Gabriel A. Devenyi

Professional Contact

Research Computing Associate
Computational Brain Anatomy (CoBrA) Laboratory
Cerebral Imaging Center
Douglas Mental Health University Institute

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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**

- 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**
Elsevier *Applied Surface Science*	**2015**

Service

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

Software Carpentry, Online
Maintainer and Developer **2012-11 – Present**

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**

Center for Inquiry, Toronto, ON, Canada
Committee for the Advancement of Scientific Skepticism **2010-10 – 2012-08**

Bibliometrics

Published Peer-Reviewed Articles : 50 (4 first author, 1 senior author)
Abstracts in Conference Proceedings : 41
Invited Presentations : 11
h-index : 13
i10-index : 16

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/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. Online, 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. 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. *LaTeX 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. *LaTeX for Preparation of Scientific Documents and Theses*. School of Graduate Studies, McMaster University. Hamilton, ON, Canada, 2013-05.

G. A. Devenyi. *LaTeX 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.

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 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.

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". In: *Schizophrenia bulletin* 44.suppl_1 (2018-04), S182–S182. DOI: 10.1093/schbul/sby016.448.

S. Guimond, ...**, G. A. Devenyi**, ..., C. A. Tamminga et al. "T22. PITUITARY GLAND VOLUME DIFFERENCES IN INDIVIDUALS WITH PSYCHOSIS: RESULTS FROM THE BIPOLAR-SCHIZOPHRENIA NETWORK ON INTERMEDIATE PHENOTYPES (B-SNIP) STUDY". In: *Schizophrenia bulletin* 44.suppl_1 (2018), S121–S121. DOI: 10.1093/schbul/sby016.298.

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.

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. URL: https://ui.adsabs.harvard.edu/abs/2014APS..MARD53010M.

Peer-Reviewed Publications

S. Amuno, ..., **G. A. Devenyi** et al. "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 (2020-03), p. 135556. DOI: 10.1016/j.scitotenv.2019.135556.

J. Germann, ..., **G. A. Devenyi** et al. "Fully automated habenula segmentation provides robust and reliable volume estimation across large MRI datasets suggesting intriguing developmental trajectories in psychiatric disease". In: *Biological Psychiatry: Cognitive Neuroscience and Neuroimaging* (2020-01). DOI: 10.1016/j.bpsc.2020.01.004.

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

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

J. L. Winterburn, ..., **G. A. Devenyi**, ..., M. M. Chakravarty et al. "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.

R. Patel, ..., **G. A. Devenyi**, ..., M. M. Chakravarty et al. "Investigating microstructural variation in the human hippocampus using non-negative matrix factorization". en. In: *NeuroImage* (2019-11), p. 116348. DOI: 10.1016/j.neuroimage.2019.116348.

G. Shafiei, ..., **G. A. Devenyi**, ..., B. Mišić et al. "Spatial Patterning of Tissue Volume Loss in Schizophrenia Reflects Brain Network Architecture". en. In: *Biological psychiatry* (2019-10). DOI: 10.1016/j.biopsych.2019.09.031.

M. Ranjan, ..., **G. A. Devenyi**, ..., M. Hodaie et al. "Tractography-based targeting of the ventral intermediate nucleus: accuracy and clinical utility in MRgFUS thalamotomy". en. In: *Journal of neurosurgery* (2019-09), pp. 1–8. DOI: 10.3171/2019.6.JNS19612.

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

E. Guma, ..., **G. A. Devenyi**, ..., B. Giros et al. "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.

G. Shafiei, ..., **G. A. Devenyi**, ..., B. Mišić et al. "Spatial patterning of tissue volume deformation in schizophrenia reflects brain network architecture". en. 2019-05.

S. A. Bedford, ..., **G. A. Devenyi**, ..., M. M. Chakravarty et al. "Large-scale analyses of the relationship between sex, age and intelligence quotient heterogeneity and cortical morphometry in autism spectrum disorder". en. In: *Molecular psychiatry* (2019-04). DOI: 10.1038/s41380-019-0420-6.

S. Stojanovski, ..., **G. A. Devenyi**, ..., A. L. Wheeler et al. "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.

F. V. Gouveia, ..., **G. A. Devenyi**, ..., R. C. R. Martinez et al. "Clinical, imaging genetics and deformation based morphometry study of longitudinal changes after surgery for intractable aggressive behaviour". en. 2019-02.

C. P. E. Rollins, ..., **G. A. Devenyi**, ..., M. M. Chakravarty et al. "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 (2019), p. 101606. DOI: 10.1016/j.nicl.2018.11.016.

A. Boutet, ..., **G. A. Devenyi**, ..., A. M. Lozano et al. "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.

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

D. Hoops, ..., **G. A. Devenyi**, ..., J. S. Keogh et al. "A 3D MRI-based atlas of a lizard brain". en. In: *The Journal of comparative neurology* 526.16 (2018-11), pp. 2511–2547. DOI: 10.1002/cne.24480.

S. M. Jovanovic**, G. A. Devenyi**, ..., J. S. Preston et al. "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.

S. M. Sengupta, ..., **G. A. Devenyi**, ..., R. Joober et al. "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.

P. Shaw, ..., **G. A. Devenyi**, ..., T. White et al. "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.

V. Kong**, G. A. Devenyi**, ..., M. M. Chakravarty et al. "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.

E. Guma, ..., **G. A. Devenyi**, ..., B. Giros et al. "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.

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

R. S. C. Amaral, ..., **G. A. Devenyi**, ..., Alzheimer's Disease Neuroimaging Initiative et al. "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.

E. A. Garza-Villarreal, ..., **G. A. Devenyi**, J. J. Gonzalez-Olvera et al. "Patterns of reduced cortical thickness and striatum pathological morphology in cocaine addiction". en. 2018-04.

C. Makowski, ..., **G. A. Devenyi**, ..., M. M. Chakravarty et al. "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.

G. A. Devenyi, ..., G. Wilson et al. "Ten simple rules for collaborative lesson development". en. In: *PLoS computational biology* 14.3 (2018-03), e1005963. DOI: 10.1371/journal.pcbi.1005963.

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

E. Guma**, G. A. Devenyi**, ..., M. Pruessner et al. "Neuroanatomical and Symptomatic Sex Differences in Individuals at Clinical High Risk for Psychosis". en. In: *Frontiers in psychiatry / Frontiers Research Foundation* 8 (2017-12), p. 291. DOI: 10.3389/fpsyt.2017.00291.

C. Laidi, ..., **G. A. Devenyi**, ..., J. Houenou et al. "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.

S. Patel, ..., **G. A. Devenyi**, ..., M. M. Chakravarty et al. "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.

E. A. Garza-Villarreal, ..., **G. A. Devenyi**, ..., J. J. Gonzalez-Olvera et al. "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.

K. J. Gorgolewski, ..., **G. A. Devenyi**, ..., R. A. Poldrack et al. "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.

R. Simpson**, G. A. Devenyi**, ..., J. Near et al. "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: official journal of the Society of Magnetic Resonance in Medicine / Society of Magnetic Resonance in Medicine* 77.1 (2017-01), pp. 23–33. DOI: 10.1002/mrm.26091.

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.

M. S. Kang, ..., **G. Devenyi**, ..., K. Blennow et al. "ELEVATED CSF LEVELS OF NEUROFILAMENT LIGHT CHAIN IS ASSOCIATED WITH GRAY MATTER NEURODEGENERATION IN BOTH HUMANS AND TRANSGENIC RAT MODEL OF ALZHEIMER'S DISEASE". In: *Alzheimer's & dementia: the journal of the Alzheimer's Association* 13.7 (2017), P1130.

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