Gabriel A. Devenyi

Professional Contact

Research Computing Associate
Computational Brain Anatomy (CoBrA) Laboratory & Cerebral Imaging Center
Project Lead — Douglas Neuroinformatics Platform
Douglas Mental Health University Institute

Affiliate Member, Department of Psychiatry
McGill University

6875 LaSalle Boulevard
CIC Pavillion, GH-2111
Montréal, Québec
H4H 1R3, Canada

514.761.6131×4781
gabriel.devenyi@mcgill.ca
gdevenyi
gadevenyi

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

MIT Press *Imaging Neuroscience*	**2023**
Wiley *Human Brain Mapping*	**2022,2023**
Organization for Human Brain Mapping *Aperture Neuro*	**2021**
Springer Nature *Anatomy and Embryology*	**2021**
Springer Nature *Brain Structure & Function*	**2021**

Elsevier *NeuroImage* **2021**
Elsevier *Progress in Neuro-Psychopharmacology & Biological Psychiatry* **2020**
PLOS *ONE* **2019**
Nature *Scientific Data* **2018**
Elsevier *Applied Surface Science* **2015**
SPIE *Journal of Photonics For Energy* **2014**

Service

Centre de la Petite Enfance Funville, Verdun, QC, Canada
Board Member **2019-05 – 2021-05**

Software Carpentry, Online
Maintainer and Developer shell-novice Lesson **2014-11 – 2022-08**

McMaster University, Hamilton, ON, Canada
Ex-Officio Member - Engineering Physics Graduate Advisory Committee **2013-12 – 2014-08**
Engineering Physics Professorial Search Committee **2010-11 – 2011-01**
NanoGiga 2009, 14th Canadian Semiconductor Technology Conference **2009-08**
Graduate Student Association — Phoenix Executive Committee **2009-09 – 2013-12**

Nano Ontario, ON, Canada
Board Member At-Large - Chair, Communications Committee **2013-03 – 2015-01**

Software

optimized_antsMultivariateTemplateConstruction
An automated pipeline to perform multi-level deformation based morphometry (DBM) on brain volume differences for animal and human MRI.

NeuroAnsible
An automated deployment tool for transforming an Ubuntu desktop into a neuroimaging workstation in a single step.

iterativeN3
A comprehensive preprocessing (inhomogeneity correction, denoising, field-of-view cropping, and background removal), N-tissue classification, brain extraction, and standard space alignment tool for human T1-weighted MRIs.

qbatch
A python cluster abstraction tool for performing command-line based parallelization for SGE, SLURM, LSF and PBS cluster systems.

Bibliometrics

Peer-Reviewed Articles : 92 (4 first author, 2 senior author)
Presentations and Posters in Conference Proceedings : 87
Invited Presentations : 11
h-index : 30
i10-index : 67

Patents

S. M. Jovanovic, **G. A. Devenyi**, and J. S. Preston. *Arbitrarily thin ultra smooth film with built-in separation ability and method of forming the same.* 2014-02. URL: https://patentimages.storage.googleapis.com/74/37/22/79228e821a36e5/WO2014026292A1.pdf.

Invited Presentations

J. Near and **G. A. Devenyi**. *MRS Simulation & Preprocessing Using the FID-A Toolkit.* MR Spectroscopy Study Group, ISMRM Virtual Meetings. 2017-07. URL: https://www.ismrm.org/virtual-meetings/virtual-meetings-archive/.

G. A. Devenyi and R. Schwartz. *Skills for Scientific Computing.* Software Carpentry Workshop, BIO5 Institute & iPlant Collaborative, Arizona State University. 2015-05. URL: https://rachelss.github.io/2015-04-18-ASU/.

G. A. Devenyi, . . ., I. Kozlov et al. *Skills for Scientific Computing.* Software Carpentry Workshop, Department of Physics, McGill University. 2015-01. URL: https://igor-kozlov.github.io/2015-01-10-mcgill/.

J. D. Blischak, ..., **G. A. Devenyi** et al. *Skills for Scientific Computing*. Software Carpentry Workshop, Faculty of Medicine, University de Montreal. 2014-11. URL: https://dhaine.github.io/2014-11-06-fmv/.

G. A. Devenyi. *LaTeXfor Preparation of Scientific Documents and Theses*. Department of Electrical and Computer Engineering, McMaster University. 2014-06.

G. A. Devenyi and J. Ory. *Skills for Scientific Computing*. Software Carpentry Workshop, Statistical Computing Unit, Cornell University. 2014-06. URL: https://gdevenyi.github.io/2014-06-04-cornell/.

G. A. Devenyi. *LaTeXfor Preparation of Scientific Documents and Theses*. Department of Medical Physics, McMaster University. 2014-05.

G. W. Wilson and **G. A. Devenyi**. *Skills for Scientific Computing*. Software Carpentry Workshop, Department of Physics & Astronomy, McMaster University. 2014-05. URL: https://gdevenyi.github.io/2014-05-05-mcmaster/.

G. A. Devenyi. *LaTeXfor Preparation of Scientific Documents and Theses*. School of Graduate Studies, McMaster University. 2013-05.

G. A. Devenyi. *LaTeXfor Preparation of Scientific Documents and Theses*. School of Graduate Studies, McMaster University. 2012-11.

G. A. Devenyi. *The Future of Photovoltaics: Next Generation Materials and Devices at McMaster University Engineering Physics*. IEEE Hamilton Chapter Monthly Meeting. 2012-05.

Contributed Publications

M. Blūma, ..., **G. A. Devenyi**, ..., C. Babiloni et al. "Heterogeneity Of Local Volume Changes In Taups2app Mouse Model Of AD". en. In: *Alzheimer's Association International Conference*. Amsterdam, Netherlands.

K. H. Binda, ..., **G. A. Devenyi**, ..., A. M. Landau et al. *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.

F. Abboud, ..., **G. A. Devenyi**, ..., M. Brossard-Racine et al. *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.

S. Palmis, ..., **G. A. Devenyi**, ..., M. Brossard-Racine et al. *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.

S. Palmis, ..., **G. A. Devenyi**, ..., M. Brossard-Racine et al. *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.

D. Benrimoh, ..., **G. A. Devenyi**, ..., S. Ducharme et al. *Trans-Diagnostic Structural Imaging In Psychosis: A Comparison Across Schizophrenia, Frontotemportal Dementia, and Alzheimer's Disease*. Organization For Human Brain Mapping 2022. 2022-06.

N. Blostein, ..., **G. A. Devenyi**, ..., M. M. Chakravarty et al. *Relationship Between Heritability And Latent Dimensions Of Behaviour In The Striatum, Thalamus And Globus Pallidus*. Society For Neuroscience 2021. 2021-11.

G. A. Devenyi, ..., M M Chakravarty et al. *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.

O. Parent, ..., **G. A. Devenyi**, M. M. Chakravarty et al. *Comparing Age Trajectories Of MRI Cortical Markers And Myelin: An Exploratory Study*. Society For Neuroscience. 2021-11.

V. Valiquette, ..., **G. A. Devenyi**, M. Chakravarty et al. *Examining Litter Specific Variability In Mice And Its Impact On Neurodevelopmental Studies*. Society for Neuroscience 2021. 2021-11.

M. Costantino, ..., **G. A. Devenyi**, ..., M. M. Chakravarty et al. "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.

M. Courson, ..., **G. Devenyi**, ..., S. M. Brambati et al. *Secondary Damage Of The Thalamus In Post-Stroke Aphasia: A New Player In Language Recovery Outcome*. Society For The Neurobiology Of Language. 2021-10.

E. Guma, ..., **G. A. Devenyi**, ..., M. M. Chakravarty et al. "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.

R. A. I. Bethlehem 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.

N. Blostein, **G. A. Devenyi**, ..., M. M. C. Armin Raznahan et al. *Subcortical Structure Areal Expansion In The Human Compared To The Chimpanzee And Heritability*. Organization For Human Brain Mapping. 2021-06.

M. Costantino, ..., **G. Devenyi**, ..., M. M. C. Nicole Gervais et al. *Effects Of Pregnancy: Menopause And Lifestyle Risk Factors On Cortical Thickness In Healthy Ageing*. Organization For Human Brain Mapping. 2021-06.

L. Cupo, ..., **G. A. Devenyi**, M. Mallar Chakravarty et al. *Characterization Of Early Maternal Immune Activation On Brain And Behavior During Adolescence And Early Adulthood In Mice*. Organization For Human Brain Mapping. 2021-06.

A. Dai, **G. A. Devenyi**, ..., M. M. Chakravarty et al. *The Association Between Cortical Thickness and Dimensions of the Adolescent Psychosis Spectrum*. Organization For Human Brain Mapping. 2021-06.

G. Desrosiers-Gregoire, **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.

H. Kalantar Hormozi, **G. A. Devenyi**, ..., M. Chakravarty et al. *Multivariate Analysis Of Cortical Morphometry Across Human Brain Development*. Organization for Human Brain Mapping 2021. 2021-06.

H. Kalantar-Hormozi, **G. A. Devenyi**, ..., M. M. C. Armin Raznahan et al. *Multivariate Analysis Of Cortical Morphometry Across Human Brain Development*. Organization For Human Brain Mapping. 2021-06.

R. Patel, ..., **G. A. Devenyi**, M. M. Chakravarty et al. *Individual Variability Of Microstructural-Functional Coupling In The Human Cortex*. Organization For Human Brain Mapping. 2021-06.

S. D. Premasiri, ..., **G. A. Devenyi**, M. M. Chakravarty et al. *A Cascaded 3D U-Net Model For Fast Automatic Segmentation Of The Hippocampus*. Organization For Human Brain Mapping. 2021-06.

S. Tullo, ..., **G. A. Devenyi**, ..., M. M. Chakravarty et al. *Whole Brain Age-Related Patterns Of Atrophy, Microstructure, And Cognitive Decline*. Organization For Human Brain Mapping. 2021-06.

R. Patel, ..., **G. A. Devenyi**, ..., S. Suri et al. "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.

N. Bhagwat, ..., **G. A. Devenyi**, ..., J.-B. Poline et al. "Understanding the impact of preprocessing pipelines on neuroimaging cortical surface analyses". en. In: *GigaScience* 10.1 (2021-01). DOI: 10.1093/gigascience/giaa155.

A. Bussy, ..., **G. A. Devenyi**, M. Chakravarty et al. "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.

M. Kirschner, ..., **G. A. Devenyi**, ..., B. Mišić et al. "Latent clinical-anatomical dimensions of schizophrenia". en. In: *Schizophrenia bulletin* 46.6 (2020-12), pp. 1426–1438. DOI: 10.1093/schbul/sbaa097.

M. N. Skorska, **G. A. Devenyi**, ..., D. P. Vanderlaan et al. *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.

M. Blūma, ..., **G. A. Devenyi**, ..., C. Babiloni et al. "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.

E. Olafson, ..., **G. A. Devenyi**, ..., MRC AIMS Consortium et al. "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.

N. Blostein, ..., **G. A. Devenyi**, M. M. C. Raihaan Patel et al. *The Modular Organization Of Heritability Across The Cortex*. Organization For Human Brain Mapping. 2020-06.

N. Blostein, ..., **G. A. Devenyi**, M. M. Chakravarty et al. *Heritability Of Subcortical Structures Using A Twin And Non-Twin Sibling Design*. Organization For Human Brain Mapping. 2020-06.

A. Bussy, ..., **G. A. Devenyi**, M. M. Chakravarty et al. *Impact Of Commonly Used Acquisition Sequences On Automated Hippocampal Subfield Volume Estimates*. Organization For Human Brain Mapping. 2020-06.

M. Chapleau, ..., **G. A. Devenyi**, ..., S. M. Brambati et al. "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.

D. R. Gallino, **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.

S. L. Jones, ..., **G. A. Devenyi**, ..., S. King et al. *Prenatal Stress Alters Hypothalamic-Pituitary-Gonadal Axis Structures In Adults: Project Ice Storm*. Organization for Human Brain Mapping 2020. 2020-06.

S. Mcgillivray, ..., **G. A. Devenyi**, ..., C. Tardif et al. *Quantitative MRI of Social Isolation In Male And Female Mice*. Organization For Human Brain Mapping. 2020-06.

E. Plitman, ..., **G. A. Devenyi**, M. M. Chakravarty et al. *Test-Retest Reliability Of Cortical Thickness And Structure Volume In Volumetric Navigator Sequences*. Organization For Human Brain Mapping. 2020-06.

E. Guma, . . ., **G. A. Devenyi**, . . ., M. Chakravarty et al. "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.

S. L. Jones, . . ., **G. A. Devenyi**, . . ., S. King et al. "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.

M. Kirschner, 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.

C. Anastassiadis, . . ., **G. A. Devenyi**, . . ., M. Mallar Chakravarty et al. *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.

A. Buckthought, **G. Devenyi**, . . ., M. Brossard-Racine et al. *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.

G. Desrosiers-Grégoire, . . ., **G. A. Devenyi**, M. Mallar Chakravarty et al. *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.

D. Goerzen, . . ., **G. Devenyi**, . . ., J. Near et al. *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.

M. N. Skorska, . . ., **G. A. Devenyi**, . . ., D. P. Vanderlaan et al. *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.

C. Anastassiadis, . . ., **G. A. Devenyi**, . . ., M. Mallar Chakravarty et al. *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.

N. Fotopoulos, **G. Devenyi**, . . ., R. Joober et al. "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.

S. L. Jones, . . ., **G. A. Devenyi**, . . ., S. King et al. *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.

C. Anastassiadis, . . ., **G. A. Devenyi**, . . ., M. M. Chakravarty et al. *Mitigating the effects of adult obesity with exercise and dietary treatment in a mouse model of Alzheimer's disease*. Society for Neuroscience. 2018-11.

E. Guma, . . ., **G. A. Devenyi**, M. M. Chakravarty et al. *Mapping of postnatal neurodevelopment in response to early and late prenatal maternal immune activation in mice*. Society for Neuroscience. 2018-11.

M. N. Skorska, . . ., **G. A. Devenyi**, . . ., D. P. Vanderlaan et al. *Surface Area And Cortical Volume In Adolescents Who Experience Gender Dysphoria: A Preliminary Analysis Using MRI*. Gender Development Research Conference. 2018-10.

M. N. Skorska, . . ., **G. A. Devenyi**, . . ., D. P. VanderLaan et al. *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.

G. Desrosiers-Gregoire, . . ., **G. A. Devenyi**, M. M. Chakravarty et al. *Investigating brain functional connectivity in mouse models of neuropsychiatric disorders using fMRI*. McGill Integrated Program in Neuroscience Retreat. 2018-09.

M. N. Skorska, . . ., **G. A. Devenyi**, . . ., D. P. VanderLaan et al. *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.

J.-A. Bertrand, **G. A. Devenyi**, . . ., S. Richard-Devantoy et al. *Thalamic surface alteration in elderly depressed patients at-risk for suicide*. Society for Biological Psychiatry. 2018-05.

J.-A. Bertrand, **G. A. Devenyi**, . . ., S. Richard-Devantoy et al. "T125. Thalami 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.

C. J. Steele, . . ., **G. A. Devenyi**, M. M. Chakravarty et al. *Quantifying cortico-cerebellar structural covariance*. International Society for Magnetic Resonance in Medicine. 2018-05.

S. Tullo, **G. A. Devenyi**, ..., M. M. Chakravarty et al. *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.

S. Guimond, ..., **G. A. Devenyi**, ..., M. S. Keshavan et al. "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.

S. Guimond, ..., **G. A. Devenyi**, ..., M. Keshavan et al. *Pituitary gland volume differences in individuals with psychosis: Results from the bipolar-schizophrenia network on intermediate phenotpyes (B-SNIP) study*. Schizophrenia International Research Society Conference. 2018-04.

C. Makowski, ..., **G. Devenyi**, ..., M. Lepage et al. "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.

C. Makowski, ..., **G. A. Devenyi**, ..., M. Lepage et al. *Multimodal Quantification of Memory Circuit Microstructure in First Episode Psychosis*. Schizophrenia International Research Society Conference. 2018-04.

Guadagno, Angela, Kan, ..., **G. A. Devenyi**, ..., C.-D. Walker et al. *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.

S. Tullo, **G. A. Devenyi**, ..., M. M. Chakravarty et al. *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.

S. Bedford, ..., **G. A. Devenyi**, ..., M. M. Chakravarty et al. *A cross-sectional neuroimaging prospective mega-analysis identifying sex-dependent atypical cortical thickness in autism spectrum disorders*. Canadian College of Neuropsychopharmacology Conference. 2017-07.

C. L. Tardif, ..., **G. A. Devenyi**, ..., PREVENT-AD Research Group et al. *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.

N. Fotopoulos, **G. A. Devenyi**, ..., R. Joober et al. *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.

S. Bedford, ..., **G. A. Devenyi**, ..., M. M. Chakravarty et al. *Large-scale (N=1830) analysis of sex-dependent atypical cortical thickness in autism spectrum disorder*. Society for Biological Psychiatry Conference. 2017-05.

D. Gallino, **G. A. Devenyi**, ..., M. M. Chakravarty et al. *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.

M. S. Kang, ..., **G. A. Devenyi**, ..., P. Rosa-Neto et al. *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.

P. F. Hill, ..., **G. A. Devenyi**, ..., R. A. Diana et al. *Functional dissociation and specialization of dentate gyrus and CA3 hippocampal subfields during episodic future thinking*. Cognitive Neuroscience Society Conference. 2017-03.

K. McKee, ..., **G. A. Devenyi**, ..., S. King et al. *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.

M. S. Kang, ..., **G. A. Devenyi**, ..., 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.

G. Ayranci, ..., **G. A. Devenyi**, ..., M. M. Chakravarty et al. *Influence of amyloid burden on subcortical volume and morphometry*. Society for Neuroscience Conference. 2016-11.

D. Gallino, **G. A. Devenyi**, ..., M. M. Chakravarty et al. *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.

E. Guma, **G. A. Devenyi**, ..., M. M. Chakravarty et al. *Sex differences in a population with familial high-risk for psychosis: analysis of neuroanatomical and symptom sexual dimorphism*. Society for Neuroscience Conference. 2016-11.

C. J. Steele, ..., **G. A. Devenyi**, ..., M. M. Chakravarty et al. *A quantification of normative grey-matter structural variability, covariance, and heritability in the human cerebellum*. Society for Neuroscience Conference. 2016-11.

C. L. Tardif, **G. A. Devenyi**, ..., PREVENT-AD Research Group et al. *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.

D. Vatcher, ..., **G. A. Devenyi**, ..., M. Brossard-Racine et al. *Subcortical Volumes and Psychosocial Outcomes in Young Adults with Congenital Heart Disease*. McGill Medicine Student Research Day. 2016-11.

S. Patel, ..., **G. A. Devenyi**, ..., J. Knight et al. *Heritability of hippocampal subfield volumes using a twin and non-twin sibling design*. Organization for Human Brain Mapping Meeting. 2016-06.

C. J. Steele, ..., **G. A. Devenyi**, ..., M. M. Chakravarty et al. *Variability and heritability of cerebellar lobules*. Organization for Human Brain Mapping Meeting. 2016-06.

N. Fotopoulos, **G. A. Devenyi**, ..., R. Joober et al. "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.

A. Bedford, ..., **G. A. Devenyi**, ..., M. M. Chakravarty et al. *Left lateralized sexual dimorphism in cortical thickness in autism*. Society for Neuroscience Conference. 2015-10.

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