

**Curriculum Vitae**  
**ÁRPÁD DOBOLYI**

**Personal data**

Nationality: Hungarian

Date and place of birth: 25<sup>th</sup> March 1970, Budapest, Hungary

Family: married with 2 children

**Contact information**

Department of Anatomy, Histology and Embryology, Semmelweis University, 1094 Budapest, Tüzoltó u. 58, Hungary, Tel: +36-1-215-6920 / 53634; Fax: +36-1-218-1612; Email: [dobolyi.arpad@med.semmelweis-univ.hu](mailto:dobolyi.arpad@med.semmelweis-univ.hu)

**Education and appointments**

*2014-* :Head of the Laboratory of Molecular and Systems Neurobiology, Eötvös Loránd University and the Hungarian Academy of Sciences, Budapest, Hungary, Research Professor

*2013-* :Head of the Laboratory of Neuromorphology, Department of Anatomy, Histology and Embryology, Semmelweis University, Budapest, Hungary, Research Associate Professor

*2007-2012:*Neuromorphological and Neuroendocrine Research Laboratory, Department of Anatomy, Histology and Embryology, Semmelweis University and the Hungarian Academy of Sciences, Budapest, Hungary, Research Associate Professor

*2005-2007:* Laboratory of Neuromorphology, Hungarian Academy of Sciences, Budapest, Hungary, Marie Curie Fellow, Senior Investigator

*2001-2005:* Laboratory of Genetics, National Institute of Mental Health, NIH, Bethesda, USA, Research Fellow

*1999-2001:* Research Group of Neurobiology, Hungarian Academy of Sciences – Eötvös University, Research Associate

*2000:* PhD in Medicine, summa cum laude, supervisor: Dr. Gábor Juhász, title: The role of non-adenosine nucleosides in the central nervous system

*1995-1998: Semmelweis University Doctoral School, Cellular and Molecular Physiology Program*

*1993-1994: University of Bristol, Bristol, UK; Pharmacology*

*1990-1995: Eötvös Loránd University, Budapest, Hungary; Chemistry*

### **Honors and awards**

*2015: János Bolyai Award of the Hungarian Academy of Sciences*

*2014: Doctor of Science of the Hungarian Academy of Sciences*

*2012: Principal Investigator of the Month of the Hungarian Scientific Research Fund OTKA*

*2007: János Bolyai Fellowship Award of the Hungarian Academy of Sciences*

*2005: Marie Curie Intra-European Fellowship Award of the European Commission, Brussels, EU*

*2004: Young Investigator Award of NARSAD (National Alliance for Research on Schizophrenia and Depression).*

*2004: FARE Award (Fellows Award for Research Excellence) at the National Institutes of Health, an award for winners of the annual competition of fellows' scientific presentations*

*1997, 1999: Fellowship of the Japanese Ministry of Education to spend 2 months in 1997 and 3 months in 1999 in the National Institute for Physiological Sciences, Okazaki, Japan*

*1995: Second prize in the National Competition of University Students in Hungary in Animal Physiology, Gödöllő, Hungary*

*1994: Scholarship Award of the British Council and the Soros Foundation to spend the 1993-94 academic year at the University of Bristol, Bristol, UK*

*1993: Scholarship Award of the Republic of Hungary for academic achievements at Eötvös University*

*1988: Szent-Györgyi Albert Award of the Hungarian Society for Chemistry for winning silver medal on the International Chemical Olympiad for Highschool Students in Helsinki, Finland*

## **Grant support**

### ***As principal investigator:***

2014-2017 KTIA\_NAP\_13-2-2014-0004 Research Grant of the National Brain Program.

Title: Neurobiology of parenthood: a systems biological approach.

2012-2015 OTKA K100319 Research Grant of the Hungarian Scientific Research Fund. Title: Novel peptidergic mechanisms in central maternal adaptations.

2011-2012 OTKA NNF 85612 Research Grant of the Hungarian Scientific Research Fund. Title: The function of transforming growth factor beta proteins in the central nervous system.

2010-2011 Pfizer Basic Research Grant. Title: Identification of novel target proteins for the treatment of postpartum depression and psychosis.

2009-2011 NFM-OTKA NNF 78219 Research Grant of the Hungarian Scientific Research Fund. Title: Transforming growth factor beta proteins in the central nervous system.

2007-2011 NKTH-OTKA K67646 Research Grant of the Hungarian Scientific Research Fund. Title: Morphological basis of the role of a novel peptidergic neuromodulator system in nociceptive information processing.

2005-2007 MC-IRG 016423 Marie Curie International Reintegration Grant of the European Commission. Title: Expression and neuroprotective function of latent transforming growth factor beta binding proteins in the central nervous system of rodent and human.

2004-2005 NARSAD Young Investigator Award Grant. Title: The action of TIP39 on corticotropin-driven stress systems.

### ***As senior participant:***

2009-2013 NKTH TECH\_09\_A1 Grant of the National Office for Research and Technology (Hungary). Title: Development of intelligent nanosensor diagnosing ion homeostasis at subcellular level.

2008-2011 OTKA NK 72929 Research Grant of the Hungarian Scientific Research Fund. Title: Topography and neurochemical characterization of hypothalamic and central autonomic pathways.

## **Teaching experience**

### ***Previous supervision of Ph.D. students:***

2007-2012 Dr. Attila G. Bagó received a Ph.D. degree at the Szentágotthai János Neuroscience Doctoral Program of the Semmelweis University. The title of the Dissertation was: The TIP39-PTH2 receptor neuromodulator system in the rodent and human central nervous system.

2008-2013 Dr. Melinda Cservenák received a Ph.D. degree at the Szentágotthai János Neuroscience Doctoral Program of the Semmelweis University. The title of the Dissertation was: The role of tuberoinfundibular peptide of 39 residues in maternal adaptations. During her Ph.D. education, Dr. Cservenák was Poster Section Winner at PhD Scientific Days 2010; Neuroendocrinology Poster Section Winner at 13<sup>th</sup> Conference of Hungarian Neuroscience Society, 2011.

2009-2015 Dr. Csilla Vincze received a Ph.D. degree at the Szentágotthai János Neuroscience Doctoral Program of the Semmelweis University. The title of the Dissertation is: The transforming growth factor beta proteins in the central nervous system and their roles in ischemia.

### ***Present supervision of Ph.D. students:***

2015- Dr. András Lékó at the Szentágotthai János Neuroscience Doctoral Program of the Semmelweis University. The title of the research topic is: Growth factors in maternal adaptations of the brain.

2014- Barbara Gellén at the Neuroscience Doctoral Program of the Eötvös Loránd University. The title of the research topic is: Posttranslational modifications and proteom changes alterations in the synapse during alterations of mood and behavior.

2014- Lilla Ravasz at the Neuroscience Doctoral Program of the Eötvös Loránd University. The title of the research topic is: The role of fast-spiking interneurons in the mechanisms of physiological pathological alterations of mood.

2013- Dr. Gabriella Pál at the Szentágotthai János Neuroscience Doctoral Program of the Semmelweis University. The title of the research topic is: The reproductive functions of transforming growth factor beta proteins in the central nervous system.

2011- Éva Rebeka Szabó at the Szentágotthai János Neuroscience Doctoral Program of the Semmelweis University. The title of the research topic is: Central amylin as a novel neuropeptide in the control of maternal care.

***Supervision of medical and master students:***

2014- Edina Udvari, a registered student researcher at Eötvös Loránd University. Research topic: Changes of the synaptic proteome in the maternal hypothalamus. First prize at the Conference of the Registered Student Researchers in Neuroscience Section at Eötvös Loránd University in 2014.

2011-2015 András Lékó, a registered student researcher at Semmelweis University. Research topic: Identification of gene targets in postpartum depression. Third and second prize at the Conference of the Registered Student Researchers in Neuroscience Section at Semmelweis University in 2013 and 2014. First prize at the National Conference of the Registered Student Researchers in 2015.

2011-2012 Károly Gubik, a registered student researcher at Semmelweis University. Research topic: Ultrasonic pup vocalization in rodents as a model of baby crying.

2010-2011 M.Sc. Dissertation of Éva Rebeka Szabó at Eötvös University. The title of the thesis: Recombinant viruses as neuronal tracers.

2009-2013 Gabriella Pál, a registered student researcher at Semmelweis University. Research topic: Induction of transforming growth factor beta proteins in the rat brain following focal ischemia elicited experimentally by middle cerebral artery occlusion. Third prize at the Conference of the Registered Student Researchers in Neuroscience Section at Semmelweis University in 2012, and first prize in 2013.

2008-2012 Bence Mogyoródi, a registered student researcher at Semmelweis University. Research topic: The neuronal connections of the medial paralemniscal nucleus. First prize at the Conference of the Registered Student Researchers in Neuroscience Section at Semmelweis University in 2011.

2008-2011 Dominika Domokos, a registered student researcher at Semmelweis University. Research topic: Neuronal activation of brainstem neurons in the maternal brain. First prize in the Theoretical Medicine Section of Student Researchers in 2009.

2006-2007 Rectoral Dissertation of Dávid Brenner at Semmelweis University. The title of the thesis: Tuberoinfundibular peptide of 39 residues in the embryonic and early postnatal rat brain.

***Organized courses:***

2015- : Organizer and lecturer of the mandatory MSc course Molecular Neurobiology at the Department of Physiology and Neurobiology, Eötvös Loránd University.

*2014-* : Lecturer of the mandatory MSc course Regulatory Biology and Physiology at the Department of Physiology and Neurobiology, Eötvös Loránd University.

*2014-* : Lecturer of the MSc course Introduction to Molecular Neurobiology, Eötvös Loránd University.

*2014-* : Lecturer in Mammalian and Human Histology and Developmental Biology for MSc students at the Department of Anatomy, Cellular and Developmental Biology, Eötvös Loránd University.

*2014-* : Organizer and Lecturer in Systems Biology mandatory MSc course at the Department of Biochemistry, Eötvös Loránd University.

*2012-* : Lecturer in Cell Biology and Neuroanatomy for medical students at the Department of Anatomy, Histology and Embryology, Semmelweis University.

*2013, 2015:* Invited lecturer at the mandatory Ph.D. course Neuroendocrinology at the Szentágotthai János Neuroscience Doctoral Program of the Semmelweis University. The title of the lecture: Hormonal regulation of the maternal behaviour.

*2012, 2014:* Invited lecturer at the mandatory Ph.D. course Cellular and Molecular Neurobiology at the Szentágotthai János Neuroscience Doctoral Program of the Semmelweis University. The title of the lecture: Growth factors and their receptors in the central nervous system.

*2010, 2012:* Organizer and lecturer of the Ph.D. course Neuropeptides in the Nervous System at the Szentágotthai János Neuroscience Doctoral Program of the Semmelweis University.

*2010:* Invited lecturer at the course Clinical and Theoretical Audiology organized by the State Health Center for the advanced education of medical doctors. The title of the lecture: The brain auditory system.

*2009:* Invited lecturer at the Ph.D. course Human Neuroanatomy 3 – Regulatory Systems at the Szentágotthai János Neuroscience Doctoral Program of the Semmelweis University. The title of the lecture: The neuroanatomy of sleep, wakefulness and dreaming.

*1999-2000:* Instructor in Laboratory Practice and Seminar of Physiology at Semmelweis University.

*1997-1998:* Assistant Instructor in Laboratory Practice of Comparative Physiology in Eötvös University.

### **Invited scientific lectures**

**A. Dobolyi** (2015) Neuropeptides and maternal responsiveness. 14<sup>th</sup> international congress on amino acids and proteins. Vienna, Austria

**A. Dobolyi** (2015) Inputs and activation mechanisms of preoptic galanin neurons in mother rats. Neuropeptides 2015, Aberdeen, UK

**A. Dobolyi** (2015) Neurobiology of motherhood – a systems biological approach. Hungarian Academy of Sciences, Section of Medicine

**A. Dobolyi** (2014) Systems biological tools to identify drug targets for the treatment of postpartum depression. XIII. Conference of the Hungarian Clinical Neurogenetics Society, Galyatető, Hungary.

**A. Dobolyi** (2014) A systems biological approach to identify drug targets in stroke. VIII. Symposium of the Experimental Pharmacological Section of the Hungarian Society of Experimental and Clinical Pharmacology, Velence, Hungary.

**A. Dobolyi** (2013) A thalamic relay center affecting maternal physiology by peptidergic mechanisms. The 5<sup>th</sup> International Conference on The Parental Brain Conference, Regensburg, Germany.

**A. Dobolyi** (2013) Identification of potential drug targets in postpartum depression. XIV. Hungarian Neuroscience Society Meeting, Budapest, Hungary.

**A. Dobolyi** (2012) Brain circuitry of maternal adaptation. 'The Impact of the next generation of neurobiologists'. The IBRO International Workshop 2012, Szeged, Hungary.

**A. Dobolyi** (2010) Central amylin expression and its potential involvement in maternal regulations. 7<sup>th</sup> International Symposia on the CGRP Family, Queenstown, New Zealand.

**A. Dobolyi** (2010) The role of TIP39 in maternal adaptations. Neural Cell Function Interest Group, National Institutes of Health, Bethesda, USA.

**A. Dobolyi** (2010) Microarray reveals robust induction of amylin in the maternal preoptic area. The 4<sup>th</sup> International Conference on The Parental Brain, Edinburgh, Scotland, UK.

**A. Dobolyi**, M. Cservenák, I. Bodnár, M. Palkovits, G.M. Nagy, T.B. Usdin (2010) Anatomical and functional evidence for the involvement of tuberoinfundibular peptide of 39 residues in the regulation of suckling-induced prolactin release. The 7<sup>th</sup> International Congress of Neuroendocrinology, Rouen, France.

**A. Dobolyi** (2010) Brain distribution of mRNAs encoding TGF-betas and latent TGF-beta binding proteins. Colloquium series, Institute for Anatomy and Cell Biology, University Freiburg, Germany.

Cservenák M., Palkovits M., Usdin T.B., **Dobolyi A.\*** (2009) Activation of posterior thalamic TIP39 neurons in mother rats. Neuropeptide Festival, Meeting of the European Neuropeptide Club and the Summer Neuropeptide Conference, Salzburg, Austria.

## **Reviewer activity**

### ***Grant proposal reviews:***

*Member of the following grant review panels of the Research Executive Agency, European Commission, Brussels, EU as expert evaluator and rapporteur:*

Horizon 2020, PHC-14-2015, 2015

7th Framework Programme, Marie Curie Actions, 2010-2014

7th Framework Programme, KBBE Consortial Theme, 2010

*Regular scientific reviewer for the following national agencies:*

Research Technological Development & Innovation Actions, Greece

Research Promotion Foundation of Cyprus

National Office for Research and Technology, Hungary

Hungarian Scientific Research Fund, Hungary

Bolyai Fellowship, Hungarian Academy of Sciences, Hungary

National, Research, Development and Innovation Office, Hungary

Merit Award, Semmelweis University, Hungary

### ***Manuscript reviews:***

Registered reviewer with regular activity for the following international scientific journals: Endocrinology (over 10 manuscripts), The Journal of Clinical Endocrinology and Metabolism, PlosOne, European Journal of Nutrition, Reproductive Biology and Endocrinology, Experimental Neurology, Brain Research, Acta Physiologica Hungarica, Current Medicinal Chemistry, International Journal of Molecular Sciences, Journal of Neuroendocrinology, Neuropeptides, Neuroscience Letters, Physiological Research, Physiology and Behaviour

### ***Reviews for Ph.D. evaluations:***

Opponent reviewer of Ph.D. dissertations at Semmelweis, Eötvös, and Pécs University Doctoral Schools 7 times since 2007.

Committee Member for Ph.D. defenses at Semmelweis and Eötvös University Doctoral Schools 8 times since 2008.

Examiner at Ph.D. final examinations at Semmelweis University Doctoral School 9 times since 2009.

***Reviews for student competitions:***

Reviewer at the PhD Symposium of the Semmelweis University in 2011 and 2012.

Committee member at the Scientific Student Competition at Semmelweis University in 2012, 2013, 2014, and 2015.

Committee member at the Scientific Student Competition at Eötvös Loránd University in 2008, 2012, and 2014.

**Languages**

English: advanced level C-type state certificate

German: intermediate level C-type state certificate

French: intermediate level C-type state certificate

**Other Experience and Professional Memberships**

2015- Member of the Program Committee of the 15<sup>th</sup> Conference of the Hungarian Neuroscience Society

2014- Member of the Neurobiology Committee of the Hungarian Academy of Sciences

2013- Member of the Executive Committee of the Hungarian Neuroscience Society

2013- Secretary of the Organizing Committee of the 14<sup>th</sup> Conference of the Hungarian Neuroscience Society

2010-2014 Member of the Young Scientist Advisory Board of the President of the Hungarian Academy of Sciences

2009 Membership in the Steering Committee on Quality Assurance at Semmelweis University

*2007-2009* Head of the Confocal Microscopy Facility supervised by a consortium of departments of the Semmelweis University and the Institute of Experimental Medicine of the Hungarian Academy of Sciences

*2009-2014* Member of the Endocrine Society

*2003-* Member of the Society for Neuroscience

*2000-* Member of the Forum of European Neuroscience Societies

*1998-* Member of the International Brain Research Organization

*1998-* Member of the Hungarian Neuroscience Society

## LIST OF PUBLICATIONS

### **Original research articles (total impact factor: 251.508, H-index: 19)**

1. Szabó ÉR, Cservenák M, Lutz TA, Gévai L, Endrényi M, Simon L, **Dobolyi A.** (2015) Behavioral changes in mothers and maternally sensitized female mice. *Behaviour*  
Impact factor: **1.230**
2. Pál I, Kardos J, **Dobolyi A.**, Héja L. (2015) Appearance of fast astrocytic component in voltage-sensitive dye imaging of neural activity. *Mol Brain*. 8:35.  
Impact factor: **4.902**
3. Kovács Z, Kékesi KA, **Dobolyi A.**, Lakatos R, Juhász G. (2015) Absence epileptic activity changing effects of non-adenosine nucleoside inosine, guanosine and uridine in Wistar Albino Glaxo Rijswijk rats. *Neuroscience* 300:593-608.  
Impact factor: **3.357**
4. Völgyi K, Gulyácssy P, Háden K, Badics K, Kis V, Kékesi KA, Simor A, Györffy B, Tóth EA, Lubec G, Juhász G, **Dobolyi A.** (2015) Synaptic mitochondria: A brain mitochondria cluster with a specific proteome. *J. Proteomics*. 120:142-157. Impact factor: **3.888**
5. **Dobolyi A.**, Ostergaard E., Bagó A.G., Dóczy T., Palkovits M., Gál A., Molnár M.J., Ádám-Vizi V., Chinopoulos C. (2015) Exclusive neuronal expression of SUCLA2 in the human brain. *Brain Struct. Funct.* 220:135-151.  
Impact factor: **5.618**
6. Romanov R.A., Alpár A., Zhang M.D., Zeisel A., Calas A., Landry M., Fuszard M., Shirran S.L., Schnell R., **Dobolyi A.**, Oláh M., Spence L., Mulder J., Martens H., Palkovits M., Uhlen M., Sitte H.H., Botting C.H., Wagner L., Linnarsson S., Hökfelt T., Harkany T. (2015) A secretogin locus of the mammalian hypothalamus controls stress hormone release. *EMBO J.* 34:36-54.  
Impact factor: **10.434**
7. Nardai S., **Dobolyi A.**, Pál G., Skopál J., Pintér N., Lakatos K., Merkely B., Nagy Z (2015) Selegiline promotes NOTCH\_JAGGED signaling in astrocytes of the peri-infarct region and improves the functional integrity of the neurovascular unit in a rat model of focal ischemia. *Restor. Neurol. Neurosci.* 33:1-14.  
Impact factor: **2.490**
8. **Dobolyi A.**, Bagó A.G., Gál A., Molnár M.J., Palkovits M., Adam-Vizi V., Chinopoulos C. (2015) Localization of SUCLA2 and SUCLG2 subunits of succinyl CoA ligase within the cerebral cortex suggests the absence of matrix substrate-level phosphorylation in glial cells of the human brain. *J. Bioenerg. Biomembr.* 47:33-41.  
Impact factor: **3.212**

9. Kovács Z., Kékesi K.A., Juhász G., Barna J., Héja L., Lakatos R., **Dobolyi A.** (2015) Non-adenosine nucleoside inosine, guanosine and uridine as promising antiepileptic drugs: a summary of current literature. *Mini Rev. Med. Chem.* 14:1033-1042.  
Impact factor: **2.903**
10. Pal G., Lovas G., **Dobolyi A.** (2014) Induction of transforming growth factor beta receptors following focal ischemia in the rat brain. *PLoS One* 9:e106544, 1-15.  
Impact factor: **3.234**
11. **Dobolyi A.**, Grattan D.R., Stolzenberg D.S. (2014) Preoptic inputs and mechanisms that regulate maternal responsiveness. *J. Neuroendocrinol.* 26:627-640.  
Impact factor: **3.138**
12. **Dobolyi A.**, Kékesi A.K., Juhász G., Székely A.D., Lovas G., Kovács Z. (2014) Receptors of peptides as therapeutic targets in epilepsy research. *Curr. Med. Chem.* 21:764-787.  
Impact factor: **3.853**
13. Györfly B., Kovács Z., Gulyássy P., Simor A., Völgyi K., Orbán G., Baracska P., Szabó Z., Janáky T., **Dobolyi A.**, Juhász G., Czurkó A., Kékesi A.K. (2014) Brain protein expression changes in WAG/Rij rats, a genetic rat model of absence epilepsy after peripheral lipopolysaccharide treatment. *Brain Behav. Immun.* 35:86-95.  
Impact factor: **5.889**
14. Kovács Z., Kékesi A.K., Juhász G., **Dobolyi A.** (2014) The antiepileptic potential of nucleosides. *Curr. Med. Chem.* 21:788-821.  
Impact factor: **3.853**
15. Kovács Z., **Dobolyi A.**, Juhász G., Kékesi A.K. (2014) Lipopolysaccharide induced increase in seizure activity in two animal models of absence epilepsy WAG/Rij and GAERS rats and Long Evans rats. *Brain Res Bull.* 104:7-18.  
Impact factor: **2.718**
16. Cservenák M., Szabó É.R., Bodnár I., Lékó A., Palkovits M., Nagy G.M., Usdin T.B., **Dobolyi A.** (2013) Thalamic neuropeptide mediating the effects of nursing on lactation and maternal motivation. *Psychoneuroendocrinology* 38:3070-3084.  
Impact factor: **5.591**
17. Kovács Z., Slézia A., Bali Z.K., Kovács P., **Dobolyi A.**, Szikra T., Hernádi I., Juhász G. (2013) Uridine modulates neuronal activity and inhibits spike-wave discharges of absence epileptic Long Evans and Wistar Albino Glaxo/Rijswijk rats. *Brain Res Bull.* 97:16-23.  
Impact factor: **2.974**

18. Kovács Z., **Dobolyi A.**, Kékesi A.K., Juhász G., (2013) 5'-nucleotidases, nucleosides, and their distribution in the brain: pathological and therapeutic implications. *Curr. Med. Chem.* 20:4217-4240.  
Impact factor: **3.715**
19. Varga T., Mogyoródi B., Bagó A.G., Cservenák M., Domokos D., Renner E., Gallatz K., Usdin T.B., Palkovits M., **Dobolyi A.** (2012) Paralemniscal TIP39 is induced in rat dams and may participate in maternal functions. *Brain Struct. Funct.* 217:323-335.  
Impact factor: **7.837**
20. Szabó E.R., Cservenák M., **Dobolyi A.** (2012) Amylin is a novel neuropeptide with potential maternal functions. *FASEB J.* 26:272-281.  
Impact factor: **5.704**
21. Pál G., Vincze C., Renner É., Wappler E.A., Nagy Z., Lovas G., **Dobolyi A.** (2012) Time course, distribution and cell types of induction of transforming growth factor betas following middle cerebral artery occlusion in the rat brain. *PLoS One* 7(10):e46731.  
Impact factor: **3.730**
22. Héja L., Nyitrai G., Kékesi O., **Dobolyi A.**, Szabó P., Fiáth R., Ulbert I., Pál-Szente B., Palkovits M., Kardos J. (2012) Astrocytes convert network excitation to tonic inhibition of neurons. *BMC Biol.* 10:26.  
Impact factor: **6.531**
23. **Dobolyi A.**, Vincze C., Pál G., Lovas G. (2012) The neuroprotective functions of transforming growth factor beta proteins. *Int. J. Mol. Sci.* 13:8219-8258.  
Impact factor: **2.464**
24. Renner E., Puskás N., **Dobolyi A.**, Palkovits M. (2012) Glucagon-like peptide-1 of brainstem origin activates dorsomedial hypothalamic neurons in satiated rats. *Peptides* 35:14-22.  
Impact factor: **2.522**
25. **Dobolyi A.**, Dimitrov E., Palkovits M., Usdin T.B. (2012) The neuroendocrine functions of the parathyroid hormone 2 receptor. *Front Endocrinol (Lausanne).* 3, 121:1-10.
26. **Dobolyi A.** (2011) Novel potential regulators of maternal adaptations during lactation: tuberoinfundibular peptide 39 and amylin. *J. Neuroendocrinol.* 23:1002-1008.  
Impact factor: **3.138**
27. **Dobolyi A.**, Kovács Z., Juhász G., Kardos J. (2011) Uridine function in the central nervous system. *Curr. Top. Med. Chem.* 11:1058-1067.  
Impact factor: **4.174**

28. Molnár T., **Dobolyi A.**, Nyitrai G., Barabás P., Héja L., Emri Z., Palkovits M., Kardos J. (2011) Calcium signals in the nucleus accumbens: Activation of astrocytes by ATP and succinate. *BMC Neurosci.* 12:96.  
Impact factor: **3.042**
29. Kovács Z., Juhasz G., Palkovits M., **Dobolyi A.**, Kékesi K.A. (2011) Area, age and gender dependence of the nucleoside system in the brain: a review of current literature. *Curr. Top. Med. Chem.* 11:1012-1033.  
Impact factor: **4.174**
30. Cservenák M., Bodnár I., Usdin T.B., Palkovits M., Nagy G.M., **Dobolyi A.** (2010) Tuberoinfundibular peptide of 39 residues is activated during lactation and participates in the suckling-induced prolactin release. *Endocrinology* 151:5830-5840.  
Impact factor: **4.993**
31. Palkovits M., Usdin T.B., Makara G.B., **Dobolyi A.** (2010) Tuberoinfundibular peptide of 39 residues-immunoreactive fibers in the zona incerta and the supraoptic decussations terminate in the neuroendocrine hypothalamus. *Neurochem. Res.* 35:2078-2085.  
Impact factor: **2.608**
32. Vincze C., Pál G., Wappler E.A., Szabó É.R., Nagy Z., Lovas G., **Dobolyi A.** (2010) Transforming growth factor beta isoforms in the intact rat brain and following experimentally induced focal ischemia. *J. Comp. Neurol.* 518:3752-3770.  
Impact factor: **3.774**
33. **Dobolyi A.**, Palkovits M., Usdin T.B. (2010) The TIP39-PTH2 receptor system: unique peptidergic cell groups in the brainstem and their interactions with central regulatory mechanisms. *Prog. Neurobiol.* 90:29-59.  
Impact factor: **9.966**
34. Kovács Z., **Dobolyi A.**, Kékesi A.K., Juhász G. (2010) Nucleoside map of the human central nervous system. *Neurochem. Res.* 35:452-464.  
Impact factor: **2.608**
35. Renner E., Szabó-Meltzer K.I., Puskás N., Tóth Z.E, **Dobolyi A.**, Palkovits M. (2010) Activation of neurons in the hypothalamic dorsomedial nucleus via hypothalamic projections of the nucleus of the solitary tract following refeeding of fasted rats. *Eur. J. Neurosci.* 31:302-314.  
Impact factor: **3.658**
36. Kovács Z., **Dobolyi A.**, Juhász G., Bobest M., Papp V., Takáts L., Kékesi A.K. (2010) Gender- and age-dependent changes in nucleoside levels in the cerebral cortex and white matter of the human brain. *Brain Res. Bull.* 81:579-584.  
Impact factor: **2.498**

37. **Dobolyi A.** (2009) Central amylin expression and its induction in rat dams. *J. Neurochem.* 111:1490-1500.  
Impact factor: **3.999**
38. Bagó A.G., Dimitrov E., Saunders R., Seress L., Palkovits M., Usdin T.B., **Dobolyi A.** (2009) Parathyroid hormone 2 receptor and its endogenous ligand tuberoinfundibular peptide of 39 residues are concentrated in endocrine, viscerosensory and auditory brain regions in macaque and human. *Neuroscience* 162:128-147.  
Impact factor: **3.292**
39. Héja L., Barabás P., Nyitrai G., Kékesi K.A., Lasztóczy B., Toke O., Tárkányi G., Madsen K., Schousboe A., **Dobolyi A.**, Palkovits M., Kardos J. (2009) Glutamate uptake triggers transporter-mediated GABA release from astrocytes. *PLoS One* 4:e7153, 1-12.  
Impact factor: **4.351**
40. Palkovits M., Helfferich F., **Dobolyi A.**, Usdin T.B. (2009) Acoustic stress activates tuberoinfundibular peptide of 39 residues neurons in the rat brain. *Brain Struct. Funct.* 214:15-23.  
Impact factor: **4.415**
41. Varga T., Palkovits M., Usdin, T.B., **Dobolyi A.** (2008) The medial paralemniscal nucleus and its afferent neuronal connections in rat. *J. Comp. Neurol.* 511:221-237.  
Impact factor: **3.743**
42. Fegley D.B., Holmes A., Riordan T., Faber C.A., Weiss J.R., Ma S., Batkai S., Pacher P., **Dobolyi A.**, Murphy A., Sleeman M.W., Usdin T.B. (2008) Increased fear- and stress-related anxiety-like behavior in mice lacking tuberoinfundibular peptide of 39 residues. *Genes Brain Behav.* 7:933-942.  
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