ISTVÁN ADORJÁN

Curriculum vitae

Personal information:
E-mail: adorist@freemail.hu, neuropsych.lab.se@gmail.com
Place and date of birth: Budapest, Hungary 15/10/1980

Previous and current jobs

October 2016-	**Department of Anatomy, Histology and Embryology**, **Semmelweis University Budapest** Position: **Research Fellow** Job description, responsibilities: investigation of cellular biomarkers in neuropsychiatric diseases, organisation of the research activity of medical students, giving anatomy and histology practicals and lectures in Hungarian and English; examining Hungarian and English speaking first and second year medical students
October 2016-	**Department of Physiology, Anatomy and Genetics, University of Oxford, UK** Position: **Visiting Researcher** Job description, responsibilities: investigation of the microglia in autism spectrum disorder and schizophrenia
January 2015- September 2016	**Neuropathology Unit, Nuffield Department of Clinical Neurosciences, John Radcliffe Hospital, Oxford, UK** Position: **Research Fellow** Job description, responsibilities: investigation of the structure of the human subventricular zone and striatum and their alterations in pathological conditions such as schizophrenia and autism spectrum disorder
November 2013-September 2016	**Department of Physiology, Anatomy and Genetics, University of Oxford, UK** Position: **Postdoctoral Research Scientist** Job description, responsibilities: investigation of the structure of the human subventricular zone and striatum and their alterations in pathological conditions such as schizophrenia and autism spectrum disorder; examining medical and biomedical students as an Assessor of Final Honour School Examinations, teaching Anatomy for first, second and third year medical students

ISTVÁN ADORJÁN

September 2012-October 2013 — **Department of Anatomy, Histology and Embryology**, **Semmelweis University Budapest**
Position: **Research Fellow**
Job description, responsibilities: organisation of the research activity of medical students; tutoring the diploma work of end year medical students, giving anatomy and histology practicals and lectures in Hungarian, English and German; examining Hungarian, English and German speaking first and second year medical students; course director of first year Hungarian medical students

March 2011-August 2012
Position: **Assistant Lecturer**
Job description, responsibilities: giving anatomy and histology practicals and lectures in Hungarian, English and German; examining Hungarian and English speaking first and second year medical students; organisation of the research activity of medical students; tutoring the diploma work of end year medical students

March 2008 - March 2011
Position: **Research Assistant**
Job description, responsibilities: see previous paragraph

September 2004 – February 2008
Position: **PhD Student**
Job description, responsibilities: giving anatomy and histology practicals in Hungarian and English; organisation of the research activity of medical students

August 2001 – May 2004
Position: **Undergraduate Research Assistant**
Job description, responsibilities: research work in neuroscience

Trainings:

February 2018 — **Human Tissue Act Training, University of Oxford**

July 2017 — **Teaching and Learning Skills Development Course, University of Oxford**

September 2004 - May 2012 — **School of PhD Studies, Semmelweis University Budapest**
Student status: PhD Student
Certificate: PhD diploma in Neuroscience

September 1999 - August 2005 — **Faculty of Medicine, Semmelweis University Budapest**
Student status: Medical Student
Certificate: MD diploma

ISTVÁN ADORJÁN

Scholarships and stipends:

August 2008	**German Language Scholarship** **University of Heidelberg, Germany** Duration: 1 month
November 2007	**Travel Stipend of the Semmelweis School of PhD Studies** Venue: **Meeting of Society for Neuroscience, San Diego, USA** Duration: 2 weeks
October 2006	**Travel Stipend of the Semmelweis School of PhD Studies** Venue: **Meeting of Society for Neuroscience, Atlanta, USA** Duration: 2 weeks
June 2005	**HUMSIRC (Hungarian Medical Students International Relations Committee) Scholarship** **Cardiology Practice, University of Pisa, Italy** Duration: 1 month
December 2004 – February 2005	**ERASMUS Scholarship** **Pediatrics, Gynaecology and Obstetrics Practice, Tor Vergata University of Rome, Italy** Duration: 3 months
August 2004	**HUMSIRC (Hungarian Medical Students International Relations Committee) Scholarship** **Cardiology Practice, University of Messina, Italy** Duration: 1 month

Memberships:

2010-	Society for Neuroscience
2006-	Hungarian Neuroscience Society
2005-	Hungarian Medical Chamber

Language skills:

English: fluent
German: intermediate
Italian: intermediate
Latin: intermediate
French: elementary

ISTVÁN ADORJÁN

Research skills:

Small animal surgery, Brain banking, Immunohistochemistry, Confocal laser scanning microscopy, Three-dimensional digital reconstruction, Aperio SlideScanner and ImageAnalysis system, Statistical analysis with SPSS, Electron microscopy, Multiphoton microscopy, qPCR, Western blot

Research themes:

The alterations of the human subventricular zone, striatum and prefrontal cortex in schizophrenia and autism spectrum disorder – the investigation of cellular biomarkers in neuropsychiatric diseases

The evolutionary trends of the caudate nucleus and prefrontal cortex in primate species

Investigation of the developing human brain – with particular emphasis on perinatal hypoxic-ischaemic conditions

Publications:

Batiuk MY, Tyler T, Dragievic K, Mei S, Rydbirk R, Pethukov V, Deviatiarov R, Sedmak D, Frank E, Feher V, Habek N, Hu Q, Igolkina A, Roszik L, Pfisterer U, Garcia-Gonzalez D, Petanjek Z, Adorjan I, Kharchenko P, Khodosevich K. 2022. Upper cortical layer-driven network impairment in schizophrenia. Science Advances Vol 8(41) DOI: 10.1126/sciadv.abn8367 IF: 14.136 D1

Menassa DA, Muntslag TAO, Martin-Estebané M, Barry-Carroll L, Chapman MA, Adorjan I, Tyler T, Turnbull B, Rose-Zerilli MJJ, Nicoll JAR, Krsnik Z, Kostovic I, Gomez-Nicola D. 2022. The spatiotemporal dynamics of microglia across the human lifespan. Dev Cell 57(17): 2127-2139 doi: 10.1016/j.devcel.2022.07.015 IF: 12.27 D1

Adorjan I, Sun B, Feher V, Tyler T, Veres D, Chance SA, Szele FG. 2020. Evidence for decreased density of calretinin-immunopositive neurons in the caudate nucleus in patients with schizophrenia. Frontiers in Neuroanat doi: 10.3389/fnana.2020.581685. IF: 3.292 Q1

Pfisterer U, Demharter S, Petukhov V, Meichsner J, Thompson JJ, Batiuk M, Martinez AA, Vasistha NA, Thakur A, Mikkelsen J, Adorjan I, Pinborg LH, Pers TH, von Engelhardt J, Kharchenko PV, Khodosevich K. 2020. Identification of epilepsy-associated neuronal subtypes and gene expression underlying epileptogenesis. Nat Commun 11(1):5038. doi: 10.1038/s41467-020-18752-7. IF: 11.878 D1

Al-Dalahmah O, Sosunov AA, Shaik A, Ofori K, Liu Y, Vonsattel JP, Adorjan I, Menon V, Goldman JE. 2020. Single-nucleus RNA-seq identifies Huntington disease astrocyte states. Acta Neuropathol Commun 8(1):19. doi: 10.1186/s40478-020-0880-6. IF: 5.860 D1

Al-Dalahmah O, Campos Soares L, Nicholson J, Draijer S, Mundim M, Lu VM, Sun B, Tyler T, Adorjan I, O'Neill E, Szele FG. 2020. Galectin-3 modulates postnatal subventricular zone gliogenesis. Glia 68(2):435-450. doi: 10.1002/glia.23730. IF: 5.829 D1

Adorjan I, Tyler T, Bhaduri A, Demharter S, Finszter CK, Bako M, Sebok OM, Nowakowski TJ, Khodosevich K, Møllgård K, Kriegstein AR, Shi L, Hoerder-Suabedissen A, Ansorge O, Molnár Z. 2019. Neuroserpin expression during human brain development and in adult brain revealed by immunohistochemistry and single cell RNA sequencing. J Anat doi: 10.1111/joa.12931 Q1

Toth L, Szollosi D, Kis-Petik K, Adorjan I, Erdelyi F, Kalman M. 2018. The first post-lesion minutes: an in vivo study of extravasation and perivascular astrocytes following cerebral lesions in various experimental mouse models. J Histochem Cytochem doi: 10.1369/0022155418788390 IF: 2.816 Q1

Kalman M, Oszwald E, Pocsai K, Bagyura Zs, Adorjan I. 2018. Disappearance of cerebral laminin immunoreactivity as related to the maturation of astroglia in rat brain. Int J Dev Neurosci 69:97-105. IF: 2.495 Q3

Kalman M, Oszwald E, Adorjan I. 2018. Appearance of beta-dystroglycan precedes the formation of gliovascular end-feet in developing rat brain. Eur J Histochem 62(2):2908. doi: 10.4081/ejh.2018.2908 IF: 2.217 Q2

Adorjan I, Ahmed B, Feher V, Torso M, Krug K, Esiri M, Chance SA, Szele FG. 2017. Calretinin interneuron density in the caudate is lower in autism spectrum disorder. Brain 140:2028-2040. IF: 10,103 D1

Chang EH, Adorjan I, Mundim MV, Sun B, Dizon MLV, Szele FG. 2016. Traumatic brain injury activation of the adult subventricular zone neurogenic niche. Frontiers in Neuroscience. doi:10.3389/fnins.2016.00332. IF: 3,42 Q1

James RE, Hillis J, Adorján I, Gration B, Mundim MV, Iqbal AJ, Majumdar MM, Yates RL, Richards MM, Goings GE, DeLuca GC, Greaves DR, Miller SD, Szele FG. 2015. Loss of galectin-3 decreases the number of immune cells in the subventricular zone and restores proliferation in a viral model of multiple sclerosis. Glia 64(1): 105-121. IF: 6,031 D1

Adorjan I, Bindics K, Galgoczy P, Kalman M. 2014. Phases of intermediate filament composition in Bergmann glia following cerebellar injury in rat. Exp Brain Res, 232(7):2095-104. IF: 2,221 Q2

Kálmán M, Mahalek J, Adorján A, Adorján I, Pócsai K, Bagyura Z, Sadeghian S. 2011. Alterations of the perivascular dystrophin-dystroglycan complex following brain lesions. An immunohistochemical study in rats. Histol Histopathol, (11):1435-52. IF: 2,502 Q1

Wappler EA, Adorján I, Gál A, Galgóczy P, Bindics K, Nagy Z. 2011. Dynamics of dystroglycan complex proteins and laminin changes due to angiogenesis in rat cerebral hypoperfusion. Microvasc Res, 81(2):153-9. IF: 2,390 Q1

Adorján I, Kálmán M. 2009. Distribution of beta-dystroglycan immunopositive globules in the subventricular zone of rat brain. Glia, 57(6):657-66. IF: 4,932 D1

Goren O, Adorján I, Kálmán M. 2006. Heterogeneous occurrence of aquaporin-4 in the ependyma and in the circumventricular organs in rat and chicken. Anat Embryol (Berl), 211(2):155-72. IF: 1,277

PhD Thesis:

Distribution of β-dystroglycan and aquaporin-4 in the ependyma and subventricular zone. 2012. School of PhD Studies, Semmelweis University, Budapest, Hungary

Presentations of supervised undergraduate students:

Sáfár K. 2022. A calretinin-immunpozitív interneuronok érintettsége a dorzolaterális prefrontális kortexben autizmus spektrum zavarban. Semmelweis University, TDK Conference, Budapest.

Somogyi E. 2022. A calretinin-immunpozitív kérgi interneuronok vizsgálata skizofréniában. Semmelweis University, TDK Conference, Budapest.

Kelmer P. 2022. Investigation of the density of DARPP32-immunopositive neurons in the putamen in patients with schizophrenia. Semmelweis University, TDK Conference, Budapest. 1. díj

Bekássy E. 2021. Az asztroglia heterogenitásának vizsgálata főemlősök agykéregben és nucleus caudatus-ában. Veterinary University, TDK Conference, Budapest.

Kelmer P. 2021. Evidence for decreased density of calretinin neurons in the putamen in patients with schizophrenia. Semmelweis University, TDK Conference, Budapest, 2. dij

Bekássy E. 2021. Az asztroglia heterogenitásának vizsgálata főemlősök agykéregben és nucleus caudatus-ában. Semmelweis University, TDK Conference, Budapest.

Hoppa P. 2021. Az asztroglia heterogenitásának vizsgálata a humán agykéregben és a nucleus caudatus-ban. Semmelweis University, TDK Conference, Budapest, 2. dij

Tyler T. 2020. Skizofréniában érintett interneuronpopulációk azonosítása kvantitatív immunhisztokémiai és RNAscope-módszerrel. Semmelweis University, TDK Konferencia, Budapest.

Tyler T. 2019. Decreased density of calretinin-immunopositive neurons in the caudate nucleus of patients with schizophrenia. Semmelweis University, TDK Conference, Budapest,

Toth L. 2014. In vivo investigations of the gliavascular connections in transgenic mice. Semmelweis University, TDK Conference, Budapest

Visolyi G, Berecz E. 2011. The development of the subventricular zone situated in the lateral ventricle: an immunohistochemical study in rat. Semmelweis University, TDK Conference, Budapest

Bindics K. 2010. Phases of regeneration of Bergmann glia following stab wound of rat cerebellum. Semmelweis University, TDK Conference, Budapest

Galgóczy P, Bindics K. 2009. Dynamics of GFAP and nestin following cerebellar lesion in rat. Semmelweis University, TDK Conference, Budapest

Bindics K, Galgóczy P. 2008. Immunohistochemical changes of cerebellar vessels following acute and chronic hypoperfusions. Semmelweis University, TDK Conference, Budapest

Diploma work of supervised student:

Sáfár Krisztina 2022. A calretinin-immunpozitív interneuronok érintettsége a dorzolaterális prefrontális kortexben autizmus spectrum zavarban, ELTE, biológus mesterszak, Idegtudomány és Humánbiológia szakirány

Kelmer Paz 2022. Investigation of the Cytoarchitecture of the Putamen in Patients with Schizophrenia. Semmelweis University, Faculty of Medicine.

Bekássy E. 2021. Az asztroglia heterogenitásának vizsgálata főemlősök agykéregben és nucleus caudatus-ában. Veterinary University, Budapest

Hoppa Paulina 2021. Az asztroglia heterogenitásának vizsgálata a humán agykéregben és nucleus caudatus-ban. Állatorvostudományi Egyetem, biológus MSc képzés

Tyler Teadora 2020. Egyes kortikális neuronpopulációk érintettsége skizofréniában. Állatorvostudományi Egyetem, biológus MSc képzés

Bindics K. 2011. Investigation of Bergmann glia in rat. Semmelweis University, Budapest