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PROFESSIONAL CONTACT Research Computing Associate
Computational Brain Anatomy (CoBrA) Laboratory & Cerebral Imaging Center
Project Lead — Douglas Neuroinformatics Platform
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RESEARCH INTERESTS Structural neuroimaging. Image processing, classification, and registration. Pipeline design and optimization for standardized image processing. High performance computing. Statistical methods in Neuroimaging. Architectural design of data management databases for data capture and management.

EDUCATION **McMaster University**, Hamilton, ON, Canada
Doctor of Philosophy — Engineering Physics **2014-06**

- Thesis : An Investigation into the Role of Energy and Symmetry at Epitaxial Interfaces
- Adviser : Dr. John S. Preston

Bachelor of Engineering — Engineering Physics **2007-05**

- Awarded with Distinction

HONOURS AND AWARDS Canadian Open Neuroscience Platform Research Scholar — \$50,000 **2019**
Nano Ontario Conference Best Poster **2011-10**
McMaster Materials Science & Engineering Graduate Conference Best Presentation Delivery **2010-09**
NSERC Postgraduate Scholarship D3 — \$63,000 **2009-2011**
Ontario Graduate Scholarship — Doctoral — \$15,000 — *Declined* **2009**
Ontario Graduate Scholarship — Masters — \$15,000 **2008**

TEACHING EXPERIENCE **Douglas University Mental Health Institute, CIC**, Montreal, QC, Canada
Research Computing Associate — CIC Software Seminar Series **2014-08 – Present**
Software Carpentry, Online
Volunteer Instructor **2012-11 – Present**
McMaster University, Hamilton, ON, Canada
Instructor — MATLS 1M03, Introduction to Materials Science **2014-06 – 2014-08**
Instructor — ENG PHYS 2CE4, Computational Methods for Engineering Physics **2014-01 – 2014-04**
Teaching Assistant — ENG PHYS 3F04 Introduction to Solid State **2012-09 – 2012-12**
Teaching Assistant — ENG PHYS 4A06 Senior Undergraduate Thesis Project **2008-09 – 2012-05**
Teaching Assistant — ENG PHYS 4U04 Advanced Computer Laboratories **2008-09 – 2009-05**

RESEARCH EXPERIENCE **McMaster University**, Hamilton, ON, Canada
Laboratory Manager **2009-05 – 2014-05**
Summer and Co-op Student Supervisor **2009-09 – 2014-05**

JOURNAL REVIEWS PLOS ONE **2019**
Nature Scientific Data **2018**

SERVICE	Centre de la Petite Enfance Funville , Verdun, QC, Canada <i>Board Member</i>	2019-05 – 2021-05
	Software Carpentry , Online <i>Maintainer and Developer shell-novice Lesson</i>	2014-11 – 2022-08
	McMaster University , Hamilton, ON, Canada <i>Ex-Officio Member - Engineering Physics Graduate Advisory Committee</i>	2013-12 – 2014-08
	<i>Engineering Physics Professorial Search Committee</i>	2010-11 – 2011-01
	<i>NanoGiga 2009, 14th Canadian Semiconductor Technology Conference</i>	2009-08
	<i>Graduate Student Association — Phoenix Executive Committee</i>	2009-09 – 2013-12
	Nano Ontario , ON, Canada <i>Board Member At-Large - Chair, Communications Committee</i>	2013-03 – 2015-01
BIBLIOMETRICS	Published Peer-Reviewed Articles : 92 (4 first author, 2 senior author) Abstracts in Conference Proceedings : 87 Invited Presentations : 11 h-index : 30 i10-index : 67	
PATENTS	Jovanovic, S. M., G. A. Devenyi , and J. S. Preston. <i>Arbitrarily thin ultra smooth film with built-in separation ability and method of forming the same</i> . 2014-02. URL: https://patentimages.storage.googleapis.com/74/37/22/79228e821a36e5/W02014026292A1.pdf .	
INVITED PRESENTATIONS	Near, J. and G. A. Devenyi . <i>MRS Simulation & Preprocessing Using the FID-A Toolkit</i> . MR Spectroscopy Study Group, ISMRM Virtual Meetings. 2017-07. URL: https://www.ismr.org/virtual-meetings/virtual-meetings-archive/ . Devenyi, G. A. and R. Schwartz. <i>Skills for Scientific Computing</i> . Software Carpentry Workshop, BIO5 Institute & iPlant Collaborative, Arizona State University. 2015-05. URL: https://rachelss.github.io/2015-04-18-ASU/ . Devenyi, G. A. , D. Haine, M. Corvellec, J. F. Santos, and I. Kozlov. <i>Skills for Scientific Computing</i> . Software Carpentry Workshop, Department of Physics, McGill University. 2015-01. URL: https://igor-kozlov.github.io/2015-01-10-mcgill/ . Blischak, J. D., D. Haine, M. Corvellec, and G. A. Devenyi . <i>Skills for Scientific Computing</i> . Software Carpentry Workshop, Faculty of Medicine, University de Montreal. 2014-11. URL: https://dhaine.github.io/2014-11-06-fmv/ . Devenyi, G. A. <i>L^AT_EX for Preparation of Scientific Documents and Theses</i> . Department of Electrical and Computer Engineering, McMaster University. 2014-06. Devenyi, G. A. and J. Ory. <i>Skills for Scientific Computing</i> . Software Carpentry Workshop, Statistical Computing Unit, Cornell University. 2014-06. URL: https://gdevenyi.github.io/2014-06-04-cornell/ . Devenyi, G. A. <i>L^AT_EX for Preparation of Scientific Documents and Theses</i> . Department of Medical Physics, McMaster University. 2014-05. Wilson, G. W. and G. A. Devenyi . <i>Skills for Scientific Computing</i> . Software Carpentry Workshop, Department of Physics & Astronomy, McMaster University. 2014-05. URL: https://gdevenyi.github.io/2014-05-05-mcmaster/ . Devenyi, G. A. <i>L^AT_EX for Preparation of Scientific Documents and Theses</i> . School of Graduate Studies, McMaster University. 2013-05. Devenyi, G. A. <i>L^AT_EX for Preparation of Scientific Documents and Theses</i> . School of Graduate Studies, McMaster University. 2012-11. Devenyi, G. A. <i>The Future of Photovoltaics: Next Generation Materials and Devices at McMaster University Engineering Physics</i> . IEEE Hamilton Chapter Monthly Meeting. 2012-05.	

- Blūma, M., E. Micotti, **G. A. Devenyi**, L. Cupo, D. Tolomeo, M. M. C. Gianluigi Forloni, and C. Babiloni. “Heterogeneity Of Local Volume Changes In Taups2app Mouse Model Of AD”. en. In: *Alzheimer’s Association International Conference*. Amsterdam, Netherlands.
- Binda, K. H., D. Orlowski, **G. A. Devenyi**, E. Kaadt, T. P. Lillethorup, A. K. O. Alstrup, E. K. Grove, S. L. Bærentzen, M. B. Thomsen, C. R. Bjarkam, C. C. Real, M. Mallar Chakravarty, B. Elfving, J. C. H. Sørensen, D. J. Brooks, A. N. Glud, and A. M. Landau. *Modulation of SV2A PET and microRNA regulation by Deep Brain Stimulation of the subthalamic nucleus in the unilateral 6-OHDA minipig model of Parkinson’s disease*. NEURORECEPTOR MAPPING (NRM) 2024. 2024-05.
- Abboud, F., K. Easson, M. Ehrler, J. Ziolkowski, C. V. Rohlicek, B. Latal, C. Saint-Martin, G. Gilbert, M. Greutmann, **G. A. Devenyi**, R. O. Tuura, M. Mallar Chakravarty, and M. Brossard-Racine. *Cortical Correlates of Executive Functions in Adolescents and Young Adults with a Congenital Heart Defect*. 8th World Congress of Pediatric Cardiology and Cardiac Surgery. 2023-08.
- Palmis, S., K. Easson, **G. A. Devenyi**, M. Khairy, C. Rohlicek, G. Gilbert, C. Saint-Martin, M. M. Chakravarty, and M. Brossard-Racine. *Cerebellar volumes are altered in youth born preterm or with congenital heart disease*. The Organization for Human Brain Mapping (OHBM) 2023 Annual Meeting. 2023-07.
- Palmis, S., K. Easson, **G. A. Devenyi**, M. Khairy, C. Rohlicek, G. Gilbert, C. Saint-Martin, M. M. Chakravarty, and M. Brossard-Racine. *Cerebellar volumes are associated with executive functioning in youth born preterm or with congenital heart disease*. Pediatric Academic Societies (PAS) 2023 Annual Meeting. 2023-07.
- Benrimoh, D., E. Guma, **G. A. Devenyi**, M. M. Chakravarty, D. Alain, M. Lepage, M. Bratislav, and S. Ducharme. *Trans-Diagnostic Structural Imaging In Psychosis: A Comparison Across Schizophrenia, Frontotemporal Dementia, and Alzheimer’s Disease*. Organization For Human Brain Mapping 2022. 2022-06.
- Blostein, N., S. Patel, R. Patel, **G. A. Devenyi**, S. Tullo, E. Plitman, M. Costantino, R. Markello, S. A. Bedford, and M. M. Chakravarty. *Relationship Between Heritability And Latent Dimensions Of Behaviour In The Striatum, Thalamus And Globus Pallidus*. Society For Neuroscience 2021. 2021-11.
- Devenyi, G. A.**, C. C. Sherwood, W. D. Hopkins, A. Raznahan, and M M Chakravarty. *Genes Correlated With Increases In Neuroanatomical Variability Through Evolution Are Implicated In Neuropsychiatric Disorders: A Comparative Chimpanzee-Human Neuroimaging And Transcriptomic Study*. Society for Neuroscience 2021. 2021-11.
- Parent, O., E. Olafson, A. Bussy, S. Tullo, A. Salaciak, S. A. Bedford, S. Farzin, M.-L. Beland, V. Valiquette, C. L. Tardif, **G. A. Devenyi**, and M. M. Chakravarty. *Comparing Age Trajectories Of MRI Cortical Markers And Myelin: An Exploratory Study*. Society For Neuroscience. 2021-11.
- Valiquette, V., E. Guma, R. Patel, E. Plitman, D. Gallino, **G. A. Devenyi**, and M. Chakravarty. *Examining Litter Specific Variability In Mice And Its Impact On Neurodevelopmental Studies*. Society for Neuroscience 2021. 2021-11.
- Costantino, M., A. Bussy, G. Pigeau, N. Blostein, **G. A. Devenyi**, R. D. Markello, R. Patel, N. Gervais, and M. M. Chakravarty. “Sex differences in cortical morphometry during ageing: Examining the interplay between lifestyle and reproductive factors”. en. In: *bioRxiv* (2021-10), p. 2021.10.14.464259. DOI: [10.1101/2021.10.14.464259](https://doi.org/10.1101/2021.10.14.464259).
- Courson, M., K. Marcotte, C. Bedetti, H. Bérengère, **G. Devenyi**, M. M. C. Alex Desautels, and S. M. Brambati. *Secondary Damage Of The Thalamus In Post-Stroke Aphasia: A New Player In Language Recovery Outcome*. Society For The Neurobiology Of Language. 2021-10.
- Guma, E., M. Bordeleau, E. Snook, G. Desrosiers-Grégoire, F. González Ibáñez, K. Picard, S. Spring, J. P. Lerch, B. J. Nieman, **G. A. Devenyi**, M.-E. Tremblay, and M. M. Chakravarty. “Differential effects of early or late exposure to prenatal maternal immune activation on mouse embryonic neurodevelopment”. en. In: *bioRxiv* (2021-07), p. 2021.07.14.452084. DOI: [10.1101/2021.07.14.452084](https://doi.org/10.1101/2021.07.14.452084).
- Bethlehem, R. A. I. et al. “Brain charts for the human lifespan”. en. In: *bioRxiv* (2021-06), p. 2021.06.08.447489. DOI: [10.1101/2021.06.08.447489](https://doi.org/10.1101/2021.06.08.447489).
- Blostein, N., **G. A. Devenyi**, S. Patel, R. Patel, S. Tullo, E. Plitman, S. Bedford, C. C. Sherwood, W. D. Hopkins, J. Seidlitz, and M. M. C. Armin Raznahan. *Subcortical Structure Areal Expansion In The Human Compared To The Chimpanzee And Heritability*. Organization For Human Brain Mapping. 2021-06.
- Costantino, M., G. Pigeau, A. Bussy, N. Blostein, **G. Devenyi**, R. Markello, R. Patel, and M. M. C. Nicole Gervais. *Effects Of Pregnancy: Menopause And Lifestyle Risk Factors On Cortical Thickness In Healthy Ageing*. Organization For Human Brain Mapping. 2021-06.
- Cupo, L., E. Guma, D. Gallino, C. Fowler, K. Mar, M. Dehghani, J. Near, **G. A. Devenyi**, and M. Mallar Chakravarty. *Characterization Of Early Maternal Immune Activation On Brain And Behavior During Adolescence And Early Adulthood In Mice*. Organization For Human Brain Mapping. 2021-06.
- Dai, A., **G. A. Devenyi**, M. Costantino, J. Seidlitz, T. D. Satterthwaite, and M. M. Chakravarty. *The Association Between Cortical Thickness and Dimensions of the Adolescent Psychosis Spectrum*. Organization For Human Brain Mapping. 2021-06.

- Desrosiers-Gregoire, G., **G. A. Devenyi**, and M. M. C. Joanes Grandjean. *Neural Source Modeling Prevents Removal Of Neural Activity During Confound Regression With fMRI*. Organization For Human Brain Mapping. 2021-06.
- Kalantar Hormozi, H., **G. A. Devenyi**, R. Patel, A. Raznahan, and M. Chakravarty. *Multivariate Analysis Of Cortical Morphometry Across Human Brain Development*. Organization for Human Brain Mapping 2021. 2021-06.
- Kalantar-Hormozi, H., **G. A. Devenyi**, R. Patel, and M. M. C. Armin Raznahan. *Multivariate Analysis Of Cortical Morphometry Across Human Brain Development*. Organization For Human Brain Mapping. 2021-06.
- Patel, R., G. Desrosiers-Gregoire, **G. A. Devenyi**, and M. M. Chakravarty. *Individual Variability Of Microstructural-Functional Coupling In The Human Cortex*. Organization For Human Brain Mapping. 2021-06.
- Premasiri, S. D., A. Bussy, **G. A. Devenyi**, and M. M. Chakravarty. *A Cascaded 3D U-Net Model For Fast Automatic Segmentation Of The Hippocampus*. Organization For Human Brain Mapping. 2021-06.
- Tullo, S., R. Patel, **G. A. Devenyi**, A. Salaciak, S. A. Bedford, S. Farzin, P.-A. R. Group, C. L. Tardif, and M. M. Chakravarty. *Whole Brain Age-Related Patterns Of Atrophy, Microstructure, And Cognitive Decline*. Organization For Human Brain Mapping. 2021-06.
- Patel, R., C. E. Mackay, M. G. Jansen, **G. A. Devenyi**, M. C. O'Donoghue, M. Kivimäki, A. Singh-Manoux, E. Zsoldos, K. P. Ebmeier, M. M. Chakravarty, and S. Suri. "Individual variation in brain structural-cognition relationships in aging". en. In: *bioRxiv* (2021-02), p. 2021.02.19.431732. DOI: [10.1101/2021.02.19.431732](https://doi.org/10.1101/2021.02.19.431732).
- Bhagwat, N., A. Barry, E. W. Dickie, S. T. Brown, **G. A. Devenyi**, K. Hatano, E. DuPre, A. Dagher, M. Chakravarty, C. M. T. Greenwood, B. Misic, D. N. Kennedy, and J.-B. Poline. "Understanding the impact of preprocessing pipelines on neuroimaging cortical surface analyses". en. In: *GigaScience* 10.1 (2021-01). DOI: [10.1093/gigascience/giaa155](https://doi.org/10.1093/gigascience/giaa155).
- Bussy, A., E. Plitman, R. Patel, A. Salaciak, S. Farzin, S. Bedford, M.-L. Béland, S. Tullo, **G. A. Devenyi**, and M. Chakravarty. "Volumetric, shape and microstructural alterations of the hippocampal subfields in healthy aging". en. In: *Alzheimer's & dementia: the journal of the Alzheimer's Association* 16.S4 (2020-12). DOI: [10.1002/alz.039589](https://doi.org/10.1002/alz.039589).
- Kirschner, M., G. Shafiei, R. D. Markello, C. Makowski, A. Talpalaru, B. Hodzic-Santor, **G. A. Devenyi**, C. Paquola, B. C. Bernhardt, M. Lepage, M. M. Chakravarty, A. Dagher, and B. Mišić. "Latent clinical-anatomical dimensions of schizophrenia". en. In: *Schizophrenia bulletin* 46.6 (2020-12), pp. 1426–1438. DOI: [10.1093/schbul/sbaa097](https://doi.org/10.1093/schbul/sbaa097).
- Skorska, M. N., **G. A. Devenyi**, N. Van Bruggen, N. J. Lobaugh, R. Patel, S. Bedford, P. Keerthi, S. Chavez, K. J. Zucker, M. C. Lai, M. M. Chakravarty, and D. P. Vanderlaan. *Brain Cortical Thickness And Surface Area In Adolescents Who Experience Gender Dysphoria: A Preliminary Analysis*. The 47th Canadian Sex Research Forum Annual Conference. 2020-10.
- Blüma, M., E. Micotti, **G. A. Devenyi**, D. Tolomeo, L. Cupo, G. Forloni, M. Mallar Chakravarty, and C. Babiloni. "Lifetime brain structural trajectories in TAUPS2APP mouse model of Alzheimer's disease". In: 2020-07. URL: <https://alz.confex.com/alz/20amsterdam/meetingapp.cgi/Paper/45523>.
- Olafson, E., S. Bedford, **G. A. Devenyi**, R. Patel, S. Tullo, M. T. M. Park, O. Parent, E. Anagnostou, S. Baron-Cohen, E. T. Bullmore, L. R. Chura, M. C. Craig, C. Ecker, D. L. Floris, R. J. Holt, R. Lenroot, J. P. Lerch, M. V. Lombardo, D. G. M. Murphy, A. Raznahan, A. N. V. Ruigrok, M. D. Spencer, J. Suckling, M. J. Taylor, M.-C. Lai, M. M. Chakravarty, and MRC AIMS Consortium. "Examining the boundary sharpness coefficient as an index of cortical microstructure and its relationship to age and sex in autism spectrum disorder". en. In: *bioRxiv* (2020-07), p. 2020.07.09.196212. DOI: [10.1101/2020.07.09.196212](https://doi.org/10.1101/2020.07.09.196212).
- Blostein, N., S. Patel, **G. A. Devenyi**, and M. M. C. Raihaan Patel. *The Modular Organization Of Heritability Across The Cortex*. Organization For Human Brain Mapping. 2020-06.
- Blostein, N., S. Patel, R. Patel, S. Tullo, E. Plitman, S. Bedford, **G. A. Devenyi**, and M. M. Chakravarty. *Heritability Of Subcortical Structures Using A Twin And Non-Twin Sibling Design*. Organization For Human Brain Mapping. 2020-06.
- Bussy, A., E. Plitman, V. Valiquette, C. Kazazian, **G. A. Devenyi**, and M. M. Chakravarty. *Impact Of Commonly Used Acquisition Sequences On Automated Hippocampal Subfield Volume Estimates*. Organization For Human Brain Mapping. 2020-06.
- Chapleau, M., C. Bedetti, **G. A. Devenyi**, S. Sheldon, H. J. Rosen, B. L. Miller, M. L. Gorno-Tempini, M. M. Chakravarty, and S. M. Brambati. "Deformation-based shape analysis of the hippocampus in the semantic variant of primary progressive aphasia and Alzheimer's disease". en. In: *NeuroImage. Clinical* 27.102305 (2020-06), p. 102305. DOI: [10.1016/j.nicl.2020.102305](https://doi.org/10.1016/j.nicl.2020.102305).
- Gallino, D. R., **G. A. Devenyi**, and M. M. Chakravarty. *Acute fornix deep brain stimulation remodels brain and improves memory in Alzheimer's mouse model*. Organization For Human Brain Mapping. 2020-06.

- Jones, S. L., C. Anastassiadis, M. Dupuis, G. Elgbeili, F. P. Marcoux, J. Gazetas, **G. A. Devenyi**, J. Near, D. P. Laplante, J. Pruessner, and S. King. *Prenatal Stress Alters Hypothalamic-Pituitary-Gonadal Axis Structures In Adults: Project Ice Storm*. Organization for Human Brain Mapping 2020. 2020-06.
- McGillivray, S., M. Tuznik, **G. A. Devenyi**, M. M. Chakravarty, D. Rudko, and C. Tardif. *Quantitative MRI of Social Isolation In Male And Female Mice*. Organization For Human Brain Mapping. 2020-06.
- Plitman, E., A. Bussy, V. Valiquette, A. Salaciak, N. Rajah, J. Near, **G. A. Devenyi**, and M. M. Chakravarty. *Test-Retest Reliability Of Cortical Thickness And Structure Volume In Volumetric Navigator Sequences*. Organization For Human Brain Mapping. 2020-06.
- Guma, E., C. Anastassiadis, D. Gallino, **G. A. Devenyi**, V. Cvetkovska, P. Bordignon, G. Ayranci, B. Mistic, R. Bagot, and M. Chakravarty. "Altered Neurodevelopmental Trajectories in Mice Following First and Second Trimester Maternal Immune Activation". In: vol. 87. Elsevier, 2020-05, S141. DOI: [10.1016/j.biopsych.2020.02.375](https://doi.org/10.1016/j.biopsych.2020.02.375).
- Jones, S. L., C. Anastassiadis, M. Dupuis, G. Elgbeili, F.-P. Marcoux, J. Gazetas, **G. A. Devenyi**, J. Near, D. P. Laplante, T.-V. Nguyen, J. C. Pruessner, and S. King. "Prenatal Maternal Stress Alters the Structural Integrity of the Hypothalamic-Pituitary-Gonadal Axis 20 Years After Exposure: Project ICE Storm". In: *Biological psychiatry* 87.9 (2020-05), S324. DOI: [10.1016/j.biopsych.2020.02.833](https://doi.org/10.1016/j.biopsych.2020.02.833).
- Kirschner, M., G. Shafiei, et al. "Clinical-Anatomical Phenotypes of Schizophrenia". In: *Biologicals: journal of the International Association of Biological Standardization* 87.9 (2020), S119-S120. DOI: [10.1016/j.biopsych.2020.02.325](https://doi.org/10.1016/j.biopsych.2020.02.325).
- Anastassiadis, C., M. Urosevic, D. Gallino, G. Ayranci, **G. A. Devenyi**, J. Germann, and M. Mallar Chakravarty. *The effect of high-fat diet and exercise on neuroanatomy in a mouse model of Alzheimer's disease*. Canadian College of Neuropsychopharmacology 2019 Conference. 2019-06. URL: <https://ccnp.ca/Meeting/Program>.
- Buckthought, A., **G. Devenyi**, G. Gilbert, C. Saint-Martin, K. Fontes, K. Easson, M. Chakravarty, and M. Brossard-Racine. *Cerebellar anatomical alterations in youth with complex congenital heart disorder*. International Society for Magnetic Resonance in Medicine 2019 Conference. 2019-05. URL: https://www.ismrm.org/19/program_files/DP12.htm.
- Desrosiers-Grégoire, G., D. Gallino, **G. A. Devenyi**, and M. Mallar Chakravarty. *Comparison of the BOLD-evoked response to hypercapnic challenge in mice anesthetized under isoflurane and dexmedetomidine*. International Society for Magnetic Resonance in Medicine 2019 Conference. 2019-05. URL: https://www.ismrm.org/19/program_files/DP11.htm.
- Goerzen, D., C. Fowler, **G. Devenyi**, J. Germann, D. Madularu, M. Chakravarty, and J. Near. *An MRI-Derived Neuroanatomical Atlas of the Fischer 344 Rat Brain*. International Society for Magnetic Resonance in Medicine 2019 Conference. 2019-05. URL: https://www.ismrm.org/19/program_files/DP10.htm.
- Skorska, M. N., N. Van Bruggen, N. J. Lobaugh, R. Patel, S. Bedford, **G. A. Devenyi**, P. Keerthi, S. Chavez, K. J. Zucker, M. C. Lai, M. M. Chakravarty, and D. P. Vanderlaan. *Surface Area And Cortical Volume In Adolescents Who Experience Gender Dysphoria: A Preliminary Analysis Using MRI*. University Of Toronto Mississauga Graduate Research Colloquium. 2019-04.
- Anastassiadis, C., M. Urosevic, D. Gallino, G. Ayranci, **G. A. Devenyi**, J. Germann, and M. Mallar Chakravarty. *Can exercise and diet rescue the effects of obesity on Alzheimer's disease-like pathology in a mouse model?* 2019 Rotman Research Institute Conference. 2019-03.
- Fotopoulos, N., **G. Devenyi**, M. M. Chakravarty, S. Karama, N. Grizenko, and R. Joobar. "SA3 - REDUCED CORTICAL THICKNESS IN CHILDREN WITH ADHD: ROLE OF NET16 AND MATERNAL SMOKING DURING PREGNANCY". In: *European neuropsychopharmacology: the journal of the European College of Neuropsychopharmacology* 29 (2019-01), S823-S824. DOI: [10.1016/j.euroneuro.2017.08.075](https://doi.org/10.1016/j.euroneuro.2017.08.075).
- Jones, S. L., C. Anastassiadis, M. Dupuis, G. Elgbeili, F. P. Marcoux, J. Gazetas, **G. A. Devenyi**, J. Near, D. P. Laplante, J. Pruessner, and S. King. *Prenatal maternal stress affects the structural integrity of the hypothalamic pituitary gonadal axis in males and females: Project Ice Storm*. en. Canadian National Perinatal Research Meeting. 2019.
- Anastassiadis, C., C. Rollins, D. Gallino, V. Kong, G. Ayranci, **G. A. Devenyi**, J. Germann, and M. M. Chakravarty. *Mitigating the effects of adult obesity with exercise and dietary treatment in a mouse model of Alzheimer's disease*. Society for Neuroscience. 2018-11.
- Guma, E., C. Anastassiadis, J. Germann, D. Gallino, G. Ayranci, **G. A. Devenyi**, and M. M. Chakravarty. *Mapping of postnatal neurodevelopment in response to early and late prenatal maternal immune activation in mice*. Society for Neuroscience. 2018-11.
- Skorska, M. N., N. Van Bruggen, N. J. Lobaugh, R. Patel, S. Bedford, **G. A. Devenyi**, P. Keerthi, S. Chavez, K. J. Zucker, M. C. Lai, M. M. Chakravarty, and D. P. Vanderlaan. *Surface Area And Cortical Volume In Adolescents Who Experience Gender Dysphoria: A Preliminary Analysis Using MRI*. Gender Development Research Conference. 2018-10.

- Skorska, M. N., N. van Bruggen, N. J. Lobaugh, R. Patel, S. Bedford, **G. A. Devenyi**, P. Keerthi, S. Chavez, K. J. Zucker, M.-C. Lai, M. M. Chakravarty, and D. P. VanderLaan. *Surface area and cortical volume in adolescents who experience gender dysphoria: A preliminary analysis of the relation to sexual orientation*. Canadian Sex Research Forum. 2018-10.
- Desrosiers-Gregoire, G., D. Gallino, **G. A. Devenyi**, and M. M. Chakravarty. *Investigating brain functional connectivity in mouse models of neuropsychiatric disorders using fMRI*. McGill Integrated Program in Neuroscience Retreat. 2018-09.
- Skorska, M. N., N. van Bruggen, N. J. Lobaugh, R. Patel, S. Bedford, **G. A. Devenyi**, P. Keerthi, S. Chavez, K. J. Zucker, M.-C. Lai, M. M. Chakravarty, and D. P. VanderLaan. *Surface area and cortical volume in adolescents who experience gender dysphoria: A preliminary analysis of the relation to sexual orientation*. International Academy of Sex Research Meeting. 2018-07.
- Bertrand, J.-A., **G. A. Devenyi**, G. Turecki, M. M. Chakravarty, and S. Richard-Devantoy. *Thalamic surface alteration in elderly depressed patients at-risk for suicide*. Society for Biological Psychiatry. 2018-05.
- Bertrand, J.-A., **G. A. Devenyi**, G. Turecki, M. Chakravarty, and S. Richard-Devantoy. "T125. Thalamic Shape Differences in Elderly Depressed Patients At-Risk for Suicide". In: *Biological psychiatry* 83.9, Supplement (2018-05), S176-S177. DOI: [10.1016/j.biopsych.2018.02.461](https://doi.org/10.1016/j.biopsych.2018.02.461).
- Steele, C. J., S. Patel, J. Germann, **G. A. Devenyi**, and M. M. Chakravarty. *Quantifying cortico-cerebellar structural covariance*. International Society for Magnetic Resonance in Medicine. 2018-05.
- Tullo, S., **G. A. Devenyi**, R. Patel, A. Salaciak, S. Bedford, and M. M. Chakravarty. *MR-based age- and sex-related effects on the striatum, globus pallidus and thalamus in healthy individuals across the adult lifespan*. Canadian Neuroscience Conference. 2018-05.
- Guimond, S., S. Tingue, **G. A. Devenyi**, Y.-X. Tang, L. Mike, M. Mallar Chakravarty, J. A. Sweeney, G. D. Pearlson, B. A. Clementz, C. A. Tamminga, and M. S. Keshavan. "T22. PITUITARY GLAND VOLUME DIFFERENCES IN INDIVIDUALS WITH PSYCHOSIS: RESULTS FROM THE BIPOLAR-SCHIZOPHRENIA NETWORK ON INTERMEDIATE PHENOTYPES (B-SNIP) STUDY". en. In: *Schizophrenia bulletin* 44.suppl_1 (2018-04), S121-S121. DOI: [10.1093/schbul/sby016.298](https://doi.org/10.1093/schbul/sby016.298).
- Guimond, S., S. Tingue, **G. A. Devenyi**, Y. Tang, L. Mike, M. M. Chakravarty, J. Sweeney, G. Perlsn, B. Clementz, C. Tamminga, and M. Keshavan. *Pituitary gland volume differences in individuals with psychosis: Results from the bipolar-schizophrenia network on intermediate phenotypes (B-SNIP) study*. Schizophrenia International Research Society Conference. 2018-04.
- Makowski, C., C. Tardif, **G. Devenyi**, R. Amaral, G. Buck, R. Joobar, A. Malla, J. Shah, M. Chakravarty, and M. Lepage. "T172. MULTIMODAL QUANTIFICATION OF MEMORY CIRCUIT MICROSTRUCTURE IN FIRST EPISODE PSYCHOSIS". en. In: *Schizophrenia bulletin* 44.suppl_1 (2018-04), S182-S182. DOI: [10.1093/schbul/sby016.448](https://doi.org/10.1093/schbul/sby016.448).
- Makowski, C., C. L. Tardif, **G. A. Devenyi**, R. S. C. Amaral, G. Buck, R. Joobar, A. Malla, J. Shah, M. M. Chakravarty, and M. Lepage. *Multimodal Quantification of Memory Circuit Microstructure in First Episode Psychosis*. Schizophrenia International Research Society Conference. 2018-04.
- Guadagno, Angela, Kan, A. P. Mathieu, E. Guma, **G. A. Devenyi**, P. Rosa-Neto, M. M. Chakravarty, and C.-D. Walker. *Resting-state functional connectivity of the basolateral amygdala is altered in preweaning rats subjected to chronic early life stress*. Society for Neuroscience Conference. 2017-11.
- Tullo, S., **G. A. Devenyi**, R. Patel, A. Salaciak, S. Bedford, and M. M. Chakravarty. *MR-based age-and sex-related effects on the striatum, globus pallidus and thalamus in healthy individuals across the adult lifespan*. Society for Neuroscience. 2017-11.
- Bedford, S., M. T. M. Park, **G. A. Devenyi**, S. Tullo, E. Anagnostou, S. Baron-Cohen, M. C. Craig, C. Ecker, R. Lenroot, J. P. Lerch, M. V. Lombardo, D. G. M. Murphy, A. Raznahan, A. N. V. Ruigrok, E. Smith, S. Swedo, M. J. Taylor, A. Thurm, MRC Aims Consortium, M.-C. Lai, and M. M. Chakravarty. *A cross-sectional neuroimaging prospective mega-analysis identifying sex-dependent atypical cortical thickness in autism spectrum disorders*. Canadian College of Neuropsychopharmacology Conference. 2017-07.
- Tardif, C. L., R. S. C. Amaral, **G. A. Devenyi**, P. Rosa-Neto, J. Poirier, J. Breitner, M. M. Chakravarty, and PREVENT-AD Research Group. *Hippocampal T1-weighted and FLAIR contrast is associated with CSF biomarkers in asymptomatic individuals with parental history of Alzheimer's disease*. International Society of Magnetic Resonance in Medicine Conference. 2017-07.
- Fotopoulos, N., **G. A. Devenyi**, M. M. Chakravarty, S. Karama, N. Grizenko, and R. Joobar. *Investigating the effects of maternal smoking during pregnancy on brain structure in children with Attention deficit-hyperactivity disorder (ADHD)*. Canadian College of Neuropsychopharmacology Conference. 2017-06.
- Bedford, S., M. T. M. Park, **G. A. Devenyi**, S. Tullo, E. Anagnostou, S. Baron-Cohen, M. C. Craig, C. Ecker, R. Lenroot, J. P. Lerch, M. V. Lombardo, D. G. M. Murphy, A. Raznahan, A. N. V. Ruigrok, E. Smith, S. Swedo, M. J. Taylor, A. Thurm, MRC Aims Consortium, M.-C. Lai, and M. M. Chakravarty. *Large-scale*

- ($N=1830$) analysis of sex-dependent atypical cortical thickness in autism spectrum disorder. Society for Biological Psychiatry Conference. 2017-05.
- Gallino, D., **G. A. Devenyi**, J. Germann, S. Frey, and M. M. Chakravarty. *High-frequency deep brain stimulation of the fornix improves memory consolidation and causes network-level neuroanatomical remodeling in an Alzheimer's mouse model*. Canadian Association for Neuroscience Conference. 2017-05.
- Kang, M. S., E. R. Zimme, M. Shin, S. Mothataarachchi, T. Pascoal, K. P. Ng, **G. A. Devenyi**, M. M. Chakravarty, K. Blennow, H. Zetterberg, J.-P. Soucy, J. Poirier, S. Gauthier, A. C. Cuello, and P. Rosa-Neto. *Increased level of CSF neurofilament light chain is associated with structural changes in transgenic rat model of Alzheimer's disease*. Brain PET Conference. 2017-04.
- Hill, P. F., T. Sweeney, **G. A. Devenyi**, M. M. Chakravarty, and R. A. Diana. *Functional dissociation and specialization of dentate gyrus and CA3 hippocampal subfields during episodic future thinking*. Cognitive Neuroscience Society Conference. 2017-03.
- McKee, K., X. Navarri, G. Elgbelli, D. P. Laplante, S. L. Jones, **G. A. Devenyi**, M. M. Chakravarty, and S. King. *Cerebellar volume mediates the association between prenatal maternal stress and motor performance in adolescent boys: Project Ice Storm*. Canadian National Perinatal Research Meeting. 2017-02.
- Kang, M. S., E. R. Zimmer, M. Shin, S. Mathotaarachchi, T. A. Pascoal, K. P. Ng, J. Therriault, **G. A. Devenyi**, M. Chakravarty, K. Blennow, et al. "The structural atrophy is associated with CSF neurofilament light chain in a transgenic rat model of Alzheimer's disease". In: *JOURNAL OF CEREBRAL BLOOD FLOW AND METABOLISM*. Vol. 37. 2017, pp. 491–492.
- Ayranci, G., R. Patel, **G. A. Devenyi**, V. Kong, and M. M. Chakravarty. *Influence of amyloid burden on subcortical volume and morphometry*. Society for Neuroscience Conference. 2016-11.
- Gallino, D., **G. A. Devenyi**, J. Germann, and M. M. Chakravarty. *High-frequency deep brain stimulation of the fornix improves memory formation and causes network-level neuroanatomical remodeling in an Alzheimer's mouse model*. Society for Neuroscience Conference. 2016-11.
- Guma, E., **G. A. Devenyi**, J. Germann, and M. M. Chakravarty. *Sex differences in a population with familial high-risk for psychosis: analysis of neuroanatomical and symptom sexual dimorphism*. Society for Neuroscience Conference. 2016-11.
- Steele, C. J., S. Patel, **G. A. Devenyi**, J. Knight, and M. M. Chakravarty. *A quantification of normative grey-matter structural variability, covariance, and heritability in the human cerebellum*. Society for Neuroscience Conference. 2016-11.
- Tardif, C. L., **G. A. Devenyi**, P. Rosa-Neto, J. Poirier, J. Breitner, M. M. Chakravarty, and PREVENT-AD Research Group. *Hippocampus and subfield volumes are associated with β -amyloid and phospho-tau in asymptomatic individuals with familial history for Alzheimer's disease*. Society for Neuroscience Conference. 2016-11.
- Vatcher, D., S. Sahakian, M. Chakravarty, **G. A. Devenyi**, C. Saint-Martin, C. Rohlicek, A. Abda, O. Leone, and M. Brossard-Racine. *Subcortical Volumes and Psychosocial Outcomes in Young Adults with Congenital Heart Disease*. McGill Medicine Student Research Day. 2016-11.
- Patel, S., M. T. M. Park, **G. A. Devenyi**, R. Patel, M. M. Chakravarty, and J. Knight. *Heritability of hippocampal subfield volumes using a twin and non-twin sibling design*. Organization for Human Brain Mapping Meeting. 2016-06.
- Steele, C. J., S. Patel, **G. A. Devenyi**, J. Knight, and M. M. Chakravarty. *Variability and heritability of cerebellar lobules*. Organization for Human Brain Mapping Meeting. 2016-06.
- Fotopoulos, N., **G. A. Devenyi**, M. M. Chakravarty, S. Karama, S. M. Segunpta, N. Grizenko, and R. Joober. "Structural Brain Imaging (MRI) Case-Control Study of Cortical Thickness and Surface area in Children Affected with Attention Deficit Hyperactivity Disorder (ADHD)". In: *GENETIC EPIDEMIOLOGY*. Vol. 40. 2016, pp. 636–636.
- Bedford, A., M. T. M. Park, **G. A. Devenyi**, R. Patel, and M. M. Chakravarty. *Left lateralized sexual dimorphism in cortical thickness in autism*. Society for Neuroscience Conference. 2015-10.
- Devenyi, G. A.**, P. R., J. Germann, and M. M. Chakravarty. *Structural trajectories of healthy aging in cortical thickness and subcortical morphometry*. Society for Neuroscience 2015. 2015-10.
- Gallino, D., V. Kong, **G. A. Devenyi**, A. Mathieu, and M. M. Chakravarty. *Deep brain stimulation in mice using magnetic resonance imaging-compatible carbon electrodes*. Society for Neuroscience 2015. 2015-10.
- Guma, E., J. Rocchetti, **G. A. Devenyi**, J. P. Lerch, G. Dal Bo, B. Courcot, M. M. Chakravarty, and B. Giros. *Brain volume changes following chronic antipsychotic treatment in animal models: MRI and histological study*. Society for Neuroscience Conference. 2015-10.
- Kong, V., R. Patel, **G. A. Devenyi**, and M. M. Chakravarty. *Heterogeneity in neuroanatomical differences in relation to amyloid burden in mild cognitive impairment*. Society for Neuroscience Conference. 2015-10.
- Patel, R., **G. Devenyi**, V. Kong, and M. M. Chakravarty. *Subcortical volume and morphology in Alzheimer's disease and mild cognitive impairment*. Society for Neuroscience Conference. 2015-10.

- Miki, C., **G. A. Devenyi**, S. Jovanovic, K. Meinander, J. Carvalho, G. Zhu, and J. S. Preston. "Transfer of Epitaxial Thin Films to Carrier Substrates". In: *APS Meeting Abstracts*. Vol. 2014. 2014-03, p. D53.010. URL: <https://ui.adsabs.harvard.edu/abs/2014APS..MARD53010M>.
- Guimond, S., A. Alftieh, **G. A. Devenyi**, L. Mike, M. M. Chakravarty, J. L. Shah, D. A. Parker, J. A. Sweeney, G. Pearlson, B. A. Clementz, C. A. Tamminga, and M. Keshavan. "Enlarged pituitary gland volume: a possible state rather than trait marker of psychotic disorders". en. In: *Psychological medicine* 54.8 (2024-06), pp. 1835–1843. DOI: [10.1017/S003329172300380X](https://doi.org/10.1017/S003329172300380X).
- Fotopoulos, N. H., B. Chaumette, **G. A. Devenyi**, S. Karama, M. Chakravarty, A. Labbe, N. Grizenko, N. Schmitz, W. Fageera, and R. Joober. "Maternal smoking during pregnancy and cortical structure in children with attention-deficit/hyperactivity disorder". en. In: *Psychiatry research* 334.115791 (2024-04), p. 115791. DOI: [10.1016/j.psychres.2024.115791](https://doi.org/10.1016/j.psychres.2024.115791).
- Ho, N. C. W., R. A. I. Bethlehem, J. Seidlitz, N. Nogovitsyn, P. Metzack, P. L. Ballester, S. Hassel, S. Rotzinger, J. Poppenk, R. W. Lam, V. H. Taylor, R. Milev, Lifespan Brain Chart Consortium, E. T. Bullmore, A. F. Alexander-Bloch, B. N. Frey, K. L. Harkness, J. Addington, S. H. Kennedy, and K. Dunlop. "Atypical brain aging and its association with working memory performance in major depressive disorder". en. In: *Biological psychiatry: cognitive neuroscience and neuroimaging* (2024-04). DOI: [10.1016/j.bpsc.2024.04.008](https://doi.org/10.1016/j.bpsc.2024.04.008).
- Livingston, N. R., A. Kiemes, **G. A. Devenyi**, S. Knight, P. B. Lukow, L. A. Jelen, T. Reilly, A. Dima, M. A. Nettis, C. Casetta, T. Agyekum, F. Zelaya, T. Spencer, A. De Micheli, P. Fusar-Poli, A. A. Grace, S. C. R. Williams, P. McGuire, A. Egerton, M. M. Chakravarty, and G. Modinos. "Effects of diazepam on hippocampal blood flow in people at clinical high risk for psychosis". en. In: *Neuropsychopharmacology: official publication of the American College of Neuropsychopharmacology* (2024-04). DOI: [10.1038/s41386-024-01864-9](https://doi.org/10.1038/s41386-024-01864-9).
- Gaiser, C., R. van der Vliet, A. A. A. de Boer, O. Donchin, P. Berthet, **G. A. Devenyi**, M. Mallar Chakravarty, J. Diedrichsen, A. F. Marquand, M. A. Frens, and R. L. Muetzel. "Population-wide cerebellar growth models of children and adolescents". en. In: *Nature communications* 15.1 (2024-03), p. 2351. DOI: [10.1038/s41467-024-46398-2](https://doi.org/10.1038/s41467-024-46398-2).
- Patel, R., C. Mackay, M. G. Jansen, **G. A. Devenyi**, M. C. O'Donoghue, M. Kivimäki, A. Singh-Manoux, E. Zsoldos, K. P. Ebmeier, M. Chakravarty, and S. Suri. "Inter- and intra-individual variation in brain structural-cognition relationships in aging". en. In: *Alzheimer's & dementia: the journal of the Alzheimer's Association* 19.S17 (2023-12). DOI: [10.1002/alz.074081](https://doi.org/10.1002/alz.074081).
- Valiquette, V., E. Guma, L. Cupo, D. Gallino, C. Anastassiadis, E. Snook, **G. A. Devenyi**, and M. M. Chakravarty. "Examining litter specific variability in mice and its impact on neurodevelopmental studies". en. In: *NeuroImage* 269.119888 (2023-04), p. 119888. DOI: [10.1016/j.neuroimage.2023.119888](https://doi.org/10.1016/j.neuroimage.2023.119888).
- Kalantar-Hormozi, H., R. Patel, A. Dai, J. Ziolkowski, H.-M. Dong, A. Holmes, A. Raznahan, **G. A. Devenyi**, and M. M. Chakravarty. "A cross-sectional and longitudinal study of human brain development: The integration of cortical thickness, surface area, gyrification index, and cortical curvature into a unified analytical framework". en. In: *NeuroImage* 268.119885 (2023-03), p. 119885. DOI: [10.1016/j.neuroimage.2023.119885](https://doi.org/10.1016/j.neuroimage.2023.119885).
- Bethlehem, R. A. I. et al. "Publisher Correction: Brain charts for the human lifespan". en. In: *Nature* 610.7931 (2022-10), E6. DOI: [10.1038/s41586-022-05300-0](https://doi.org/10.1038/s41586-022-05300-0).
- Ravanfar, P., W. T. Syeda, M. Jayaram, R. J. Rushmore, B. Moffat, A. P. Lin, A. E. Lyall, A. H. Merritt, N. Yaghmaie, L. Laskaris, S. Luza, C. M. Opazo, B. Liberg, M. M. Chakravarty, **G. A. Devenyi**, P. Desmond, V. L. Croypley, N. Makris, M. E. Shenton, A. I. Bush, D. Velakoulis, and C. Pantelis. "In vivo 7-Tesla MRI investigation of brain iron and its metabolic correlates in chronic schizophrenia". en. In: *Schizophrenia (Heidelberg, Germany)* 8.1 (2022-10), p. 86. DOI: [10.1038/s41537-022-00293-1](https://doi.org/10.1038/s41537-022-00293-1).
- Patel, R., C. E. Mackay, M. G. Jansen, **G. A. Devenyi**, M. C. O'Donoghue, M. Kivimäki, A. Singh-Manoux, E. Zsoldos, K. P. Ebmeier, M. M. Chakravarty, and S. Suri. "Inter- and intra-individual variation in brain structural-cognition relationships in aging". en. In: *NeuroImage* 257.119254 (2022-08), p. 119254. DOI: [10.1016/j.neuroimage.2022.119254](https://doi.org/10.1016/j.neuroimage.2022.119254).
- Bethlehem, R. A. I. et al. "Brain charts for the human lifespan". en. In: *Nature* 604.7906 (2022-04), pp. 525–533. DOI: [10.1038/s41586-022-04554-y](https://doi.org/10.1038/s41586-022-04554-y).
- Fowler, C. F., D. Goerzen, **G. A. Devenyi**, D. Madularu, M. M. Chakravarty, and J. Near. "Neurochemical and cognitive changes precede structural abnormalities in the TgF344-AD rat model". en. In: *Brain communications* 4.2 (2022-03), fcac072. DOI: [10.1093/braincomms/fcac072](https://doi.org/10.1093/braincomms/fcac072).
- Fowler, C., D. Goerzen, D. Madularu, **G. A. Devenyi**, M. M. Chakravarty, and J. Near. "Longitudinal characterization of neuroanatomical changes in the Fischer 344 rat brain during normal aging and between sexes". en. In: *Neurobiology of aging* 109 (2022-01), pp. 216–228. DOI: [10.1016/j.neurobiolaging.2021.10.003](https://doi.org/10.1016/j.neurobiolaging.2021.10.003).

- Ochi, R., E. Plitman, R. Patel, R. Tarumi, Y. Iwata, S. Tsugawa, J. Kim, S. Honda, Y. Noda, H. Uchida, **G. A. Devenyi**, M. Mimura, A. Graff-Guerrero, M. M. Chakravarty, and S. Nakajima. “Investigating structural subdivisions of the anterior cingulate cortex in schizophrenia, with implications for treatment resistance and glutamatergic levels”. en. In: *Journal of psychiatry & neuroscience: JPN* 47.1 (2022-01), E1–E10. DOI: [10.1503/jpn.210113](https://doi.org/10.1503/jpn.210113).
- Bussy, A., J. Levy, T. Best, R. Patel, L. Cupo, T. Van Langenhove, J. Nielsen, Y. Pijnenburg, M. L. Waldö, A. Remes, M. L. Schroeter, I. Santana, F. Pasquier, M. Otto, A. Danek, J. Levin, I. L. Ber, R. Vandenberghe, M. Synofzik, F. Moreno, A. de Mendonça, R. Sanchez-Valle, R. Laforce, T. Langheinrich, A. Gerhard, C. Graff, C. R. Butler, S. Sorbi, L. Jiskoot, H. Seelaar, J. C. van Swieten, E. Finger, M. C. Tartaglia, M. Masellis, P. Tiraboschi, D. Galimberti, B. Borroni, J. B. Rowe, M. Bocchetta, J. D. Rohrer, **G. A. Devenyi**, M. M. Chakravarty, and S. Ducharme. “Cerebellar and subcortical atrophy contribute to psychiatric symptoms in frontotemporal dementia”. en. In: *bioRxiv* (2021-11), p. 2021.11.12.468429. DOI: [10.1101/2021.11.12.468429](https://doi.org/10.1101/2021.11.12.468429).
- Bussy, A., R. Patel, E. Plitman, S. Tullo, A. Salaciak, S. A. Bedford, S. Farzin, M.-L. Béland, V. Valiquette, C. Kazazian, C. L. Tardif, **G. A. Devenyi**, and M. M. Chakravarty. “Hippocampal shape across the healthy lifespan and its relationship with cognition”. en. In: *Neurobiology of aging* 106 (2021-10), pp. 153–168. DOI: [10.1016/j.neurobiolaging.2021.03.018](https://doi.org/10.1016/j.neurobiolaging.2021.03.018).
- Costantino, M., A. Bussy, G. Pigeau, N. Blostein, **G. A. Devenyi**, R. D. Markello, R. Patel, N. Gervais, and M. M. Chakravarty. “Sex differences in cortical morphometry during ageing: Examining the interplay between lifestyle and reproductive factors”. en. In: *bioRxiv* (2021-10), p. 2021.10.14.464259. DOI: [10.1101/2021.10.14.464259](https://doi.org/10.1101/2021.10.14.464259).
- Germann, J., F. V. Gouveia, H. Brentani, S. A. Bedford, S. Tullo, M. M. Chakravarty, and **G. A. Devenyi**. “Involvement of the habenula in the pathophysiology of autism spectrum disorder”. en. In: *Scientific reports* 11.1 (2021-10), p. 21168. DOI: [10.1038/s41598-021-00603-0](https://doi.org/10.1038/s41598-021-00603-0).
- Guimond, S., F. Gu, H. Shannon, S. Kelly, L. Mike, **G. A. Devenyi**, M. M. Chakravarty, J. A. Sweeney, G. Pearlson, B. A. Clementz, C. Tamminga, and M. Keshavan. “A diagnosis and Biotype comparison across the psychosis spectrum: Investigating volume and shape amygdala-hippocampal differences from the B-SNIP study”. en. In: *Schizophrenia bulletin* 47.6 (2021-10), pp. 1706–1717. DOI: [10.1093/schbul/sbab071](https://doi.org/10.1093/schbul/sbab071).
- Guma, E., E. Snook, S. Spring, J. P. Lerch, B. J. Nieman, **G. A. Devenyi**, and M. M. Chakravarty. “Subtle alterations in neonatal neurodevelopment following early or late exposure to prenatal maternal immune activation in mice”. en. In: *NeuroImage. Clinical* 32.102868 (2021-10), p. 102868. DOI: [10.1016/j.nicl.2021.102868](https://doi.org/10.1016/j.nicl.2021.102868).
- Kang, M. S., A. A. Aliaga, M. Shin, S. Mathotaarachchi, A. L. Benedet, T. A. Pascoal, J. Therriault, M. Chamoun, M. Savard, **G. A. Devenyi**, A. Mathieu, M. M. Chakravarty, Å. Sandelius, K. Blennow, H. Zetterberg, J.-P. Soucy, A. C. Cuello, G. Massarweh, S. Gauthier, P. Rosa-Neto, and Alzheimer’s Disease Neuroimaging Initiative. “Amyloid-beta modulates the association between neurofilament light chain and brain atrophy in Alzheimer’s disease”. en. In: *Molecular psychiatry* 26.10 (2021-10), pp. 5989–6001. DOI: [10.1038/s41380-020-0818-1](https://doi.org/10.1038/s41380-020-0818-1).
- Guma, E., P. d. C. Bordignon, **G. A. Devenyi**, D. Gallino, C. Anastassiadis, V. Cvetkovska, A. D. Barry, E. Snook, J. Germann, C. M. T. Greenwood, B. Misic, R. C. Bagot, and M. M. Chakravarty. “Early or late gestational exposure to maternal immune activation alters neurodevelopmental trajectories in mice: An integrated neuroimaging, behavioral, and transcriptional study”. en. In: *Biological psychiatry* 90.5 (2021-09), pp. 328–341. DOI: [10.1016/j.biopsych.2021.03.017](https://doi.org/10.1016/j.biopsych.2021.03.017).
- Plitman, E., A. Bussy, V. Valiquette, A. Salaciak, R. Patel, L. Cupo, M.-L. Béland, S. Tullo, C. L. Tardif, M. N. Rajah, J. Near, **G. A. Devenyi**, and M. M. Chakravarty. “The impact of the Siemens Tim Trio to Prisma upgrade and the addition of volumetric navigators on cortical thickness, structure volume, and 1H-MRS indices: An MRI reliability study with implications for longitudinal study designs”. en. In: *NeuroImage* 238.118172 (2021-09), p. 118172. DOI: [10.1016/j.neuroimage.2021.118172](https://doi.org/10.1016/j.neuroimage.2021.118172).
- Guma, E., M. Bordeleau, E. Snook, G. Desrosiers-Grégoire, F. González Ibáñez, K. Picard, S. Spring, J. P. Lerch, B. J. Nieman, **G. A. Devenyi**, M.-E. Tremblay, and M. M. Chakravarty. “Differential effects of early or late exposure to prenatal maternal immune activation on mouse embryonic neurodevelopment”. en. In: *bioRxiv* (2021-07), p. 2021.07.14.452084. DOI: [10.1101/2021.07.14.452084](https://doi.org/10.1101/2021.07.14.452084).
- Bethlehem, R. A. I. et al. “Brain charts for the human lifespan”. en. In: *bioRxiv* (2021-06), p. 2021.06.08.447489. DOI: [10.1101/2021.06.08.447489](https://doi.org/10.1101/2021.06.08.447489).
- Bussy, A., E. Plitman, R. Patel, S. Tullo, A. Salaciak, S. A. Bedford, S. Farzin, M.-L. Béland, V. Valiquette, C. Kazazian, C. L. Tardif, **G. A. Devenyi**, M. M. Chakravarty, and Alzheimer’s Disease Neuroimaging Initiative. “Hippocampal subfield volumes across the healthy lifespan and the effects of MR sequence on estimates”. en. In: *NeuroImage* 233.117931 (2021-06), p. 117931. DOI: [10.1016/j.neuroimage.2021.117931](https://doi.org/10.1016/j.neuroimage.2021.117931).

- Gouveia, F. V., J. Germann, **G. A. Devenyi**, E. T. Fonoff, R. M. C. B. Morais, H. Brentani, M. M. Chakravarty, and R. C. R. Martinez. “Bilateral amygdala radio-frequency ablation for refractory aggressive behavior alters local cortical thickness to a pattern found in non-refractory patients”. en. In: *Frontiers in human neuroscience* 15 (2021-06), p. 653631. DOI: [10.3389/fnhum.2021.653631](https://doi.org/10.3389/fnhum.2021.653631).
- Olafson, E., S. A. Bedford, **G. A. Devenyi**, R. Patel, S. Tullo, M. T. M. Park, O. Parent, E. Anagnostou, S. Baron-Cohen, E. T. Bullmore, L. R. Chura, M. C. Craig, C. Ecker, D. L. Floris, R. J. Holt, R. Lenroot, J. P. Lerch, M. V. Lombardo, D. G. M. Murphy, A. Raznahan, A. N. V. Ruigrok, M. D. Spencer, J. Suckling, M. J. Taylor, MRC AIMS Consortium, M.-C. Lai, and M. M. Chakravarty. “Examining the boundary sharpness coefficient as an index of cortical microstructure in autism spectrum disorder”. en. In: *Cerebral cortex (New York, N.Y.: 1991)* 31.7 (2021-06), pp. 3338–3352. DOI: [10.1093/cercor/bhab015](https://doi.org/10.1093/cercor/bhab015).
- Fotopoulos, N. H., **G. A. Devenyi**, S. Guay, S. M. Sengupta, M. M. Chakravarty, N. Grizenko, S. Karama, and R. Joober. “Cumulative exposure to ADHD medication is inversely related to hippocampus subregional volume in children”. en. In: *NeuroImage. Clinical* 31.102695 (2021-05), p. 102695. DOI: [10.1016/j.nicl.2021.102695](https://doi.org/10.1016/j.nicl.2021.102695).
- Fowler, C. F., D. Madularu, M. Dehghani, **G. A. Devenyi**, and J. Near. “Longitudinal quantification of metabolites and macromolecules reveals age- and sex-related changes in the healthy Fischer 344 rat brain”. en. In: *Neurobiology of aging* 101 (2021-05), pp. 109–122. DOI: [10.1016/j.neurobiolaging.2020.12.012](https://doi.org/10.1016/j.neurobiolaging.2020.12.012).
- Tustison, N. J., P. A. Cook, A. J. Holbrook, H. J. Johnson, J. Muschelli, **G. A. Devenyi**, J. T. Duda, S. R. Das, N. C. Cullen, D. L. Gillen, M. A. Yassa, J. R. Stone, J. C. Gee, and B. B. Avants. “The ANTsX ecosystem for quantitative biological and medical imaging”. en. In: *Scientific reports* 11.1 (2021-04), p. 9068. DOI: [10.1038/s41598-021-87564-6](https://doi.org/10.1038/s41598-021-87564-6).
- Patel, R., C. E. Mackay, M. G. Jansen, **G. A. Devenyi**, M. C. O’Donoghue, M. Kivimäki, A. Singh-Manoux, E. Zsoldos, K. P. Ebmeier, M. M. Chakravarty, and S. Suri. “Individual variation in brain structural-cognition relationships in aging”. en. In: *bioRxiv* (2021-02), p. 2021.02.19.431732. DOI: [10.1101/2021.02.19.431732](https://doi.org/10.1101/2021.02.19.431732).
- Bhagwat, N., A. Barry, E. W. Dickie, S. T. Brown, **G. A. Devenyi**, K. Hatano, E. DuPre, A. Dagher, M. Chakravarty, C. M. T. Greenwood, B. Misic, D. N. Kennedy, and J.-B. Poline. “Understanding the impact of preprocessing pipelines on neuroimaging cortical surface analyses”. en. In: *GigaScience* 10.1 (2021-01). DOI: [10.1093/gigascience/giaa155](https://doi.org/10.1093/gigascience/giaa155).
- Gouveia, F. V., J. Germann, R. de Morais, E. T. Fonoff, C. Hamani, E. J. Alho, H. Brentani, A. P. Martins, **G. A. Devenyi**, R. Patel, C. Steele, R. Gramer, M. Chakravarty, and R. C. R. Martinez. “Longitudinal changes after amygdala surgery for intractable aggressive behavior: Clinical, imaging genetics, and deformation-based morphometry study-A case series: Clinical, imaging genetics, and deformation-based morphometry study-A case series”. en. In: *Neurosurgery* 88.2 (2021-01), E158–E169. DOI: [10.1093/neuros/nyaa378](https://doi.org/10.1093/neuros/nyaa378).
- Trujillo-Villarreal, L. A., V. J. Romero-Díaz, I. A. Marino-Martínez, L. Fuentes-Mera, M. A. Ponce-Camacho, **G. A. Devenyi**, M. Mallar Chakravarty, A. Camacho-Morales, and E. E. Garza-Villarreal. “Maternal cafeteria diet exposure primes depression-like behavior in the offspring evoking lower brain volume related to changes in synaptic terminals and gliosis”. en. In: *Translational psychiatry* 11.1 (2021-01), p. 53. DOI: [10.1038/s41398-020-01157-x](https://doi.org/10.1038/s41398-020-01157-x).
- Kirschner, M., G. Shafiei, R. D. Markello, C. Makowski, A. Talpalaru, B. Hodzic-Santor, **G. A. Devenyi**, C. Paquola, B. C. Bernhardt, M. Lepage, M. M. Chakravarty, A. Dagher, and B. Mišić. “Latent clinical-anatomical dimensions of schizophrenia”. en. In: *Schizophrenia bulletin* 46.6 (2020-12), pp. 1426–1438. DOI: [10.1093/schbul/sbaa097](https://doi.org/10.1093/schbul/sbaa097).
- Snytte, J., A. Elshiekh, S. Subramaniapillai, L. Manning, S. Pasvanis, **G. A. Devenyi**, R. K. Olsen, and M. N. Rajah. “The ratio of posterior-anterior medial temporal lobe volumes predicts source memory performance in healthy young adults”. en. In: *Hippocampus* 30.11 (2020-11), pp. 1209–1227. DOI: [10.1002/hipo.23251](https://doi.org/10.1002/hipo.23251).
- Ranjan, M., G. J. B. Elias, A. Boutet, J. Zhong, P. Chu, J. Germann, **G. A. Devenyi**, M. M. Chakravarty, A. Fasano, K. Hynynen, N. Lipsman, C. Hamani, W. Kucharczyk, M. L. Schwartz, A. M. Lozano, and M. Hodaie. “Tractography-based targeting of the ventral intermediate nucleus: accuracy and clinical utility in MRgFUS thalamotomy”. en. In: *Journal of neurosurgery* 133.4 (2020-10), pp. 1002–1009. DOI: [10.3171/2019.6.jns19612](https://doi.org/10.3171/2019.6.jns19612).
- Germann, J., F. V. Gouveia, R. C. R. Martinez, M. V. Zanetti, F. L. de Souza Duran, T. M. Chaim-Avancini, M. H. Serpa, M. M. Chakravarty, and **G. A. Devenyi**. “Fully automated habenula segmentation provides robust and reliable volume estimation across large magnetic resonance imaging datasets, suggesting intriguing developmental trajectories in psychiatric disease”. en. In: *Biological psychiatry: cognitive neuroscience and neuroimaging* 5.9 (2020-09), pp. 923–929. DOI: [10.1016/j.bpsc.2020.01.004](https://doi.org/10.1016/j.bpsc.2020.01.004).
- Gouveia, F. V., J. Germann, **G. A. Devenyi**, R. M. C. B. Morais, A. P. M. Santos, E. T. Fonoff, C. Hamani, H. Brentani, M. M. Chakravarty, and R. C. R. Martinez. “Refractoriness of aggressive behaviour to pharmacological treatment: cortical thickness analysis in autism spectrum disorder”. en. In: *BJPsych open* 6.5 (2020-08), e85. DOI: [10.1192/bjo.2020.71](https://doi.org/10.1192/bjo.2020.71).

- Olafson, E., S. Bedford, **G. A. Devenyi**, R. Patel, S. Tullo, M. T. M. Park, O. Parent, E. Anagnostou, S. Baron-Cohen, E. T. Bullmore, L. R. Chura, M. C. Craig, C. Ecker, D. L. Floris, R. J. Holt, R. Lenroot, J. P. Lerch, M. V. Lombardo, D. G. M. Murphy, A. Raznahan, A. N. V. Ruigrok, M. D. Spencer, J. Suckling, M. J. Taylor, M.-C. Lai, M. M. Chakravarty, and MRC AIMS Consortium. “Examining the boundary sharpness coefficient as an index of cortical microstructure and its relationship to age and sex in autism spectrum disorder”. en. In: *bioRxiv* (2020-07), p. 2020.07.09.196212. DOI: [10.1101/2020.07.09.196212](https://doi.org/10.1101/2020.07.09.196212).
- Chapleau, M., C. Bedetti, **G. A. Devenyi**, S. Sheldon, H. J. Rosen, B. L. Miller, M. L. Gorno-Tempini, M. M. Chakravarty, and S. M. Brambati. “Deformation-based shape analysis of the hippocampus in the semantic variant of primary progressive aphasia and Alzheimer’s disease”. en. In: *NeuroImage. Clinical* 27.102305 (2020-06), p. 102305. DOI: [10.1016/j.nicl.2020.102305](https://doi.org/10.1016/j.nicl.2020.102305).
- Plitman, E., R. Ochi, R. Patel, S. Tsugawa, R. Tarumi, S. Honda, K. Matsushita, S. Fujii, H. Uchida, M. Mimura, Y. Noda, **G. A. Devenyi**, S. Nakajima, and M. Chakravarty. “Using non-negative matrix factorization to examine treatment resistance and response in patients with schizophrenia: A multimodal imaging study”. en. In: *Biological psychiatry* 87.9 (2020-05), S350. DOI: [10.1016/j.biopsych.2020.02.899](https://doi.org/10.1016/j.biopsych.2020.02.899).
- Goerzen, D., C. Fowler, **G. A. Devenyi**, J. Germann, D. Madularu, M. M. Chakravarty, and J. Near. “An MRI-derived neuroanatomical atlas of the Fischer 344 rat brain”. en. In: *Scientific reports* 10.1 (2020-04), p. 6952. DOI: [10.1038/s41598-020-63965-x](https://doi.org/10.1038/s41598-020-63965-x).
- Shafiei, G., R. D. Markello, C. Makowski, A. Talpalaru, M. Kirschner, **G. A. Devenyi**, E. Guma, P. Hagmann, N. R. Cashman, M. Lepage, M. M. Chakravarty, A. Dagher, and B. Mišić. “Spatial patterning of tissue volume loss in schizophrenia reflects brain network architecture”. en. In: *Biological psychiatry* 87.8 (2020-04), pp. 727–735. DOI: [10.1016/j.biopsych.2019.09.031](https://doi.org/10.1016/j.biopsych.2019.09.031).
- Amuno, S., D. A. Rudko, D. Gallino, M. Tuznik, K. Shekh, V. Kodzhahinchev, S. Niyogi, M. M. Chakravarty, and **G. A. Devenyi**. “Altered neurotransmission and neuroimaging biomarkers of chronic arsenic poisoning in wild muskrats (*Ondatra zibethicus*) and red squirrels (*Tamiasciurus hudsonicus*) breeding near the City of Yellowknife, Northwest Territories (Canada)”. en. In: *The Science of the total environment* 707.135556 (2020-03), p. 135556. DOI: [10.1016/j.scitotenv.2019.135556](https://doi.org/10.1016/j.scitotenv.2019.135556).
- Bedford, S. A., M. T. M. Park, **G. A. Devenyi**, S. Tullo, J. Germann, R. Patel, E. Anagnostou, S. Baron-Cohen, E. T. Bullmore, L. R. Chura, M. C. Craig, C. Ecker, D. L. Floris, R. J. Holt, R. Lenroot, J. P. Lerch, M. V. Lombardo, D. G. M. Murphy, A. Raznahan, A. N. V. Ruigrok, E. Smith, M. D. Spencer, J. Suckling, M. J. Taylor, A. Thurm, MRC AIMS Consortium, M.-C. Lai, and M. M. Chakravarty. “Large-scale analyses of the relationship between sex, age and intelligence quotient heterogeneity and cortical morphometry in autism spectrum disorder”. en. In: *Molecular psychiatry* 25.3 (2020-03), pp. 614–628. DOI: [10.1038/s41380-019-0420-6](https://doi.org/10.1038/s41380-019-0420-6).
- Patel, R., C. J. Steele, A. G. X. Chen, S. Patel, **G. A. Devenyi**, J. Germann, C. L. Tardif, and M. M. Chakravarty. “Investigating microstructural variation in the human hippocampus using non-negative matrix factorization”. en. In: *NeuroImage* 207.116348 (2020-02), p. 116348. DOI: [10.1016/j.neuroimage.2019.116348](https://doi.org/10.1016/j.neuroimage.2019.116348).
- Talpalaru, A., N. Bhagwat, **G. A. Devenyi**, M. Lepage, and M. M. Chakravarty. “Identifying schizophrenia subgroups using clustering and supervised learning”. en. In: *Schizophrenia research* 214 (2019-12), pp. 51–59. DOI: [10.1016/j.schres.2019.05.044](https://doi.org/10.1016/j.schres.2019.05.044).
- Tullo, S., R. Patel, **G. A. Devenyi**, A. Salaciak, S. A. Bedford, S. Farzin, N. Wlodarski, C. L. Tardif, PREVENT-AD Research Group, J. C. S. Breitner, and M. M. Chakravarty. “MR-based age-related effects on the striatum, globus pallidus, and thalamus in healthy individuals across the adult lifespan”. en. In: *Human brain mapping* 40.18 (2019-12), pp. 5269–5288. DOI: [10.1002/hbm.24771](https://doi.org/10.1002/hbm.24771).
- Winterburn, J. L., A. N. Voineskos, **G. A. Devenyi**, E. Plitman, C. de la Fuente-Sandoval, N. Bhagwat, A. Graff-Guerrero, J. Knight, and M. M. Chakravarty. “Can we accurately classify schizophrenia patients from healthy controls using magnetic resonance imaging and machine learning? A multi-method and multi-dataset study”. en. In: *Schizophrenia research* 214 (2019-12), pp. 3–10. DOI: [10.1016/j.schres.2017.11.038](https://doi.org/10.1016/j.schres.2017.11.038).
- Gallino, D., **G. A. Devenyi**, J. Germann, E. Guma, C. Anastassiadis, and M. M. Chakravarty. “Longitudinal assessment of the neuroanatomical consequences of deep brain stimulation: Application of fornical DBS in an Alzheimer’s mouse model”. en. In: *Brain research* 1715 (2019-07), pp. 213–223. DOI: [10.1016/j.brainres.2019.03.030](https://doi.org/10.1016/j.brainres.2019.03.030).
- Guma, E., J. Rocchetti, **G. A. Devenyi**, A. Tanti, A. P. Mathieu, J. P. Lerch, G. Elgbeili, B. Courcot, N. Mechawar, M. M. Chakravarty, and B. Giros. “Role of D3 dopamine receptors in modulating neuroanatomical changes in response to antipsychotic administration”. en. In: *Scientific reports* 9.1 (2019-05), p. 7850. DOI: [10.1038/s41598-019-43955-4](https://doi.org/10.1038/s41598-019-43955-4).
- Shafiei, G., R. D. Markello, C. Makowski, A. Talpalaru, M. Kirschner, **G. A. Devenyi**, E. Guma, P. Hagmann, N. R. Cashman, M. Lepage, M. M. Chakravarty, A. Dagher, and B. Mišić. “Spatial patterning of tissue

- volume loss in schizophrenia reflects brain network architecture". en. In: *bioRxiv* (2019-05), p. 626168. DOI: [10.1101/626168](https://doi.org/10.1101/626168).
- Stojanovski, S., D. Felsky, J. D. Viviano, S. Shahab, R. Bangali, C. L. Burton, **G. A. Devenyi**, L. J. O'Donnell, P. Szatmari, M. M. Chakravarty, S. Ameis, R. Schachar, A. N. Voineskos, and A. L. Wheeler. "Polygenic risk and neural substrates of attention-deficit/hyperactivity disorder symptoms in youths with a history of mild traumatic brain injury". en. In: *Biological psychiatry* 85.5 (2019-03), pp. 408–416. DOI: [10.1016/j.biopsych.2018.06.024](https://doi.org/10.1016/j.biopsych.2018.06.024).
- Gouveia, F. V., J. Germann, R. M. C. B. de Morais, E. T. Fonoff, C. Hamani, E. J. Alho, H. Brentani, A. P. Martins, **G. Devenyi**, R. Patel, C. J. Steele, R. Gramer, M. M. Chakravarty, and R. C. R. Martinez. "Clinical, imaging genetics and deformation based morphometry study of longitudinal changes after surgery for intractable aggressive behaviour". en. In: *bioRxiv* (2019-02), p. 548826. DOI: [10.1101/548826](https://doi.org/10.1101/548826).
- Rollins, C. P. E., D. Gallino, V. Kong, G. Ayranci, **G. A. Devenyi**, J. Germann, and M. M. Chakravarty. "Contributions of a high-fat diet to Alzheimer's disease-related decline: A longitudinal behavioural and structural neuroimaging study in mouse models". en. In: *NeuroImage. Clinical* 21.101606 (2019), p. 101606. DOI: [10.1016/j.nicl.2018.11.016](https://doi.org/10.1016/j.nicl.2018.11.016).
- Boutet, A., M. Ranjan, J. Zhong, J. Germann, D. Xu, M. L. Schwartz, N. Lipsman, K. Hynynen, **G. A. Devenyi**, M. Chakravarty, E. Hlasny, M. Llinas, C. S. Lozano, G. J. B. Elias, J. Chan, A. Coblenz, A. Fasano, W. Kucharczyk, M. Hodaie, and A. M. Lozano. "Focused ultrasound thalamotomy location determines clinical benefits in patients with essential tremor". en. In: *Brain: a journal of neurology* 141.12 (2018-12), pp. 3405–3414. DOI: [10.1093/brain/awy278](https://doi.org/10.1093/brain/awy278).
- Guadagno, A., M. S. Kang, **G. A. Devenyi**, A. P. Mathieu, P. Rosa-Neto, M. Chakravarty, and C.-D. Walker. "Reduced resting-state functional connectivity of the basolateral amygdala to the medial prefrontal cortex in preweaning rats exposed to chronic early-life stress". en. In: *Brain structure & function* 223.8 (2018-11), pp. 3711–3729. DOI: [10.1007/s00429-018-1720-3](https://doi.org/10.1007/s00429-018-1720-3).
- Hoops, D., E. Desfilis, J. F. P. Ullmann, A. L. Janke, T. Stait-Gardner, **G. A. Devenyi**, W. S. Price, L. Medina, M. J. Whiting, and J. S. Keogh. "A 3D MRI-based atlas of a lizard brain: HOOPSet al". en. In: *The Journal of comparative neurology* 526.16 (2018-11), pp. 2511–2547. DOI: [10.1002/cne.24480](https://doi.org/10.1002/cne.24480).
- Jovanovic, S. M., **G. A. Devenyi**, P. Kuyanov, J. L. Carvalho, K. Meinander, R. R. LaPierre, and J. S. Preston. "Epitaxial thin film transfer for flexible devices from reusable substrates". en. In: *Materials research express* 6.2 (2018-11), p. 025913. DOI: [10.1088/2053-1591/aaf264](https://doi.org/10.1088/2053-1591/aaf264).
- Sengupta, S. M., N. Fotopoulos, **G. A. Devenyi**, M.-È. Fortier, M. Ter-Stepanian, S. Sagliker, S. Karama, M. Mallar Chakravarty, A. Labbe, N. Grizenko, and R. Joobar. "Dissecting genetic cross-talk between ADHD and other neurodevelopmental disorders: Evidence from behavioural, pharmacological and brain imaging investigations". en. In: *Psychiatry research* 269 (2018-11), pp. 652–657. DOI: [10.1016/j.psychres.2018.08.080](https://doi.org/10.1016/j.psychres.2018.08.080).
- Shaw, P., A. Ishii-Takahashi, M. T. Park, **G. A. Devenyi**, C. Zibman, S. Kasperek, G. Sudre, A. Mangalmurti, M. Hoogman, H. Tiemeier, G. von Polier, D. Shook, R. Muetzel, M. M. Chakravarty, K. Konrad, S. Durston, and T. White. "A multicohort, longitudinal study of cerebellar development in attention deficit hyperactivity disorder". en. In: *Journal of child psychology and psychiatry, and allied disciplines* 59.10 (2018-10). in press, pp. 1114–1123. DOI: [10.1111/jcpp.12920](https://doi.org/10.1111/jcpp.12920).
- Kong, V., **G. A. Devenyi**, D. Gallino, G. Ayranci, J. Germann, C. Rollins, and M. M. Chakravarty. "Early-in-life neuroanatomical and behavioural trajectories in a triple transgenic model of Alzheimer's disease". en. In: *Brain structure & function* 223.7 (2018-09), pp. 3365–3382. DOI: [10.1007/s00429-018-1691-4](https://doi.org/10.1007/s00429-018-1691-4).
- Guma, E., J. Rocchetti, **G. A. Devenyi**, A. Tanti, A. Mathieu, J. P. Lerch, G. Elgbeili, B. Courcot, N. Mechawar, M. M. Chakravarty, and B. Giros. "Regional brain volume changes following chronic antipsychotic administration are mediated by the dopamine D2 receptor". en. In: *NeuroImage* 176 (2018-08), pp. 226–238. DOI: [10.1016/j.neuroimage.2018.04.054](https://doi.org/10.1016/j.neuroimage.2018.04.054).
- Tullo, S., **G. A. Devenyi**, R. Patel, M. T. M. Park, D. L. Collins, and M. M. Chakravarty. "Warping an atlas derived from serial histology to 5 high-resolution MRIs". en. In: *Scientific data* 5 (2018-06), p. 180107. DOI: [10.1038/sdata.2018.107](https://doi.org/10.1038/sdata.2018.107).
- Amaral, R. S. C., M. T. M. Park, **G. A. Devenyi**, V. Lynn, J. Pipitone, J. Winterburn, S. Chavez, M. Schira, N. J. Lobaugh, A. N. Voineskos, J. C. Pruessner, M. M. Chakravarty, and Alzheimer's Disease Neuroimaging Initiative. "Manual segmentation of the fornix, fimbria, and alveus on high-resolution 3T MRI: Application via fully-automated mapping of the human memory circuit white and grey matter in healthy and pathological aging". en. In: *NeuroImage* 170 (2018-04), pp. 132–150. DOI: [10.1016/j.neuroimage.2016.10.027](https://doi.org/10.1016/j.neuroimage.2016.10.027).
- Garza-Villarreal, E. A., R. Alcalá-Lozano, T. Balducci, D. Ángeles-Valdéz, M. M. Chakravarty, **G. A. Devenyi**, and J. J. Gonzalez-Olvera. "Patterns of reduced cortical thickness and striatum pathological morphology in cocaine addiction". en. In: *bioRxiv* (2018-04), p. 306068. DOI: [10.1101/306068](https://doi.org/10.1101/306068).

- Makowski, C., S. Béland, P. Kostopoulos, N. Bhagwat, **G. A. Devenyi**, A. K. Malla, R. Joobar, M. Lepage, and M. M. Chakravarty. “Evaluating accuracy of striatal, pallidal, and thalamic segmentation methods: Comparing automated approaches to manual delineation”. en. In: *NeuroImage* 170 (2018-04), pp. 182–198. DOI: [10.1016/j.neuroimage.2017.02.069](https://doi.org/10.1016/j.neuroimage.2017.02.069).
- Devenyi, G. A.**, R. Emonet, R. M. Harris, K. L. Hertweck, D. Irving, I. Milligan, and G. Wilson. “Ten simple rules for collaborative lesson development”. en. In: *PLoS computational biology* 14.3 (2018-03), e1005963. DOI: [10.1371/journal.pcbi.1005963](https://doi.org/10.1371/journal.pcbi.1005963).
- Tardif, C. L., **G. A. Devenyi**, R. S. C. Amaral, S. Pelleieux, J. Poirier, P. Rosa-Neto, J. Breitner, M. M. Chakravarty, and PREVENT-AD Research Group. “Regionally specific changes in the hippocampal circuitry accompany progression of cerebrospinal fluid biomarkers in preclinical Alzheimer’s disease”. en. In: *Human brain mapping* 39.2 (2018-02), pp. 971–984. DOI: [10.1002/hbm.23897](https://doi.org/10.1002/hbm.23897).
- Guma, E., **G. A. Devenyi**, A. Malla, J. Shah, M. M. Chakravarty, and M. Pruessner. “Neuroanatomical and symptomatic sex differences in individuals at clinical high risk for psychosis”. en. In: *Frontiers in psychiatry* 8 (2017-12), p. 291. DOI: [10.3389/fpsy.2017.00291](https://doi.org/10.3389/fpsy.2017.00291).
- Laidi, C., J. Boisgontier, M. Chakravarty, S. Hotier, M. D’Albis, J. Mangin, G. Devenyi, R. Delorme, F. Bolognani, C. Czech, M. Bouvard, D. Gras, J. Petit, M. Mishchenko, A. Gaman, I. Scheid, M. Leboyer, T. Zalla, and J. Houenou. “Cerebellum and attention to the eyes in autism”. In: *European neuropsychopharmacology: the journal of the European College of Neuropsychopharmacology* 27 (2017-10), S605–S606. DOI: [10.1016/S0924-977X\(17\)31152-5](https://doi.org/10.1016/S0924-977X(17)31152-5).
- Laidi, C., J. Boisgontier, M. M. Chakravarty, S. Hotier, M.-A. d’Albis, J.-F. Mangin, **G. A. Devenyi**, R. Delorme, F. Bolognani, C. Czech, C. Bouquet, E. Toledano, M. Bouvard, D. Gras, J. Petit, M. Mishchenko, A. Gaman, I. Scheid, M. Leboyer, T. Zalla, and J. Houenou. “Cerebellar anatomical alterations and attention to eyes in autism”. en. In: *Scientific reports* 7.1 (2017-09), p. 12008. DOI: [10.1038/s41598-017-11883-w](https://doi.org/10.1038/s41598-017-11883-w).
- Patel, S., M. T. M. Park, **G. A. Devenyi**, R. Patel, M. Masellis, J. Knight, and M. M. Chakravarty. “Heritability of hippocampal subfield volumes using a twin and non-twin siblings design”. en. In: *Human brain mapping* 38.9 (2017-09), pp. 4337–4352. DOI: [10.1002/hbm.23654](https://doi.org/10.1002/hbm.23654).
- Kang, M. S., M. Shin, E. R. Zimmer, S. S. Mathotaarachchi, T. A. Pascoal, K. P. Ng, J. Therriault, **G. Devenyi**, M. Chakravarty, K. Blennow, H. Zetterberg, J.-P. Soucy, J. Poirier, S. Gauthier, A. C. Cuello, and P. Rosa-Neto. “[IC-P-048]: ELEVATED CSF LEVELS OF NEUROFILAMENT LIGHT CHAIN IS ASSOCIATED WITH GRAY MATTER NEURODEGENERATION IN BOTH HUMANS AND TRANSGENIC RAT MODEL OF ALZHEIMER’S DISEASE”. en. In: *Alzheimer’s & dementia: the journal of the Alzheimer’s Association* 13.7S_Part_1 (2017-07), P41–P41. DOI: [10.1016/j.jalz.2017.06.2320](https://doi.org/10.1016/j.jalz.2017.06.2320).
- Garza-Villarreal, E. A., M. M. Chakravarty, B. Hansen, S. F. Eskildsen, **G. A. Devenyi**, D. Castillo-Padilla, T. Balducci, E. Reyes-Zamorano, S. N. Jespersen, P. Perez-Palacios, R. Patel, and J. J. Gonzalez-Olvera. “The effect of crack cocaine addiction and age on the microstructure and morphology of the human striatum and thalamus using shape analysis and fast diffusion kurtosis imaging”. en. In: *Translational psychiatry* 7.5 (2017-05), e1122. DOI: [10.1038/tp.2017.92](https://doi.org/10.1038/tp.2017.92).
- Gorgolewski, K. J., F. Alfaro-Almagro, T. Auer, P. Bellec, M. Capotă, M. M. Chakravarty, N. W. Churchill, A. L. Cohen, R. C. Craddock, **G. A. Devenyi**, A. Eklund, O. Esteban, G. Flandin, S. S. Ghosh, J. S. Guntupalli, M. Jenkinson, A. Keshavan, G. Kiar, F. Liem, P. R. Raamana, D. Raffelt, C. J. Steele, P.-O. Quirion, R. E. Smith, S. C. Strother, G. Varoquaux, Y. Wang, T. Yarkoni, and R. A. Poldrack. “BIDS apps: Improving ease of use, accessibility, and reproducibility of neuroimaging data analysis methods”. en. In: *PLoS computational biology* 13.3 (2017-03). Ed. by D. Schneidman, e1005209. DOI: [10.1371/journal.pcbi.1005209](https://doi.org/10.1371/journal.pcbi.1005209).
- Simpson, R., **G. A. Devenyi**, P. Jezzard, T. J. Hennessy, and J. Near. “Advanced processing and simulation of MRS data using the FID appliance (FID-A)—An open source, MATLAB-based toolkit”. en. In: *Magnetic resonance in medicine* 77.1 (2017-01), pp. 23–33. DOI: [10.1002/mrm.26091](https://doi.org/10.1002/mrm.26091).
- Chakravarty, M., R. S. C. Amaral, N. Bhagwat, R. Patel, E. Garza-Villarreal, **G. A. Devenyi**, and M. T. Park. “Interpreting disease heterogeneity in Alzheimer’s and Parkinson’s disease”. In: *Alzheimer’s & dementia: the journal of the Alzheimer’s Association* 12.7 (2016-07), P327–P328. DOI: [10.1016/j.jalz.2016.06.601](https://doi.org/10.1016/j.jalz.2016.06.601).
- Wilson, G., R. Silva, A. Boughton, A. C. Mayes, W. Trevor King, F. Michonneau, fatmaï, **G. A. Devenyi**, R. Beagrie, N. Ross, B. Konrad, A. O’Leary, L. Nederbragt, I. Gonzalez, Filipe, T. Bekolay, E. White, R. Olson, T. Kelly, P. Banaszkiewicz, J. Blischak, J. Allen, D. Irving, A. van der Walt, P. Barnby, K. K. Y. Chung, J. Madin, D. Winston, D. Standage, and J. von der Linden. *shell-novice: Version 5.3*. 2015-05. DOI: [10.5281/ZENODO.17723](https://doi.org/10.5281/ZENODO.17723).
- Meinander, K., J. L. Carvalho, C. Miki, J. Rideout, S. M. Jovanovic, **G. A. Devenyi**, and J. S. Preston. “Purified water etching of native oxides on heteroepitaxial CdTe thin films”. en. In: *Journal of physics D: Applied physics* 47.49 (2014-12), p. 495304. DOI: [10.1088/0022-3727/47/49/495304](https://doi.org/10.1088/0022-3727/47/49/495304).
- Jovanovic, S. M., **G. A. Devenyi**, V. M. Jarvis, K. Meinander, C. M. Haapamaki, P. Kuyanov, M. Gerber, R. R. LaPierre, and J. S. Preston. “Optical characterization of epitaxial single crystal CdTe thin films on

- Al₂O₃ (0001) substrates”. en. In: *Thin solid films* 570.PartA (2014-11), pp. 155–158. DOI: [10.1016/j.tsf.2014.09.027](https://doi.org/10.1016/j.tsf.2014.09.027).
- Minnick, M. D., **G. A. Devenyi**, and R. N. Kleiman. “Optimum reactive ion etching of x-cut quartz using SF₆ and Ar”. en. In: *Journal of micromechanics and microengineering: structures, devices, and systems* 23.11 (2013-11), p. 117002. DOI: [10.1088/0960-1317/23/11/117002](https://doi.org/10.1088/0960-1317/23/11/117002).
- Woo, S. Y., **G. A. Devenyi**, S. Ghanad-Tavakoli, R. N. Kleiman, J. S. Preston, and G. A. Botton. “Tilted epitaxy on (211)-oriented substrates”. en. In: *Applied physics letters* 102.13 (2013-04), p. 132103. DOI: [10.1063/1.4799278](https://doi.org/10.1063/1.4799278).
- Yuen, A. P., S. M. Jovanovic, A.-M. Hor, R. A. Klenkler, **G. A. Devenyi**, R. O. Loutfy, and J. S. Preston. “Photovoltaic properties of M-phthalocyanine/fullerene organic solar cells”. en. In: *Solar energy (Phoenix, Ariz.)* 86.6 (2012-06), pp. 1683–1688. DOI: [10.1016/j.solener.2012.03.019](https://doi.org/10.1016/j.solener.2012.03.019).
- Sundar, A., R. A. Hughes, P. Farzinpour, K. D. Gilroy, **G. A. Devenyi**, J. S. Preston, and S. Neretina. “Manipulating the size distribution of supported gold nanostructures”. en. In: *Applied physics letters* 100.1 (2012-01), p. 013111. DOI: [10.1063/1.3675569](https://doi.org/10.1063/1.3675569).
- Devenyi, G. A.**, S. Y. Woo, S. Ghanad-Tavakoli, R. A. Hughes, R. N. Kleiman, G. A. Botton, and J. S. Preston. “The role of vicinal silicon surfaces in the formation of epitaxial twins during the growth of III-V thin films”. en. In: *Journal of applied physics* 110.12 (2011-12), p. 124316. DOI: [10.1063/1.3671022](https://doi.org/10.1063/1.3671022).
- Devenyi, G. A.**, J. Li, R. A. Hughes, A.-C. Shi, P. Mascher, and J. S. Preston. “Epitaxially driven formation of intricate supported gold nanostructures on a lattice-matched oxide substrate”. en. In: *Nano letters* 9.12 (2009-12), pp. 4258–4263. DOI: [10.1021/nl902491g](https://doi.org/10.1021/nl902491g).
- Neretina, S., R. A. Hughes, **G. A. Devenyi**, N. V. Sochinskii, J. S. Preston, and P. Mascher. “Atypical grain growth for (211) CdTe films deposited on surface reconstructed (100) SrTiO₃ substrates”. en. In: *Applied surface science* 255.11 (2009-03), pp. 5674–5681. DOI: [10.1016/j.apsusc.2008.12.050](https://doi.org/10.1016/j.apsusc.2008.12.050).
- Neretina, S., R. A. Hughes, **G. A. Devenyi**, N. V. Sochinskii, J. S. Preston, and P. Mascher. “The role of substrate surface alteration in the fabrication of vertically aligned CdTe nanowires”. en. In: *Nanotechnology* 19.18 (2008-05), p. 185601. DOI: [10.1088/0957-4484/19/18/185601](https://doi.org/10.1088/0957-4484/19/18/185601).