Gabriel A. Devenyi

CONTACT

PROFESSIONAL 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

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Research INTERESTS Structural neuroimaging. Image processing, classification, and registration. Pipeline design and optimization for standardized image processing. High performancing computing.

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

2019

• Awarded with Distinction

HONOURS AND Canadian Open Neuroscience Platform Research Scholar — \$50.000 AWARDS

Canadian Open regressioner harrorm research Scholar 490,000	2010
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

Douglas University Mental Health Institute, CIC, Montreal, QC, Canada

EXPERIENCE Research Computing Associate - CIC Software Seminar Series 2014-08 - Present

Software Carpentry, Online

Volunteer Instructor 2012-11 - Present

McMaster University, Hamilton, ON, Canada MATIC 1M02 Introduction

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	$2008 \hbox{-} 09 - 2009 \hbox{-} 05$

Research

McMaster University, Hamilton, ON, Canada

EXPERIENCE Laboratory Manager

2009-05 - 2014-05Summer and Co-op Student Supervisor 2009-09 - 2014-05

PLOS ONE JOURNAL 2019 REVIEWS Nature Scientific Data 2018 2015 Elsevier Applied Surface Science

SERVICE

Centre de la Petite Enfance Funville, Verdun, QC, Canada Board Memember 2019-05 - 2021-05Software Carpentry, Online Maintainer and Developer 2012-11 - PresentMcMaster University, Hamilton, ON, Canada Ex-Officio Member - Engineering Physics Graduate Advisory Committee 2013-12 - 2014-08Engineering Physics Professorial Search Committee 2010 - 11 - 2011 - 01NanoGiga 2009, 14th Canadian Semiconductor Technology Conference 2009-08 Graduate Student Association - Phoenix Executive Committee 2009-09 - 2013-12Nano Ontario, ON, Canada Board Member At-Large - Chair, Communications Committee 2013-03 - 2015-01Center for Inquiry, Toronto, ON, Canada

BIBLIOMETRICS Published Peer-Reviewed Articles: 78 (4 first author, 2 senior author)

Committee for the Advancement of Scientific Skepticism

Abstracts in Conference Proceedings: 53

Invited Presentations: 11

h-index: 20 i10-index: 35

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". 2014026292:A1. 2014-02. URL: https://patentimages. storage.googleapis.com/74/37/22/79228e821a36e5/W02014026292A1.pdf.

INVITED PRESENTATIONS

- J. Near and G. A. Devenyi. MRS Simulation & Preprocessing Using the FID-A Toolkit. MR Spectroscopy Study Group, ISMRM Virtual Meetings. Online, 2017-07. URL: https://www.ismrm.org/virtualmeetings/virtual-meetings-archive/.
- G. A. Devenyi and R. Schwartz. Skills for Scientific Computing. Software Carpentry Workshop, BIO5 Institute & iPlant Collaborative, Arizona State University. Tempe, AZ, USA, 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. Montreal, QC, CA, 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. Saint-Hyacinthe, QC, Canada, 2014-11. URL: https: //dhaine.github.io/2014-11-06-fmv/.
- G. A. Devenyi. ATEX for Preparation of Scientific Documents and Theses. Department of Electrical and Computer Engineering, McMaster University. Hamilton, ON, Canada, 2014-06.
- G. A. Devenyi and J. Ory. Skills for Scientific Computing. Software Carpentry Workshop, Statistical Computing Unit, Cornell University. Ithaca, NY, USA, 2014-06. URL: https://gdevenyi.github.io/2014-06-04-cornell/.
- G. A. Devenyi. LATEX for Preparation of Scientific Documents and Theses. Department of Medical Physics, McMaster University. Hamilton, ON, Canada, 2014-05.
- G. W. Wilson and G. A. Devenyi. Skills for Scientific Computing. Software Carpentry Workshop, Department of Physics & Astronomy, McMaster University. Hamilton, ON, Canada, 2014-05. URL: https: //gdevenyi.github.io/2014-05-05-mcmaster/.
- G. A. Devenyi. ATEX for Preparation of Scientific Documents and Theses. School of Graduate Studies, McMaster University. Hamilton, ON, Canada, 2013-05.
- G. A. Devenyi. ATEX for Preparation of Scientific Documents and Theses. School of Graduate Studies, McMaster University. Hamilton, ON, Canada, 2012-11.
- G. A. Devenyi. The Future of Photovoltaics: Next Generation Materials and Devices at McMaster University Engineering Physics. IEEE Hamilton Chapter Monthly Meeting. Hamilton, ON, Canada, 2012-05.

2010 - 10 - 2012 - 08

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.
- 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. Online, 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. Online, 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. Online, 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. Online, 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. Online, 2021-11.
- R. A. I. Bethlehem et al. "Brain charts for the human lifespan". en. 2021-10.
- M. Costantino, ..., G. A. Devenyi, ..., M. Mallar Chakravarty et al. "Sex Differences in Cortical Morphometry during Ageing: Examining the Interplay between Lifestyle and Reproductive Factors". en. 2021-10.
- 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. Online, 2021-10.
- E. Guma, ..., G. A. Devenyi, ..., M. Mallar Chakravarty et al. "Differential effects of early or late exposure to prenatal maternal immune activation on mouse embryonic neurodevelopment". en. 2021-07.
- 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. Online, 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. Online, 2021-06.
- L. Cupo, ..., M. M. C. Gabriel Devenyi et al. Characterization Of Early Maternal Immune Activation On Brain And Behavior During Adolescence And Early Adulthood In Mice. Organization For Human Brain Mapping. Online, 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. Online, 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. Online, 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. Online, 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. Online, 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. Online, 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. Online, 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. Online, 2021-06.
- R. Patel, ..., G. A. Devenyi, ..., S. Suri et al. "Individual variation in brain microstructural-cognition relationships in aging". en. 2021-02.
- 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.
- E. Olafson, ..., G. A. Devenyi, ..., M. Mallar Chakravarty 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. 2020-12.

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- bibinitperiod 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. Online, 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.
- 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. Online, 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. Online, 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. Online, 2020-06.
- 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. Online, 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. Online, 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. Online, 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. Online, 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. 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". In: *NeuroImage: Clinical* 27 (2020-01), p. 102305. DOI: 10.1016/j.nicl.2020.102305.
- 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. Montreal, Quebec, Canada, 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. Montreal, Quebec, Canada, 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. Montreal, Quebec, Canada, 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. Montreal, Quebec, Canada, 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. Mississauga, Ontario, Canada, 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. Toronto, Ontario, Canada, 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. Mont-Tremblant, Quebec, 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. San Diego, CA, USA, 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. San Diego, CA, USA, 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. San Francisco, California, USA, 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. Toronto, ON, Canada, 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. Montreal, QC, Canada, 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. Madrid, Spain, 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. New York, NY, USA, 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. Paris, France, 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. Montreal, QC, Canada, 2018-05.
- 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. Florence, Italy, 2018-04.
- S. Guimond, ..., G. A. Devenyi, ..., M. S. Keshavan et al. "T22. PITUITARY GLAND VOLUME DIFFER-ENCES 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.
- C. Makowski, ..., G. A. Devenyi, ..., M. Lepage et al. *Multimodal Quantification of Memory Circuit Microstructure in First Episode Psychosis*. Schizophrenia International Research Society Conference. Florence, Italy, 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.
- 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. Washington, DC, USA, 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. Washington, DC, USA, 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. Kingston, ON, Canada, 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. Honolulu, Hawaii, USA, 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. Kingston, ON, Canada, 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. San Diego, CA, USA, 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. Montreal, QC, Canada, 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. Berlin, Germany, 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. San Francisco, CA, USA, 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. Montebello, QC, Canada, 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. San Diego, CA, USA, 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. San Diego, CA, USA, 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. San Diego, CA, USA, 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. San Diego, CA, USA, 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. San Diego, CA, USA, 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. Montreal, QC, CA, 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. Geneva, Switzerland, 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. Geneva, Switzerland, 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. Chicago, IL, USA, 2015-10.
- **G. A. Devenyi**, ..., M. M. Chakravarty et al. *Structural trajectories of healthy aging in cortical thickness and subcortical morphometry*. Society for Neuroscience 2015. Chicago, IL, USA, 2015-10.
- D. Gallino, ..., G. A. Devenyi, ..., M. M. Chakravarty et al. Deep brain stimulation in mice using magnetic resonance imaging-compatible carbon electrodes. Society for Neuroscience 2015. Chicago, IL, USA, 2015-10.

- E. Guma, ..., G. A. Devenyi, ..., B. Giros et al. Brain volume changes following chronic antipsychotic treatment in animal models: MRI and histological study. Society for Neuroscience Conference. Chicago, IL, USA, 2015-10.
- V. Kong, ..., G. A. Devenyi, M. M. Chakravarty et al. Heterogeneity in neuroanatomical differences in relation to amyloid burden in mild cognitive impairment. Society for Neuroscience Conference. Chicago, IL, USA, 2015-10.
- R. Patel, G. Devenyi, ..., M. M. Chakravarty et al. Subcortical volume and morphology in Alzheimer's disease and mild cognitive impairment. Society for Neuroscience Conference. Chicago, IL, USA, 2015-10.
- C. Miki, G. A. Devenyi, ..., J. S. Preston et al. "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.

PEER-REVIEWED PUBLICATIONS

- C. Fowler, ..., G. A. Devenyi, ..., J. Near et al. "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.neurobiologing.2021.10.003.
- A. Bussy, ..., G. A. Devenyi, ..., on behalf of the GENetic Frontotemporal dementia Initiative (GENFI) et al. "Cerebellar and subcortical atrophy contribute to psychiatric symptoms in frontotemporal dementia". en. 2021-11.
- R. A. I. Bethlehem et al. "Brain charts for the human lifespan". en. 2021-10.
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