#) to complete a survey for ADHD researchers and students/trainees regarding the pandemic by AUGUST 20th, 2021 ”

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

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Editors:

Anne-Claude Bedard Ph.D.
Brandy Callahan Ph.D.

Please Help Us Spread the Word about our Survey

CADDRA is carrying out a survey to assess the impacts of the pandemic on ADHD researchers and students/trainees. Please copy [this link](#) and forward to your colleagues, collaborators and students/trainees.



Research Project Spotlight

Impact of COVID-19 on Childhood ADHD

Research Team:



Tasmia Hai, M.Sc.

Fourth year doctoral student
University of Alberta



Rose Swansburg, M.B.T.

Research Coordinator
Alberta Children's Hospital



Dr. Jean-Francois Lemay
M.D., C.C.F.P., C.P.S.Q., F.R.C.P.C.
Alberta Children's Hospital

Objectives:

1. To better understand the impact of COVID-19 on the mental health, behavior and lifestyle of children with ADHD from a parent's perspective
2. To understand changes in educational support and learning for children with ADHD in the initial phases of the pandemic
3. To understand ongoing impacts.

The initial survey was conducted in May 2020. Community agencies were involved in recruiting parents. Over 600 parents participated.

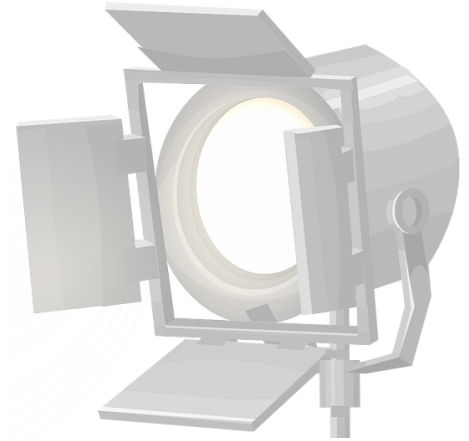
Key takeaways from the project so far are:

- 1) Children with ADHD found online learning challenging and their learning needs were not being met;
- 2) Healthy lifestyle behaviors, which were affected by the pandemic, are critical to the mental wellbeing of children with ADHD.

Tasmia Hai is training to be a school psychologist and is specifically interested in the impact of the pandemic on education and learning.

Rose Swansburg's research is focused on the lifestyle impact of the pandemic. Data from the first survey showed children who exhibit less healthy lifestyle habits (decreased sleep, exercise) demonstrated poorer mental health functioning (increased ADHD symptoms, depression and anxiety).

The team is currently recruiting parents for a [follow-up survey](#).



The team recently sat down for a conversation with Stacey D. Espinet, CADDRA's Education Manager

[Click here for the video interview](#)



Read more:

COVID-19 Pandemic Impacts Lifestyle Habits and Mental Health in Children with ADHD [Infographic](#)

Impact of COVID-19 on Educational Services in Canadian Children With Attention-Deficit/Hyperactivity Disorder [Study](#) [Infographic](#)

Impact of COVID-19 on lifestyle habits and mental health symptoms in children with attention-deficit/hyperactivity disorder in Canada [Study](#) [Infographic](#)

[Study website](#)

brainkids@ucalgary.ca

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 [here](#).

Researcher Spotlight



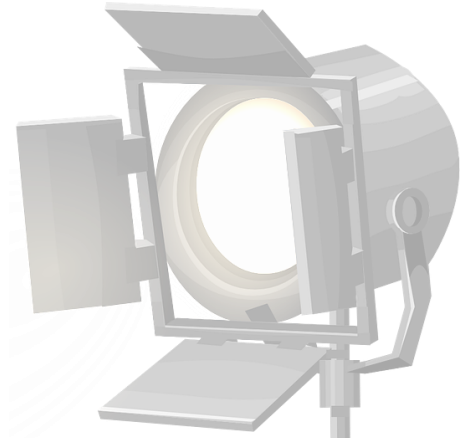
Brandy Callahan, Ph.D.

University of Calgary

Assistant Professor
Tier II CRC Adult Clinical Neuropsychology

Hotchkiss Brain Institute

Full Member



Tell us about yourself and why you chose your research area of focus.

I am a clinically-trained neuropsychologist with an interest in age-related disorders of cognition, such as Alzheimer's disease. I know this may sound like a surprising path towards ADHD research, and indeed it is a coincidence that I ended up becoming interested in ADHD! In fact, it was during my postdoctoral fellowship that I became aware that many of the patients at our hospital's memory clinic (i.e., older adults worried they might be showing early signs of dementia) actually had undiagnosed ADHD.

I became very interested to find out more about how ADHD manifests in older adults, and whether it might impact the way people age. Most of my research currently focuses on addressing these questions, as I've realized there is a real paucity of knowledge about ADHD in people over the age of 50.

Why are you at the institute you are at now?

I grew up in Montreal, went to graduate school in Quebec City, and completed my clinical residency and postdoctoral research training in Toronto. I was recruited to the University of Calgary in 2017 because the Department was looking to prioritize its focus on adult clinical neuropsychology and had been allocated a Tier II Canada Research Chair for this purpose. It was the perfect opportunity for me. I had just decided to go on the job market and the possibility of landing a CRC was very enticing! Of course, Calgary's proximity to the mountains is also a plus. :)

What excites you most about your research?

The novelty of studying ADHD from a later-life perspective is very exciting to me because it's almost completely uncharted territory. Many of my research participants express relief to find out I am studying ADHD in seniors and tell me they find it difficult to find information about ADHD that is specific to their later-life experiences.

Do you have advice you would like to share with students/trainees?

"Action precedes motivation." When I was just starting graduate school, that is something a newly-minted PhD told me had got her through her graduate training. I found it helpful to remind myself of it on days (or weeks... or months...) when it felt like I didn't have the drive or desire to revisit my thesis project for the nth time.

Tell us about a current project of interest - main objectives and outcomes? What stage is this project at now and what do you hope to achieve with this project?

Some other research groups have reported that ADHD might be associated with increased risk for dementia in later life. We just welcomed a CIHR Postdoctoral Fellow into our group, Dr. Sara Becker, who will be investigating this question further with me.

We'll be looking at whether certain markers of neurodegenerative disease are more common in people with ADHD than in those without (which we would expect if ADHD were associated with dementia risk).

We're currently recruiting participants and beginning to look at preliminary results in our ADHD sample. If our results confirm a link between ADHD and dementia, adults with ADHD may be studied as a high-risk group and provide unique opportunities to test hypotheses related to early intervention and explore driving mechanisms.

If results suggest that they are unrelated, dementia researchers and clinicians can be made aware of this and consider screening for ADHD to exclude these 'mimics'.

Upcoming Member Projects



Dr. Kuppuswami Shivakumar

Featuring CADDRA Member

Shiva Kuppuswami Shivakumar, FRCP(C)

CADDRA member and Sudbury-based psychiatrist, Shiva Kuppuswami Shivakumar, is leading two research projects with team members Drs. Kevin Saroka, Angelita Sanchez & Shabbir Amanulah.

Read the team's bios [here](#).



Dr. Kevin Saroka

Network analysis of co-morbid symptoms of adult major depressive disorder and attention-deficit hyperactivity disorder in an outpatient population

Team: Shiva Kuppuswami Shivakumar (Principal Investigator), Angelita Sanchez (Child and Adolescent Psychiatrist), Shabbir Amanulah (Clinical Psychiatrist) and Kevin Saroka (Research Assistant)

[Read more](#)



Dr. Angelita Sanchez

Investigation of the barriers to service provision in the treatment of adult ADHD: A qualitative study

Team Members: Shiva Kuppuswami Shivakumar (Principal Investigator) and Kevin Saroka (Research Assistant)

[Read more](#)



Dr. Shabbir Amanulah

We Want to Hear from You!

This digest will highlight achievements by CADDRA members and students.

Please submit contributions by the first of each publication month (March, June, September, December).

Email: stacey.espinet@caddra.ca.



CADDRA – Canadian ADHD Resource Alliance

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Student Achievements

This section highlights publications, presentations and other achievements by CADDRA student members or students of CADDRA members (names bolded below).

Presentations

Ms. Kathryn Fotinos is the Senior Research Coordinator at the START Clinic for Mood and Anxiety Disorders and a Master of Psychology Candidate at the Adler Professional Graduate School. Ms. Fotinos has recently co-authored, presented and published six conference posters on ADHD.

- *The Moderating Effect of Reward Processing on the Relationship Between Sleep and ADHD.* Lokuge, S., **Fotinos, K., Sternat, T., & Katzman, M.A.** American Psychiatric Association Annual Meeting. 2021
- *Misconduct Within Prison Environments: Can Stimulant Therapy Help?* Lorberg, G., Lokuge, S., Mason, G., **Fotinos, K.,** Runnalls, D., **Sternat, T., & Katzman, M.A.** 8th World Congress on ADHD. 2021
- *A Preliminary Evaluation of the Relationship Between Stimulant Treatment and Prison Misconduct Among Incarcerated Individuals with Attention-Deficit/Hyperactivity Disorder.* Lorberg, G., Mason, G., Lokuge, S., **Fotinos, K.,** Di Matteo, D., Runnalls, D., & **Katzman MA.** The 8th World Congress of ADHD. 2021
- *Intolerance of Uncertainty in Attention-Deficit/Hyperactivity Disorder and Comorbid Anxiety Disorders.* Mason, G., Lokuge, S., **Fotinos, K.,** Epstein, I., **Sternat, T., & Katzman, M.A.** The American Psychiatric Association Annual Conference (APA). 2021
- *Implications of the orexin system on the relationship between impaired sleep, ADHD and reward processing: How are they related?* **Fotinos, K.,** Lokuge, S., G, Mason, J., Hubert, J., Epstein, I., **Sternat, T., & Katzman, M.A.** The Anxiety and Depression Association of America (ADAA). 2021
- *Intolerance of Uncertainty, Executive Dysfunction, and Impaired Reward-Processing: Assessing the Effect of Covid-Specific Dysfunction in a Psychiatric Sample.* Lokuge, S., **Fotinos, K.,** G, Mason, J., Hubert, J., Epstein, I., **Sternat, T., & Katzman, M.A.** The Anxiety and Depression Association of America (ADAA). 2021

Doctoral Thesis Defense

Flanigan, L. K. *I do not have stigma towards people with ADHD (but I do think they're lazy): Using education and experience to reduce negative attitudes towards ADHD*, University of Calgary, Feb, 2021

Publications

Impact of COVID-19 on lifestyle habits and mental health symptoms in children with attention-deficit/hyperactivity disorder in Canada. Rose Swansburg, MBT, **Tasmia Hai**, MSc, Frank P MacMaster, PhD, Jean-François Lemay, MD FRCPC, Paediatrics & Child Health, May 2021

Differences in Neurometabolites and Transcranial Magnetic Stimulation Motor Maps in Children with Attention-Deficit Hyperactivity Disorder. Cynthia Kahl, Rose Swansburg, **Tasmia Hai**, James Wrightson, Tiffany Bell, Jean-François Lemay, Adam Kirton, Frank MacMaster. Biological Psychiatry, May 2021

Funding & Awards

Dr. Sara Becker, postdoctoral fellow, University of Calgary, received a CIHR Postdoctoral Fellowship to complete a project entitled "Later-life ADHD as a possible risk factor for the development of Lewy body diseases".

Chelsie Hart, PhD student, University of Calgary, received an NSERC Doctoral Fellowship to complete a project entitled "Elucidating the relationship between executive functioning and mind wandering".

Himanthri Weerawardhena, MSc student, University of Calgary, received a SSHRC Doctoral Fellowship to complete a project entitled "ADHD, personality, and coping strategies in older adults".

Susan Flynn Lowry, undergraduate student, University of Calgary, received a PURE (Psychology Undergraduate Research Experience) Award to complete a summer project entitled "Literature review of support systems for adults with ADHD and survey of local resources available in Calgary".

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, June, September, December).

CADDRA Member Research Achievements

CADDRA member names are bolded.

Presentations

Mega Team, A Video-Game Based Cognitive Intervention For Children: Effects on Emotional and Behavioural Regulation in ADHD, ASD, and CHD. Arshad, T., Dhaliwal, N., Rizeq, J., Lishak, V., Sananes, R., Anagnostou, E., Ameis, S., **Bedard, A-C.**, and Crosbie, J. 2021 CHILD-BRIGHT Virtual Symposium.

Publications

Cognitive Sophistication and the Development of Judgment and Decision-Making, 1st Edition. **Maggie Toplak.** Imprint: Academic Press 2021.

Cross-ministry data on service use and limitations faced by children in special education. Matthew Joseph Russell, Craig William Michael Scott, **Kara Murias**, W. Ben Gibbard, Xinjie Cui, Suzanne Tough, Jennifer D. Zwicker. *Disability and Health Journal*, 2021.

Naturalistic exploratory study of the associations of substance use on ADHD outcomes and function. MacDonald, B., **Sadek, J.** *BMC Psychiatry*, 2021.

The Association between ADHD and the Severity of COVID-19 Infection. Merzon E, **Weiss MD**, Cortese S, et al. *Journal of Attention Disorders*, 2021.

The relation between symptoms of ADHD and symptoms of eating disorders in university students. Jessica Baraskewich & **Emma A. Climie.** *The Journal of General Psychology*, 2021.

Even a Mild Sleep Restriction Can Impact Daytime Functioning in Children with ADHD and Their Typically Developing Peers. Fiona Davidson, Gabrielle Rigney, Sarah Brine, Tamara Speth, Laura Miller, Benjamin Rusak, Christine Chambers, Malgorzata Rajda, Esmot Ara Begum & **Penny Corkum.** *Behavioral Sleep Medicine*, 2021.

Paging Dr. Google: Availability and Reliability of Online Evidence-Based Treatment Information about ADHD, Evidence-Based Practice in Child and Adolescent Mental Health. Sara King, Krista C. Ritchie, Melissa McGonnell, Christine Doe, **Penny Corkum**, Emily Côté & Adena Cox. *Evidence-Based Practice in Child and Adolescent Mental Health*, 2021.

A systematic review of online parent-implemented interventions for children with neurodevelopmental disorders. Kim M. Tan-MacNeill, Isabel M. Smith, Shannon A. Johnson, Jill Chorney & **Penny Corkum.** *Children's Health Care*, 2021.

Temperament Profiles Associated with Internalizing Symptoms and Externalizing Behavior in Adolescents with ADHD. Deotto, A., **Eastwood, J.D.** & **Toplak, M.E.** *Child Psychiatry and Human Development*, 2021.

Sitting with it: An investigation of the relationship between trait mindfulness and sustained attention. Rotem Petranker, **John D. Eastwood.** *Consciousness and Cognition*, 2021.

Social Resilience in Children with ADHD: Parent and Teacher Factors. Jia, R.M., Mikami, A.Y. & **Normand, S.** *Journal of Child and Family Studies*, 2021.

Parenting Children with ADHD: Associations with Parental Depression, Parental ADHD, and Child Behavior Problems. Smit, S., Mikami, A.Y. & **Normand, S.** *Journal of Child and Family Studies*, 2021.

Factors Related to Agreement between Parent and Teacher Ratings of Children's ADHD Symptoms: an Exploratory Study Using Polynomial Regression Analyses. Boaz Y. Saffer, Amori Yee Mikami, Hongyuan Qi, Julie Sarno Owens & **Sébastien Normand.** *Journal of Psychopathology and Behavioral Assessment*, 2021.

Effects of the Parental Friendship Coaching Intervention on Parental Emotion Socialization of Children with ADHD. Smit, S., Mikami, A.Y. & **Normand, S.** *Research on Child and Adolescent Psychopathology*, 2021.

Inattentive Behavior and Homework Performance in Elementary School: the Mediating Effects of Academic Enablers. Oram, R., **Rogers, M.** *Contemporary School Psychology*, 2021.

Attitudes on Palliative Care for Adults with Developmental Disabilities. **Kyle Sue** and Nicole Mar. *Journal of Palliative Medicine*, 2021.

Exploring the Relationship Between ADHD Symptoms and Daily Cannabis Consequences in Emerging Adulthood: The Role of Cannabis Motives. **Abby L. Goldstein**, Alexandra Shifrin, Jasmin L. Katz, Lap K. Lu, & Danielle Kofler. *Journal of Studies on Alcohol and Drugs*, 2021.

The development of attentional control mechanisms in multisensory environments. Nora Turoman, Ruxandra I. Tivadar, Chrysa Retsa, **Anne M. Maillard**, Gaia Scerif, Pawel J. Matusz. *Developmental Cognitive Neuroscience*, 2021.

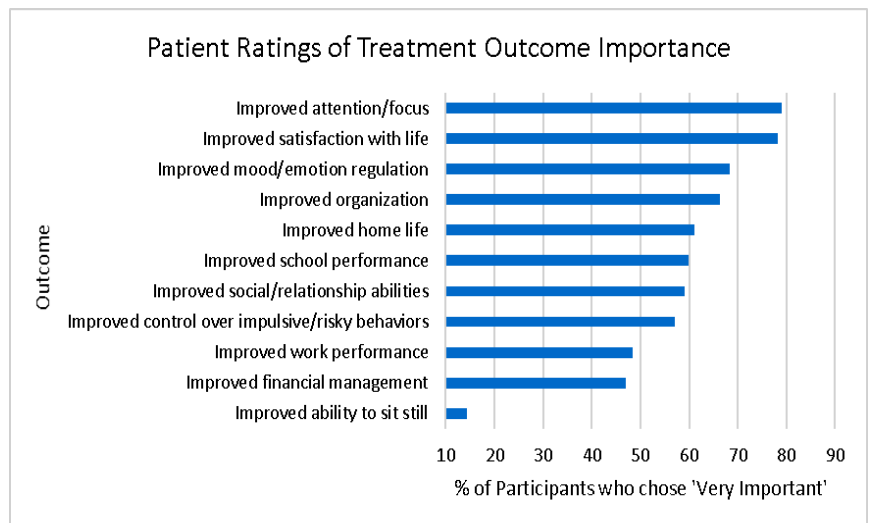
Association between COMT methylation and response to treatment in children with ADHD. **Sarojini Sengupta**, Ridha Joober. *Journal of Psychiatric Research*, 2021.

Cumulative exposure to ADHD medication is inversely related to hippocampus subregional volume in children. Nellie H. Fotopoulos, Gabriel A. Devenyi, Stephanie Guay, **Sarojini M. Sengupta**, M. Mallar Chakravarty, **Natalie Grizenko**, Sherif Karama, Ridha Joober. *NeuroImage: Clinical*, 2021.

ADHD Research Translation & Participation

What outcomes matter to individuals with ADHD?

In February 2020, CADDRA, in collaboration with CADDAC, sent out a survey to individuals with ADHD, their families and supporters to better understand which treatment outcomes matter most. One of the survey items asked how important certain treatment outcomes are. Participants (n = ~70) rated the following outcomes, which are listed here in order of participant-rated importance: improved attention/focus, improved satisfaction with life, improved mood/emotion regulation, improved organization, improved home life, improved school performance, improved social/relationships, improved control over impulsive/risky behaviors, improved work performance, improved financial management, and improved ability to sit still. These results suggest that while ADHD symptoms of inattention are important outcomes of interest to individuals with ADHD, their families and supporters, symptoms of hyperactivity seem to be relatively less important. In this survey, improved life satisfaction took precedence over hyperactivity, along with improved mood, school and home life functioning. Although participants were given the option to comment on other outcomes of importance, no alternative outcomes were suggested. Instead, comments highlighted barriers to care due to the high costs and lack of services. These findings underscore the need for research regarding preferred treatment outcomes and barriers to care for individuals with ADHD and their families, and the importance of considering preferred outcomes in treatment recommendations and practice guideline development for individuals with ADHD.



Application Deadlines

Funding Calls

Kids Brain Health Network, Strategic Investment Fund LOI. Deadline: **June 25, 2021.**
[Apply here](#)

SSHRC Connection Grants. Deadline: **August 1, 2021.**
[Apply here](#)

Submission Calls

Canadian Mental Health Association Virtual Conference: Redefining Normal. Deadline: **June 25, 2021**
[Apply here](#)

SSHRC Imaging Canada's Future Ideas Lab (virtual workshop). Letter of intent deadline: **July 16, 2021.**
[Apply here](#)

CADDRA 2021 Research Committee

Committee members will oversee planning of Research Day and 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.
Natalie Grizenko
M.D., F.R.C.P.C.
Jacqueline Hesson
Ph.D.

Lily Hechtman
M.D., F.R.C.P.
Martin Katzman
M.D., F.R.C.P.C.
Carlin J Miller
Ph.D.
Maria Rogers
Ph.D., C.Psych.
Sarojini Sengupta
Ph.D.
Maggie Toplak
Ph.D., C.Psych.

ADHD Research in the News

Recent research suggests accommodations may not be as effective for children with ADHD as expected. [Publication / Editorial](#)

A systematic review of studies from various countries with community samples revealed that attitudes towards individuals with ADHD remain generally negative. [Abstract](#)

A recent meta-analysis demonstrated efficacy of non-pharmacological treatments on emotional symptoms of children and adults with ADHD. [Abstract](#)

Recent studies point to genetics underlying the co-occurrence of ADHD and other disorders. [Article](#)

Studies reveal associations between pre- and postnatal exposure to smoke, as well as acetaminophen, and ADHD symptoms in children. [Article / Story / Publication](#)

Is there a symptom-impairment threshold for diagnosing ADHD? This study did not find evidence of a discrete threshold. [Publication](#)

Vigorous physical activity has a small, but significant effect, on ADHD core symptoms in children and adolescents. [Publication / Story](#)

ADHD medication is associated with lower rates of suicidality in children with externalizing symptoms. [Publication](#)



Topics of Discussion

Let fellow members know your thoughts on the [CADDRA Discussion Forum](#)

Is ADHD in children and adolescents over-diagnosed, underdiagnosed, misdiagnosed or adequately diagnosed?

A recent meta-analysis provides evidence for a substantial undertreatment of children and adolescents affected by ADHD across various countries and slight overtreatment of those without a formal diagnosis. The review suggests that for every one mis-diagnosed/ mistreated youth with ADHD, there are three undertreated. [Article](#)

In another recent review, findings suggest that when symptoms are mild, a diagnosis may have harmful net effects and points out the value of strict diagnostic guidelines. [Article](#)

Discuss [here](#) with other members.

Screens and technology: benefits for children and teenagers with ADHD?

The global pandemic has forced us to adopt screen and technology use in an unprecedented way for both research and clinical purposes. Overuse of screens and technology has long been a topic of significant concern for Individuals with ADHD and their families. Popular media and some research suggests that screen and technology use is detrimental to both adolescent mental health and effective parenting. The articles below outline some caveats to this: 1) Base-rate fallacy; 2) Misreading of the literature; 3) Construct measurement and 4) Moderating variables. Recent research has even highlighted some benefits of screen and technology use in young people (e.g., social connection). These caveats to previous research findings and potential benefits of screen and technology use are important considerations given the past-year emphasis on virtual living. How might these more nuanced considerations change screen and technology use recommendations for individuals with ADHD?

For further reading:

Abstract: [Smartphones are bad for some teens, not all](#)

Commentary: [Commentary response: Smartphone use and parenting: re-stratifying the multiverse for families of young children](#)

Discuss [here](#) with other members.



Research Day Keynotes



Joseph Biederman, M.D.

**Massachusetts General Hospital
Harvard Medical School**

[Read Dr. Biederman's biography](#)

[Read Dr. Biederman's abstract](#)



Stephen Faraone, Ph.D.

**State University of New York
President of the World Federation of ADHD**

[Read Dr. Faraone's biography](#)

[Read Dr. Faraone's abstract](#)

KBHN/CADDRA Awards

The 8th Annual CADDRA ADHD Research Day is supported by the Kids Brain Health Network (KBHN).

Kids Brain Health Network Awards for 2021:

- 10 KBHN/CADDRA Junior Researcher Awards of \$300 plus complimentary registration to the 17th Annual CADDRA ADHD Conference
- KBHN/CADDRA ADHD Research Day Registration Awards for the 40 top ranked student oral/poster presentation applicants. Awardees will be provided with complimentary registration to the 8th Annual CADDRA ADHD Research Day.

Registration is Open
Reserve Your Seat Now!
caddra.societyconference.com

Submissions Period has Ended

Thank you for your applications.

Notice of Acceptance: by June 30, 2021

Presenter Registration Deadline: July 31, 2021