eCURRICULUM VITAE

Russell Schachar, MD, FRCP(C)

Address

The Hospital for Sick Children,
Department of Psychiatry
555 University Avenue
Toronto, Canada, M5G 1X8

Degrees

1965-1971	Doctor of Medicine, University of Toronto, Toronto, Ontario, Canada
1968	Clinical Preceptorship, Menninger School of Psychiatry, Topeka, Kansas, USA
1971-1975	Psychiatry Residency, McMaster University, Hamilton, Ontario, Canada
1975	Psychiatry Fellow, Royal College of Physicians and Surgeons of Canada, Ottawa, Ontario, Canada
1976-1980	Research Fellowship, Child and Adolescent Psychiatry, Institute of Psychiatry, London, England

Research and clinical training

1976-1980	Research Fellowship, Institute of Psychiatry, London, England
1971-1975	Residency in Psychiatry, McMaster University, Hamilton, Canada
1968	Clinical Preceptorship in Psychiatry, Menninger School of Psychiatry, Topeka, Kansas, U.S.A.
1965-1971	Medical School, University of Toronto, Canada

Employment and academic appointments

1998-	Professor, Department of Psychiatry, University of Toronto
1993-	Faculty, Institute of Medical Science, University of Toronto
1991-	Senior Scientist, Research Institute, The Hospital for Sick Children
1985-	Faculty, Graduate Faculty of Education, University of Toronto
1980-	Staff Psychiatrist, The Hospital for Sick Children, Toronto
1976-1980	Honorary Senior Registrar, Maudsley Hospital, London, England
1975-1976	Staff Psychiatrist and Director of Emergency Psychiatric Service, St. Joseph's Hospital, Hamilton
1975-1976	Lecturer, Department of Psychiatry, McMaster University

Administrative Responsibilities and Committees (recent)

Research Institute, The Hospital for Sick Children

2007-2011	Executive, Neurosciences and Mental Health
2004-2007	Research Training Committee
2003	Research Ethics Board External Review Committee

Department of Psychiatry, The Hospital for Sick Children

1991-2011	Research and Fellowship Director
1992-2013	Chair, Psychiatry Endowment Fund
1985-2010	Executive Committee, Department of Psychiatry

Department of Psychiatry, University of Toronto

2013-2015	Member Senior Promotions Committee
2012-2017	Strategic Planning Pillar co-lead
2011-2012	Member Review and Search Committee
2003-2011	Clinician Scientist Program Executive
1992-2011	Fellowship Committee - member
1992-2011	Research Executive - member

Division of Child Psychiatry, University of Toronto

2009-2010	Mentorship Programme, (founding director)
1995-2011	Divisional Executive
1995-2011	Fellowship Director

1992-2011 Research Director

Canadian Academy of Child and Adolescent Psychiatry

2012-2015 Editor, Journal of the Canadian Academy of Child and Adolescent Psychiatry

1998-2000 Editor, Special Issue on Child and Adolescent Psychiatry, Canadian Journal of Psychiatry

International Committee Participation

2023- Board of Directors, American Professional Society for ADHD (APSARD)

2014- Professional Advisory Board CHADD: Children and Adults with ADHD

2016-2021 American Professional Society of ADHD and Related Disorders Conference Planning Committee

Honours and award

2012 CHADD Hall of Fame for lifetime achievement

2012 Research Canada presentation on Parliament Hill

2011 Presidential Interviewee. American Academy of Child and Adolescent Psychiatry

2010 Schwarz-Reisman Travel Award

2009 TD Bank Chair in Child & Adolescent Psychiatry

2003 The Centre of Excellence for Early Childhood Development (CEECD) one of 10 best scientific papers, published in 2002 by Canadian researchers, on early childhood development.

2002, 2011 Department of Psychiatry, Fellowship Supervisor Award (Nominated)

1999 PAIRO Excellence in Clinical Teaching Award (Nominated)

1995 Elaine Schlosser Lewis Award, American Academy of Child & Adolescent Psychiatry (achievement in ADHD research)

1994 Research Expert Advisory Working Group, Children's Mental Health Unit, Health Canada

1989-1994 Senior Research Fellowship, Ontario Mental Health Foundation

1977-1980 Fellowship, Medical Research Council of Canada

1976-1977 Research Training Fellowship, Ontario Mental Health Foundation

2010 Honorary Visiting Professor, Schneider Children's Hospital, University of Tel Aviv, Israel

Clinical-Research Statement

My clinical-research programme aims to further the understanding of the cognitive, physiological and genetic factors that contribute to neuodevelopmental disorders of childhood (attention-deficit hyperactivity disorder, obsessive-compulsive disorder and autism spectrum disorder) and to translate this understanding into novel assessment and therapeutic insights to improve treatment. We have developed novel laboratory paradigms to study executive control processes of response inhibition and error processing and functional imaging strategies to parse the rapidly unfolding and interacting cognitive processes involved in cognitive control. Assessment tools developed in our lab have been translated into many languages and are widely disseminated. We have conducted both large-scale clinical (POND N=3500) and population-based studies (Spit for Science N=27,000) of cognition and genetics resulting in highly cited publications in major journal (Nature Genetics, Nature). Insights gained through studies of neurodevelopmental disorders are applied to the study of pathological structure-function relationships in children who have experienced consequences of concussion and those who have survived treatment for acute lymphoblastic anemia. We are developing cognitive rehabilitiation tools using virtual reality in collaboration with the National Reseach Council. I have been continuously funded by CIHR and other agencies. My lab has trained approximately 30 graduate students and provided clinical and research training for many psychiatry and pediatric residents. I have been priviledged to present invited and keynote lectures in the USA, Canada, Argentina, England, South Africa, The Netherlands, Israel, Korea and China.

Research Awards (most recent National)

2022 - 2026 Co-Investigator. Canadian Institute for Health Research Project Grant Fall 2021. *The GAYA Study - Exploring the Genetic Architecture of Youth Anxiety*. Principal Investigator: Meier, S. Co-

Principal Investigators: Arnold, P, Crosbie, J., Matthiesen, M., Soreni, N., Stewart, E. Co-applicants: Bagnell, A., Burton, C., Lingley-Pottie., P, McGrath., Newton, A., Sassi, R., Schachar, R., Stewart, SS. Award Duration: 5 years. Award Amount: $1,078,652 CDN

2020 - 2025 Co-Investigator. Canadian Institutes of Health Research – Project Grant. *How does chemotherapy to treat childhood cancer affect brain development?* Neiman, B.J., Guger, S., Hitzler, H., Ito, S., Schachar, RJ., Wheeler, A. Amount awarded: $993,300 CDN

2020 - 2023 Co-Investigator. Health Outcomes Catalyst Grant Award. *Developing Novel Virtual Reality Assessment and Intervention Tools to Improve Mental Health Outcomes in Youth.* Crosbie, J, Schachar, R, Bedard, AC, Lishak, V, Debergue, P, Proulx, C. Amount awarded: $89,353.44 CDN.

2022 - 2023 Co-Investigator. Risk prediction of autism disorders (ASD) in siblings of individuals with ASD, using a novel genetic technique. Principal Investigator: Breetvelt, E. Co-Investigators: Crosbie, C., Schachar, R., Vorstman, J., Szatmari, P., Anagnostou, E., Lai, MC., Scherer, S. Funding Source: The Finance Committee of the Psychiatric Association and the Centre for Brain & Mental Health (C-BMH) (ON). Award Duration: 1 year; Award Amount: $29,000 CDN

2019 - 2024 Co-Investigator. Canadian Institute for Health Research - Project Grant. *Spit for Science 2 Autism Spectrum Project: Harnessing the Power of Population-Based Samples for Gene x Environment Studies.* Crosbie, J., Schachar, R, Arnold, P, Burton, C., Schachar, R, Peters. P. Collaborators: Strug, L, Paterson, A, Scherer, S, Anagnostou, E, Vorstman, J. Amount awarded: $1,170,450 CDN.

2019 – 2022 Principal Investigator. McLaughlin Centre – Accelerator Grants in Genomic Medicine. *Using Whole Genome Sequencing to Understand the Role of Variants of Unknown Significance in Neurodevelopmental Phenotypes in the General Population.* Schachar, R, Crosbie, J, Anagnostou, E, Burton, C, Arnold. P. Amount awarded: $100,000 CDN.

Research Awards (under review)

1. Canadian Institute for Health Research Project Grant Fall 2023 (2024-2029). Pan-ancestry approaches to understand the genetic and environmental contributors to mental health in children and youth. Principal Applicant: Crosbie, J. Co-applicants: Arnold, P, Burton, C, Gajaria, A, Huang, H, Peters. P, Schachar, R. Collaborators: Strug, L, Paterson, A, Scherer, S. Duration: 5 years. Amount: $3,465,000 CDN.
2. Canadian Institute for Health Research Project Grant Fall 2023 (2024-2029). Oral microbiome & mental health in children and adolescents in community and clinic samples. Principal Applicant: Crosbie, J. Co-Principal Applicant: Langille, M., Co-applicants: Arnold, P., Burton, C., DeClerq, V., Schachar, R. Duration: 5 years. Amount: $1,865,000 CDN.
3. Canadian Institute for Health Research Project Grant Fall 2023 (2024-2029). Building genetic predictors for child and adolescent psychiatric disorders utilizing multi-scale data. Principal Applicant: Long, Q. Co-Principal Applicant: Arnold, P., Co-Applicants: Bousman, C., Burton, C.L., Crosbie, J., Dimitropoulos, G., Hanna, G., Mattheisen, M., Meier, S., Schachar, R., Zhang, Q. Duration: 5 years. Amount: $995,000 CDN.
4. Canadian Institute for Health Research Project Grant Fall 2023 (2024-2029). The longitudinal association of safety at school and mental health for school aged children in Ontario. Principal Applicant: Korczak, D. Co-Applicant: Anagnostou, E., Birken, C., Burton, C., Charach, A., Cost, K., Crosbie, J., Kelley, E., Maguire, J., Tsujimoto, K., Lee, N., Osokin, K.. Duration: 5 years. Amount: $850,000.

Publications

Citations = >41,000
h-index = 109
publications >300

Peer-Reviewed Publications (since 2021)

1. Sadat-Nejad, Vandewouw, Cardy, Lerch, Taylor, Iaboni, Hammill, Syed, Brian, Kelley, Ayub, Crosbie, Schachar, Georgiades, Nicolson, Anagnostou, Kushki. Investigating Heterogeneity Across Autism, ADHD, and Neurotypical Development Using Measures of Cortical Thickness, Surface Area, Cortical/Subcortical Volume, and Structural Covariance, Frontiers in Child and Adolescent Psychiatry, section Autism and Other Neurodevelopmental Disorders, 7 September 2023 | DOI 10.3389/frcha.2023.1171.

2. Schachar RJ, Dupuis A, Arnold PD, Anagnostou E, Kelley E, Georgiades S, Nicolson R, Townes P, Burton CL, Crosbie J. Autism Spectrum Disorder and Attention-Deficit/Hyperactivity Disorder: Shared or Unique Neurocognitive Profiles? Res Child Adolesc Psychopathol. 2023 Jan;51(1):17-31. doi: 10.1007/s10802-022-00958-6. Epub 2022 Aug 25.PMID: 36006496
3. Pang EW, Hammill C, Taylor MJ, Near J, Schachar R, Crosbie J, Arnold PD, Anagnostou E, Lerch JP. (2023). Cerebellar gamma-aminobutyric acid: Investigation of group effects in neurodevelopmental disorders. Autism Res. 2023 Jan 10. doi: 10.1002/aur.2888. Online ahead of print. PMID: 36626308
4. Fan XR, Lifespan Brain Chart Consortium (LBCC); Zuo XN. et al A longitudinal resource for population neuroscience of school-age children and adolescents in China. Sci Data. 2023 Aug 21;10(1):545. doi: 10.1038/s41597-023-02377-8. PMID: 37604823
5. Cost KT, Mudiyanselage P, Unternaehrer E, Korczak DJ, Crosbie J, Anagnastou E, Monga S, Kelley E, Schachar R, Maguire J, Arnold P, Burton CL, Georgiades S, Nicolson R, Birken CS, Charach A. The role of parenting practices in parent and child mental health over time. BJPsych Open. 2023 Aug 8;9(5):e147. doi: 0.1192/bjo.2023.529. PMID: 37550865
6. Townes P, Liu C, Panesar P, Devoe D, Lee SY, Taylor G, Arnold PD, Crosbie J, Schachar R. Do ASD and ADHD Have Distinct Executive Function Deficits? A Systematic Review and Meta-Analysis of Direct Comparison Studies. J Atten Disord. 2023 Aug 11:10870547231190494. doi: 10.1177/10870547231190494. Online ahead of print. PMID: 37565325
7. Schachar, R.J., Dupuis, A., Arnold, P.D., Anagnoustou, E., Kelley, E., Georgiades, S., Nicholson, R. Burton, C.L., Crosbie, J. (2022). Autism Spectrum Disorder and Attention-Deficit/Hyperactivity Disorder: Shared or unique neurocognitive impairments? Res Child Adolesc Psychopathol. 2023 Jan;51(1):17-31. doi: 10.1007/s10802-022-00958-6. Epub 2022 Aug 25. *PMID: 36006496*
8. Demontis D, et al., (2023), Genome-wide analyses of ADHD identify 27 risk loci, refine the genetic architecture and implicate several cognitive domains. Nat Genet. 2023 Jan 26. doi: 10.1038/s41588-022-01285-8. Online ahead of print. PMID: 36702997
9. Choi SE, Rahman A, Ayoub T, Botelho O, Lee G, Gazdzinski LM, Wheeler AL, Weksberg R, Guger SL, Schachar RJ, Ito S, Hitzler J, Nieman BJ. (2023). High-frequency ultrasound-guided intrathecal injections in a young mouse model: Targeting the central nervous system in drug delivery. J Neurosci Methods. 2023 Feb 15;386:109778. doi: 0.1016/j.jneumeth.2022.109778. Epub 2022 Dec 23. PMID: 36572156
10. Nakua H, Hawco C, Forde NJ, Joseph M, Grillet M, Johnson D, Jacobs GR, Hill S, Voineskos AN, Wheeler AL, Lai MC, Szatmari P, Georgiades S, Nicolson R, Schachar R, Crosbie J, Anagnostou E, Lerch JP, Arnold PD, Ameis SH. Systematic comparisons of different quality control approaches applied to three large pediatric neuroimaging datasets. Neuroimage. 2023 Jul 1;274:120119. doi: 10.1016/j.neuroimage.2023.120119. Epub 2023 Apr 15. PMID: 37068719

11. Lowet DS, Vaida F, Hesselink JR, Ewing-Cobbs L, Schachar RJ, Chapman SB, Bigler ED, Wilde EA, Saunders AE, Yang TT, Tymofiyeva O, Huang M, Max JE. Novel Oppositional Defiant Disorder or Conduct Disorder 24 Months After Traumatic Brain Injury in Children and Adolescents. J Neuropsychiatry Clin Neurosci. 2023 Aug 10:0. doi: 10.1176/appi.neuropsych.20220094. Online ahead of print. PMID: 37559510
12. Vandewouw MM, Brian J, Crosbie J, Schachar RJ, Iaboni A, Georgiades S, Nicolson R, Kelley E, Ayub M, Jones J, Taylor MJ, Lerch JP, Anagnostou E, Kushki A. Identifying Replicable Subgroups in Neurodevelopmental Conditions Using Resting-State Functional Magnetic Resonance Imaging Data. JAMA Netw Open. 2023 Mar 1;6(3):e232066. doi: 10.1001/jamanetworkopen.2023.2066. PMID: 36912839
13. Schulz, S. E., Kelley, E., Anagnostou, E., Nicolson, R., Georgiades, S., Crosbie, J., Schachar, R., Ayub, M., & Stevenson, R. A. (2022). Sensory Processing Patterns Predict Problem Behaviours in Autism Spectrum Disorder and Attention-Deficit/Hyperactivity Disorder. *Advances in Neurodevelopmental Disorders*. https://doi.org/10.1007/s41252-022-00269-3
14. Gharehgazlou, A., Vandewouw, M., Ziolkowski, J., Wong, J., Crosbie, J., Schachar, R., Nicolson, R., Georgiades, S., Kelley, E., Ayub, M., Hammill, C., Ameis, S. H., Taylor, M. J., Lerch, J. P., & Anagnostou, E. (2022). Cortical Gyrification Morphology in ASD and ADHD: Implication for Further Similarities or Disorder-Specific Features? *Cerebral Cortex, 32(11), 2332–2342.* https://doi.org/10.1093/cercor/bhab326
15. Levy T, Kil H, Schachar RJ, Itzhaky L, Andrade BF. Suicidality risk in children and adolescents with externalizing disorders: symptoms profiles at high risk and the moderating role of dysregulated family relationships. Eur Child Adolesc Psychiatry. 2023 Apr 12. doi: 10.1007/s00787-023-02190-z. Online ahead of print. PMID: 37043094
16. Penner, M., Dupuis, A., Arnold, P., Ayub, M., Crosbie, J., Georgiades, S., Kelley, E., Nicolson, R., Schachar, R., & Anagnostou, E. (2022). Pubertal stage, sex and behaviour in neurodevelopmental disorders versus typical development: A cross-sectional study. BMJ Paediatrics Open, 6(1), e001469. https://doi.org/10.1136/bmjpo-2022-001469
17. Soltanifar M, Escobar M, Dupuis A, Chevrier A, Schachar R. (2022). The Asymmetric Laplace Gaussian (ALG) Distribution as the Descriptive Model for the Internal Proactive Inhibition in the Standard Stop Signal Task. *Brain Sciences 12(6):730.* https://doi.org/10.3390/brainsci12060730
18. Dupuis, A., Mudiyanselage, P, Burton, C.L., Arnold, P.D., Crosbie, J., Schachar, R. (2022). Hyperfocus or Flow? Attentional strengths in Autism Spectrum Disorder. *Frontiers in Psychiatry, 13.* https://doi.org/10.3389/fpsyt.2022.886692
19. Levy T, Dupuis A, Andrade BF, Crosbie J, Kelley E, Nicolson R, Schachar RJ. Facial emotion recognition in children and youth with attention-deficit/hyperactivity disorder and irritability (2022). *Eur Child Adolesc Psychiatry. Sep 1*. https://doi.org/10.1007/s00787-022-02033-3. Epub ahead of print.
20. Seguin, D., Pac, S., Wang, J., Nicolson, R., Martinez-Trujillo, J., Anagnostou, E., Lerch, JP., Hammill, C., Schachar, R., Crosbie, J., Kelley, E., Ayub, M., Brian, J., Liu, X., Arnold, PD., Georgiades, S., Duerden, EG. (2022). Amygdala subnuclei volumes and anxiety behaviors in children and adolescents with autism spectrum disorder, attention deficit hyperactivity disorder, and obsessive-compulsive disorder. Hum Brain Mapp Jul 12. https://doi.org/10.1002/hbm.26005
21. Nakua, H., Hawco, C., Forde, NJ., Jacobs, GR., Joseph, MJ., Voineskos, A., Wheeler, AL., Lai, M-C., Szatmari, P., Kelley, E., Liu, X., Georgiades, S., Nicolson, R., Schachar, RJ., Crosbie, J., Anagnostou, E., Lerch, JP., Arnold, PD.,

Ameis, S. (2022). Cortico-amygdalar connectivity and externalizing/internalizing behavior in children with neurodevelopmental disorders. *Brain Structure & Function.* https://doi.org/10.1007/s00429-022-02483-0.

22. Charalampopoulou, M., Choi, EJ., Korczak, D.J., Cost, K.T., Crosbie, J., Birken, C.S., Charach, A., Monga, S., Kelley, E., Nicolson, R., Georgiades, S., Ayub, M., Schachar, R.J., Iaboni, A., Anagnostou, E. (2022). Mental health profiles of autistic children and youth during the COVID-19 pandemic. *Paediatrics & Child Health.* https://doi.org/10.1093/pch/pxab111
23. Bethlehem RAI, et al (2022). Brain charts for the human lifespan. *Nature* (7906):525-533. doi: 10.1038/s41586-022-04554-y.
24. Krakowski, A. D., Tombeau Cost, K., Szatmari, P., Anagnostou, E., Crosbie, J., Schachar, R. J., Duku, E., Georgiades, S., Ayub, M., Kelley, E., Nicolson, R., Pullenayegum, E., Barnett-Tapia, C. (2022). Characterizing the ASD–ADHD phenotype: measurement structure and invariance in a clinical sample. Journal of Child Psychology and Psychiatry, Epub ahead of print. http://doi.org/10.1111/jcpp.13609.
25. Lowet, D.S., Vaida, F., Hesselink, J.R., Levin, H.S., Ewing-Cobbs, L., Schachar, R.J., Chapman, S.B., Bigler, E.D., Wilde, E.A., Saunders, A.E., Yang, T.T., Tymofiyeva, O., Max, J.E. (2022). Novel oppositional defiant disorder 12 months after traumatic brain injury in children and adolescents. The Journal of neuropsychiatry and clinical neurosciences, Epub ahead of print. https://doi.org/10.1176/appi.neuropsych.21060149.
26. Lowet, D. S., Kolan, A., Vaida, F., Hesselink, J. R., Levin, H. S., Ewing-Cobbs, L., Schachar, R. J., Chapman, S. B., Bigler, E. D., Wilde, E. A., Saunders, A. E., Yang, T. T., Tymofiyeva, O., Arif, H., & Max, J. E. (2022). Novel Oppositional Defiant Disorder 6 Months After Traumatic Brain Injury in Children and Adolescents. *The Journal of Neuropsychiatry and Clinical Neurosciences*, *34*(1), 68–76. https://doi.org/10.1176/appi.neuropsych.21020052
27. Freitas, C., Hunt, B.A.E., Wong, S.M., Ristic, L., Fragiadakis, S., Chow, S., Iaboni, A., Brian, J., Soorya, L., Chen, J.L., Schachar, R., Dunkley, B.T., Taylor, M.J., Lerch J.P., Anagnostou, E. (2022). Atypical Functional Connectivity During Unfamiliar Music Listening in Children With Autism. *Frontiers in Neuroscience.* https://doi.org/10.3389/fnins.2022.829415.
28. Safar, K., Vandewouw, M.M., Pang, E.W., de Villa, K., Crosbie, J., Schachar, R., Iaboni, A., Georgiades, S., Nicolson, R., Kelley, E., Ayub, M., Lerch, J.P., Anagnostou, E., Taylor, M.J. (2022). Shared and Distinct Patterns of Functional Connectivity to Emotional Faces in Autism Spectrum Disorder and Attention-Deficit/Hyperactivity Disorder Children. *Frontiers in Psychology*. https://doi.org/10.3389/fpsyg.2022.826527.
29. Mar, K., Townes, P., Pechlivanoglou, P., Arnold, P.D., Russell, R.J. (2022). Obsessive Compulsive Disorder and Response Inhibition: Meta-analysis of the Stop-Signal Task. *Journal of psychopathology and clinical science*, *131*(2), 152–161. https://doi.org/10.1037/abn0000732.
30. Scheerer, N.E., Pourtousi, A., Yang, C., Ding, Z., Stojanoski, B., Anagnostou, E., Nicolson, R., Kelley, E., Georgiades, S., Crosbie, J., Schachar, R., Ayub, M., Stevenson, R.A. (2022). Transdiagnostic Patterns of Sensory Processing in Autism and ADHD. *Journal of Autism and Developmental Disorders.* https://doi.org/10.1007/s10803-022-05798-3
31. Max, J. E., Drake, I., Vaida, F., Hesselink, J. R., Ewing-Cobbs, L., Schachar, R. J., Chapman, S. B., Bigler, E. D., Wilde, E. A., Saunders, A. E., Yang, T. T., Tymofiyeva, O., & Levin, H. S. (2022). Novel Psychiatric Disorder 6 Months After Traumatic Brain Injury in Children and Adolescents. *The Journal of Neuropsychiatry and Clinical Neurosciences*, appi.neuropsych.21120301. https://doi.org/10.1176/appi.neuropsych.21120301

32. Strom NI, Smit DJA, Silzer T, Iyegbe C, Burton CL, Pool R, Lemire M, Crowley JJ, Hottenga JJ, Ivanov VZ, Larsson H, Lichtenstein P, Magnusson P, Rück C, **Schachar RJ**, Wu HM, Meier SM, Crosbie J, Arnold PD, Mattheisen M, Boomsma DI, Mataix-Cols D, Cath D. (2022). Meta-analysis of genome-wide association studies of hoarding symptoms in 27,537 individuals. Transl Psychiatry. 2022 Nov 15;12(1):479. doi: 10.1038/s41398-022-02248-7.PMID: 36379924
33. Tsujimoto KC, Cost KT, LaForge-MacKenzie K, Anagnostou E, Birken CS, Charach A, Monga S, Kelly E, Nicolson R, Georgiadis S, Lee N, Osokin K, Arnold P, Schachar R, Burton C, Crosbie J, Korczak DJ. (2022). School and learning contexts during the COVID-19 pandemic: Implications for child and youth mental health. Curr Psychol. 2022 Nov 24:1-17. doi: 10.1007/s12144-022-03941-y. Online ahead of print. PMID: 36468159
34. Demontis D, Walters RK, Rajagopal VM, Waldman ID, Grove J, Als TD, Dalsgaard S, Ribasés M, Bybjerg-Grauholm J, Bækvad-Hansen M, Werge T, Nordentoft M, Mors O, Mortensen PB; ADHD Working Group of the Psychiatric Genomics Consortium (PGC); Cormand B, Hougaard DM, Neale BM, Franke B, Faraone SV, Børglum AD. Risk variants and polygenic architecture of disruptive behavior disorders in the context of attention-deficit/hyperactivity disorder. Nat Commun. 2021 Jan 25;12(1):576. doi: 10.1038/s41467-020-20443-2. PMID: 33495439
35. Schachar, RJ., Dupuis, A., Anagnostou, E., Georgiades, S., Soreni, N., Arnold, P., Burton, C., Crosbie, J. (2021). Obsessive-compulsive disorder in children and youth: neurocognitive functions in clinic and community samples. *Journal of Child Psychology and Psychiatry*, Oct 22. https://doi.org/10.1111/jcpp.13533
36. Cost, K., Crosbie J., Anagnostou E., Birken, C., Charach, A., Monga, S., Kelley, E., Nicolson, R., Maguire, J., Burton, CL, Schachar, RJ, Arnold PD, Korczak, D. (2021). Mostly worse, occasionally better: Impact of COVID-19 pandemic on the mental health of Canadian children and adolescents. *European Journal of Child and Adolescent Psychiatry*, Feb 26: 1-14. https://doi.org/10.1007/s00787-021-01744-3
37. Kushki A, Cardy RE, Panahandeh S, Malihi M, Hammill C, Brian J, Iaboni A, Taylor MJ, **Schachar R**, Crosbie J, Arnold P, Kelley E, Ayub M, Nicolson R, Georgiades S, Lerch JP, Anagnostou E. Cross-Diagnosis Structural Correlates of Autistic-Like Social Communication Differences. Cereb Cortex. 2021 Oct 1;31(11):5067-5076. doi: 10.1093/cercor/bhab142.PMID: 34080611
38. Zarrei M, Burton CL, Engchuan W, Higginbotham EJ, Wei J, Shaikh S, Roslin NM, MacDonald JR, Pellecchia G, Nalpathamkalam T, Lamoureux S, Manshaei R, Howe J, Trost B, Thiruvahindrapuram B, Marshall CR, Yuen RKC, Wintle RF, Strug LJ, Stavropoulos DJ, Vorstman JAS, Arnold P, Merico D, Woodbury-Smith M, Crosbie J, Schachar RJ, Scherer SW.Gene copy number variation and pediatric mental health/neurodevelopment in a general population. Hum Mol Genet. 2023 Jul 20;32(15):2411-2421. doi: 10.1093/hmg/ddad074. PMID: 37154571
39. Vainieri I, Martin J, Rommel AS, Asherson P, Banaschewski T, Buitelaar J, Cormand B, Crosbie J, Faraone SV, Franke B, Loo SK, Miranda A, Manor I, Oades RD, Purves KL, Ramos-Quiroga JA, Ribasés M, Roeyers H, Rothenberger A, Schachar R, Sergeant J, Steinhausen HC, Vuijk PJ, Doyle AE, Kuntsi J. Polygenic association between attention-deficit/hyperactivity disorder liability and cognitive impairments. Psychol Med. 2022 Oct;52(14):3150-3158. doi: 10.1017/S0033291720005218. Epub 2021 Feb 3. PMID: 33531098
40. Arnatkeviciute A, Lemire M, Morrison C, Mooney M, Ryabinin P, Roslin NM, Nikolas M, Coxon J, Tiego J, Hawi Z, Fornito A, Henrik W, Martinot JL, Martinot MP, Artiges E, Garavan H, Nigg J, Friedman NP, Burton C, Schachar R, Crosbie J, Bellgrove MA. Trans-ancestry meta-analysis of genome wide association studies of inhibitory control. Mol Psychiatry. 2023 Jul 27. doi: 10.1038/s41380-023-02187-9. Online ahead of print. PMID: 37500827

41. Crowley JJ, et al Latin American Trans-ancestry INitiative for OCD genomics (LATINO): Study Protocol. medRxiv. 2023 Feb 26:2023.02.23.23286373. doi: 10.1101/2023.02.23.23286373. Preprint. PMID: 37131804
42. Brierley NJ, McDonnell CG, Parks KMA, Schulz SE, Dalal TC, Kelley E, Anagnostou E, Nicolson R, Georgiades S, Crosbie J, Schachar R, Liu X, Stevenson RA. Factor Structure of Repetitive Behaviors Across Autism Spectrum Disorder and Attention-Deficit/Hyperactivity Disorder. J Autism Dev Disord. 2021 Oct;51(10):3391-3400. doi: 10.1007/s10803-020-04800-0. Epub 2020 Nov 24. PMID: 33236274
43. Lambe LJ, Burton CL, Anagnostou E, Kelley E, Nicolson R, Georgiades S, Soreni N, Schachar RJ, Hanna GL, Arnold PD, Crosbie J. Clinical validation of the parent-report Toronto Obsessive-Compulsive Scale (TOCS): A pediatric open-source rating scale. JCPP Adv. 2021 Dec 3;1(4):e12056. doi: 10.1002/jcv2.12056. eCollection 2021 Dec. PMID: 37431399
44. Stojanovski S, Scratch SE, Dunkley BT, Schachar R, Wheeler AL. A Systematic Scoping Review of New Attention Problems Following Traumatic Brain Injury in Children. Front Neurol. 2021 Nov 10;12:751736. doi: 10.3389/fneur.2021.751736. eCollection 2021. PMID: 34858314
45. West GL, Kurdi V, Fouquet C, Schachar R, Boivin M, Hastings P, Robaey P, Bohbot VD. Differential stress response to psychological and physical stressors in children using spatial versus response-dependent navigation strategies. Compr Psychoneuroendocrinol. 2021 Mar 3;6:100043. doi: 10.1016/j.cpnec.2021.100043. eCollection 2021 May. PMID: 35757366
46. Mansour R, Ward AR, Lane DM, Loveland KA, Aman MG, Jerger S, Schachar RJ, Pearson DA. ADHD severity as a predictor of cognitive task performance in children with Autism Spectrum Disorder (ASD). Res Dev Disabil. 2021 Apr;111:103882. doi: 10.1016/j.ridd.2021.103882. Epub 2021 Feb 3. PMID: 33548744
47. Dupuis A, Moon MJ, Brian J, Georgiades S, Levy T, Anagnostou E, Nicolson R, Schachar R, Crosbie J. Concurrent Validity of the ABAS-II Questionnaire with the Vineland II Interview for Adaptive Behavior in a Pediatric ASD Sample: High Correspondence Despite Systematically Lower Scores. J Autism Dev Disord. 2021 May;51(5):1417-1427. doi: 10.1007/s10803-020-04597-y. PMID: 32776267
48. Burton CL, Lemire M, Xiao B, Corfield EC, Erdman L, Bralten J, Poelmans G, Yu D, Shaheen SM, Goodale T, Sinopoli VM; OCD Working Group of the Psychiatric Genomics Consortium; Soreni N, Hanna GL, Fitzgerald KD, Rosenberg D, Nestadt G, Paterson AD, Strug LJ, Schachar RJ, Crosbie J, Arnold PD. Genome-wide association study of pediatric obsessive-compulsive traits: shared genetic risk between traits and disorder. Transl Psychiatry. 2021 Feb 2;11(1):91. doi: 10.1038/s41398-020-01121-9. PMID: 33531474
49. van der Plas E, Spencer Noakes TL, Butcher DT, Weksberg R, Galin-Corini L, Wanstall EA, Te P, Hopf L, Guger S, Hitzler J, Schachar RJ, Ito S, Nieman BJ. Cognitive and behavioral risk factors for low quality of life in survivors of childhood acute lymphoblastic leukemia. Pediatr Res. 2021 Aug;90(2):419-426. doi: 10.1038/s41390-020-01230-7. Epub 2020 Nov 17. PMID: 33203967
50. Krakowski AD, Szatmari P, Crosbie J, Schachar R, Duku E, Georgiades S, Anagnostou E. Latent Structure of Combined Autistic and ADHD Symptoms in Clinical and General Population Samples: A Scoping Review. Front Psychiatry. 2021 Dec 20;12:654120. doi: 10.3389/fpsyt.2021.654120. eCollection 2021. PMID: 34987421
51. Soltanifar M, Escobar M, Dupuis A, Schachar R. A Bayesian Mixture Modelling of Stop Signal Reaction Time Distributions: The Second Contextual Solution for the Problem of Aftereffects of Inhibition on SSRT Estimations. Brain Sci. 2021 Aug 21;11(8):1102. doi: 10.3390/brainsci11081102. PMID: 34439721
52. Jangjoo M, Goodman SJ, Choufani S, Trost B, Scherer SW, Kelley E, Ayub M, Nicolson R, Georgiades S, Crosbie J, Schachar R, Anagnostou E, Grunebaum E, Weksberg R. An Epigenetically Distinct Subset of Children With Autism Spectrum Disorder Resulting From Differences in Blood Cell Composition. Front Neurol. 2021 Apr 16;12:612817. doi: 10.3389/fneur.2021.612817. eCollection 2021. PMID: 33935932
53. Jacobs GR, Voineskos AN, Hawco C, Stefanik L, Forde NJ, Dickie EW, Lai MC, Szatmari P, Schachar R, Crosbie J, Arnold PD, Goldenberg A, Erdman L, Ameis SH. Integration of brain and behavior measures for identification of data-driven groups

cutting across children with ASD, ADHD, or OCD. Neuropsychopharmacology. 2021 Feb;46(3):643-653. doi: 10.1038/s41386-020-00902-6. Epub 2020 Nov 9. PMID: 33168947

54. Klim-Conforti P, Zaheer R, Levitt AJ, Cheung AH, Schachar R, Schaffer A, Goldstein BI, Fefergrad M, Niederkrotenthaler T, Sinyor M. The Impact of a Harry Potter-Based Cognitive-Behavioral Therapy Skills Curriculum on Suicidality and Well-being in Middle Schoolers: A Randomized Controlled Trial. J Affect Disord. 2021 May 1;286:134-141. doi: 10.1016/j.jad.2021.02.028. Epub 2021 Feb 10. PMID: 33721740
55. McInnis C, Garcia MJS, Widjaja E, Frndova H, Huyse JV, Guerguerian AM, Oyefiade A, Laughlin S, Raybaud C, Miller E, Tay K, Bigler ED, Dennis M, Fraser DD, Campbell C, Choong K, Dhanani S, Lacroix J, Farrell C, Beauchamp MH, Schachar R, Hutchison JS, Wheeler AL. Magnetic Resonance Imaging Findings Are Associated with Long-Term Global Neurological Function or Death after Traumatic Brain Injury in Critically Ill Children. J Neurotrauma. 2021 Sep 1;38(17):2407-2418. doi: 10.1089/neu.2020.7514. Epub 2021 May 13. PMID: 33787327
56. Tremblay LK, Hammill C, Ameis SH, Bhaijiwala M, Mabbott DJ, Anagnostou E, Lerch JP, Schachar RJ. Tracking Inhibitory Control in Youth With ADHD: A Multi-Modal Neuroimaging Approach. Front Psychiatry. 2020 Nov 19;11:00831. doi: 10.3389/fpsyt.2020.00831. eCollection 2020. PMID: 33329071
57. Krakowski AD, Cost KT, Anagnostou E, Lai MC, Crosbie J, Schachar R, Georgiades S, Duku E, Szatmari P. Inattention and hyperactive/impulsive component scores do not differentiate between autism spectrum disorder and attention-deficit/hyperactivity disorder in a clinical sample. Mol Autism. 2020 Apr 25;11(1):28. doi: 10.1186/s13229-020-00338-1.PMID: 32334619
58. Levy T, Kronenberg S, Crosbie J, Schachar RJ. Attention-deficit/hyperactivity disorder (ADHD) symptoms and suicidality in children: The mediating role of depression, irritability and anxiety symptoms. J Affect Disord. 2020 Mar 15;265:200-206. doi: 10.1016/j.jad.2020.01.022. Epub 2020 Jan 9. PMID: 32090742
59. Choi EJ, Vandewouw MM, Taylor MJ, Arnold PD, Brian J, Crosbie J, Kelley E, Lai MC, Liu X, Schachar RJ, Lerch JP, Anagnostou E. Beyond diagnosis: Cross-diagnostic features in canonical resting-state networks in children with neurodevelopmental disorders. Neuroimage Clin. 2020;28:102476. doi: 10.1016/j.nicl.2020.102476. Epub 2020 Oct 27. PMID: 33201803
60. Sinopoli VM, Erdman L, Burton CL, Park LS, Dupuis A, Shan J, Goodale T, Shaheen SM, Crosbie J, Schachar RJ, Arnold PD. Serotonin system genes and hoarding with and without other obsessive-compulsive traits in a population-based, pediatric sample: A genetic association study. Depress Anxiety. 2020 Aug;37(8):760-770. doi: 10.1002/da.22996. Epub 2020 Feb 24. PMID: 32092211
61. Bralten J, Widomska J, Witte W, Yu D, Mathews CA, Scharf JM, Buitelaar J, Crosbie J, Schachar R, Arnold P, Lemire M, Burton CL, Franke B, Poelmans G. Shared genetic etiology between obsessive-compulsive disorder, obsessive-compulsive symptoms in the population, and insulin signaling. Transl Psychiatry. 2020 Apr 27;10(1):121. doi: 10.1038/s41398-020-0793-y. PMID: 32341337
62. Chevrier A, Schachar RJ. BOLD differences normally attributed to inhibitory control predict symptoms, not task-directed inhibitory control in ADHD. J Neurodev Disord. 2020 Feb 21;12(1):8. doi: 10.1186/s11689-020-09311-8. PMID: 32085698 Free PMC article.
63. van der Plas E, Spencer Noakes TL, Butcher DT, Weksberg R, Galin-Corini L, Wanstall EA, Te P, Hopf L, Guger S, Spiegler BJ, Hitzler J, Schachar RJ, Ito S, Nieman BJ. Quantitative MRI outcomes in child and adolescent leukemia survivors: Evidence for global alterations in gray and white matter. Neuroimage Clin. 2020;28:102428. doi: 10.1016/j.nicl.2020.102428. Epub 2020 Sep 15. PMID: 32980598 Free PMC article.
64. Goodman SJ, Burton CL, Butcher DT, Siu MT, Lemire M, Chater-Diehl E, Turinsky AL, Brudno M, Soreni N, Rosenberg D, Fitzgerald KD, Hanna GL, Anagnostou E, Arnold PD, Crosbie J, Schachar R, Weksberg R. Obsessive-compulsive disorder and attention-deficit/hyperactivity disorder: distinct associations with DNA methylation and genetic variation. J Neurodev Disord. 2020 Aug 16;12(1):23. doi: 10.1186/s11689-020-09324-3. PMID: 32799817 Free PMC article.

65. Pearson DA, Santos CW, Aman MG, Arnold LE, Lane DM, Loveland KA, Mansour R, Ward AR, Casat CD, Jerger S, Schachar RJ, Bukstein OG, Cleveland LA. Effects of Extended-Release Methylphenidate Treatment on Cognitive Task Performance in Children with Autism Spectrum Disorder and Attention-Deficit/Hyperactivity Disorder J Child Adolesc Psychopharmacol. 2020 Sep;30(7):414-426. doi: 10.1089/cap.2020.0004. Epub 2020 Jul 9. PMID: 32644833
66. Sanjeevan T, Hammill C, Brian J, Crosbie J, Schachar R, Kelley E, Liu X, Nicolson R, Iaboni A, Day Fragiadakis S, Ristic L, Lerch JP, Anagnostou E. Exploring the Neural Structures Underlying the Procedural Memory Network as Predictors of Language Ability in Children and Adolescents With Autism Spectrum Disorder and Attention Deficit Hyperactivity Disorder. Front Hum Neurosci. 2020 Dec 10;14:587019. doi: 10.3389/fnhum.2020.587019. eCollection 2020. PMID: 33362492 Free PMC article.
67. Vandewouw MM, Choi E, Hammill C, Arnold P, Schachar R, Lerch JP, Anagnostou E, Taylor MJ. Emotional face processing across neurodevelopmental disorders: a dynamic faces study in children with autism spectrum disorder, attention deficit hyperactivity disorder and obsessive-compulsive disorder. Transl Psychiatry. 2020 Nov 2;10(1):375. doi: 10.1038/s41398-020-01063-2. PMID: 33139709 Free PMC article.
68. Blanchette CA, Kurdi V, Fouquet C, Schachar R, Boivin M, Hastings P, Robaey P, West GL, Bohbot VD. Opposing effects of cortisol on learning and memory in children using spatial versus response-dependent navigation strategies. Neurobiol Learn Mem. 2020 Mar;169:107172. doi: 10.1016/j.nlm.2020.107172. Epub 2020 Jan 21. PMID: 31978550
69. Soltanifar M, Escobar M, Dupuis A, Chevrier A, Schachar R. The Asymmetric Laplace Gaussian (ALG) Distribution as the Descriptive Model for the Internal Proactive Inhibition in the Standard Stop Signal Task. Brain Sci. 2022 Jun 1;12(6):730. doi: 10.3390/brainsci12060730. PMID: 35741615 Free PMC article.
70. Soltanifar M, Knight K, Dupuis A, Schachar R, Escobar M. A Time Series-Based Point Estimation of Stop Signal Reaction Times: More Evidence on the Role of Reactive Inhibition-Proactive Inhibition Interplay on the SSRT Estimations. Brain Sci. 2020 Aug 29;10(9):598. doi: 10.3390/brainsci10090598. PMID: 32872438