

CURRICULUM VITAE

Zagrean Ana-Maria, MD, Ph.D., Associate Professor

Previous Name: **Munteanu**

Born: 1968, Bucharest, Romania

Marital status: married, one child

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Education: Faculty of Medicine, University of Medicine and Pharmacy Carol Davila, Bucharest, Romania
1995 Medical Doctor
2003 Ph.D. in Medical Sciences – Specialty Neurology

Positions: Division of Physiology and Neuroscience, Faculty of Medicine, Carol Davila University of Medicine and Pharmacy, Bucharest, Romania
2013-present Associate Professor
2003-2013 Lecturer
2000-2003 Assistant professor
1996-2000 Research associate and Teaching assistant

Teaching experience: Faculty of Medicine, Carol Davila University of Medicine and Pharmacy, Bucharest, Romania
From 2003- Coordinator for the Physiology and Neuroscience for the English Module Medical Students
From 2001- Supervisor for the research activity of undergraduate and graduate students
From 1996- Physiology and Neurosciences (in Romanian and English)

Fellowships, research stays, schools and workshops:

2006-2008 Honorary Research Fellow, Division of Medical Sciences, Birmingham University, UK
2005-2007 Junior Fellowship of The Physiological Society (UK), supervisor Prof. Emil C. Toescu, Division of Medical Sciences, Birmingham University, UK
2005, May Workshop LSH-ACC-Mentor, a 4-day mentoring workshop on issues relating to participation in FP6 EU-funded RTD projects, Sofia, Bulgaria.
2003 Postdoctoral research work, Division of Medical Sciences, Birmingham University, UK
2001, October Advanced Workshop in Neuroscience for Young Physiologists, Prague, Czech Republic
2001, July IBRO/FENS Summer School "Receptor activation and beyond", Sulejów, Poland
2001, February Lectures and practical demonstrations for postgraduate students on 'Apoptosis: Theory and Methods', organized by Prof. Boris Zhivotovsky, Institute of Environmental Medicine, Karolinska Institutet, Stockholm, Sweden
2000-2001 Doctoral fellowship at Karolinska Institute, Dept. of Clinical Neuroscience, Occupational Therapy & Elderly Care Research, Div. of Geriatric Medicine, NEUROTEC, Novum, KFC, Huddinge, Sweden
2000, May Pedagogy Lectures 'Teaching the teacher', TEMPUS Phare, Carol Davila University of Medicine and Pharmacy, Bucharest, Romania
1997, August International Summer School "Membrane Transport Processes and Signal Transduction", FEBS'97 Advanced Course, Bucharest, Romania

Scientific interest:

Brain responses to hypoxia/ischemia and reperfusion and to altered states of excitability, in immature and mature brain, in *in vivo* (global cerebral ischemia, perinatal asphyxia, experimental epilepsy) and *in vitro* (oxygen-glucose deprivation) experimental paradigms. Epigenetic, biochemical, electrophysiological and behavioral study of brain response to various metabolic and environmental stressors, looking towards brain recovery and neuroprotective strategies. Genetic, biochemical and behavioral effects of maternal sleep-wakefulness cycle disruption and melatonin deprivation on offspring brain development. Electrophysiologic study of anesthetic induced coma (www.comaeeg.ro). Cerebellum as a controller of oscillatory cortical activity from normal to pathological states (www.fiziologie.ro/cerosco/).

Research Grants:

National, supported by the Ministry of Education, Research and Technology of the Romanian Government

- 2016-2018 Research Project PN-III-P2-2.1-PTE-2016-0114, contract no. 42PTE/2016, Neurophysiological Reactivity Monitor (NERMO) (Project Responsible for Partner 2 - Carol Davila University of Medicine).
- 2015-2017 Research Project no. 326/2015, Cerebellum as a controller of oscillatory cortical activity from normal to pathological states (member in the project team).
- 2012-2016 Research Project PN-II-PT-PCCA-2011-3.2-1290, contract no. 129/2012, Coma EEG Reactivity Monitor (CERMO) (member in the project team).
- 2012-2016 Research Project no. 80/2012, Regenerative cellular therapy for stroke (Project Responsible for Partner 1 - Carol Davila University of Medicine and Pharmacy).
- 2011-2016 Research Project PN-II-ID-PCE-2011-3-0847, contract no. 110/2011, Quantifying the reactivity of burst-suppression EEG to external stimuli: a novel tool for monitoring the comatose brain (member in the project team).
- 2008-2011 Research Project CNMP Program 4, no. 92125/2008, Interdisciplinary research on neuromarketing and human behavior in relation with branding, advertising and satisfactory categories (member in the project team).
- 2007 – 2008 Research Project CNCSIS A no. 1200/2007, Study of physiological and behavioral mechanisms involved in mood disorders. Effect of nonapeptides, supported by the Ministry of Education, Research and Technology of the Romanian Government (project director).
- 2007 – 2010 Research Project PNCD II no. 41001/2007, Identification and characterization of brain cancer biomarkers expressed in serum and cerebrospinal fluid by modern mass spectrometry-based glycomics, (member in the project team).
- 2006–2008 Research Project CEEX M3 no. 242/2006, The development of an European network for the investigation of interneuronal and neuroglial relations in energetic stress, neurodegenerative diseases and ageing, aiming the development of new therapeutic strategies (scientific manager).
- 2005- 2008 Research Project CEEX no. 31/2005, Molecular, cellular and integrative mechanisms of pain – clinical implications (member in the research team).
- 2004 – 2006 Research Project Viasan no. 454/2004, An electrophysiological study on the effect of nicotine on the dorsal raphe 5-HT Neurons: sleep and behavior (project director).
- 2004-2006 Research Project Viasan no. 453/2004, Cortical postischemic hyperexcitability: an in vivo study in rat (project director).
- 2003-2005 Research Project Viasan no. 253/2001, Cellular and molecular study of the effects of hypoxia on neuronal development and excitability in vitro (project director).
- 2001-2003 Research Project Viasan no. 158/2001, Cerebral ischemic preconditioning (project director).
- 2001-2002 Research Project CNCSIS no. 256, Apoptosis in Geriatric Disorders, supported by the Romanian Government and the World Bank (member in the project team).
- 1999-2000 Research Project no. 1285/1996, Additional act no. 450/2000, HORIZON 2000 Program, member in the project team for the following projects:
A10/1999, B10/2000, Computerized EEG analysis in kainic acid-induced experimental epilepsy
A11/1999, B11/2000, Preconditioning mechanisms in global cerebral ischemia and reperfusion
A8/1999, B8/2000, Cellular mechanisms induced by cerebral ischemia and reperfusion. Apoptosis, necrosis and neuronal survival.
- 1994-1996 Research Project no. 85/1994, Neuroprotective effect of calcium blockers in cerebral ischemia (member in the project team).

International

- 2016-present Member of the Scientific Advisory Board, Neuron Cofound, Contract no. 680966/2015
- 2012-2015 Member of the Scientific Advisory Board, ERA-Net NEURON II Project, Contract no. 291840/2012
- 2007-2011 Member of the Scientific Advisory Board, ERA-Net NEURON FP6 Project, Contract no. 036213/2007
- 2012-2013 FENS History Project: Historiography of Neurosciences in Eastern Europe, Romania, 1870-1970.

Professional Memberships and assignments:

- 2006 European Dana Alliance for the Brain (EDAB);
- 2003 The Physiological Society (UK);
- 2001 National Neuroscience Society of Romania (SNN) - founding member and secretary general;
- 2001 Federation of European Neuroscience Societies (FENS);
- 2001 International Brain Research Organization (IBRO);

- 1996 Federation of European Physiological Societies (FEPS);
- 1996 International Union of Physiological Sciences (IUPS);
- 1996 Romanian Society of Physiological Sciences (SRSF).

Service to the Community:

Organizer of numerous outreach activities to promote Neuroscience: Brain Awareness Week (BAW), Researcher's night, Neuroscience lectures and conferences, Neuroscience Lab open days, collaborations with secondary schools and high-schools in Bucharest etc.

Experience in Meetings Organization:

- Organizer of all the national and international scientific events of SNN, as Secretary of the Organizing Committee, yearly from 2003
- The Physiological Society International Workshop in Neuroscience 'Ischemia/hypoxia in the brain: experimental methods and basic mechanisms', Bucharest, September 23-25, 2003 – Secretary of the local organizing committee.
- Brain Awareness Week (BAW) events at Carol Davila University of Medicine and Pharmacy – yearly, from 2004, as main organizer or co-organizer.

Other activities/positions:

- Elected member of the IBRO-PERC committee, 2017
- Reviewer activity: for PlosOne; Cellular and Molecular Neurobiology; Molecular Human Reproduction (Oxford Journals); Neonatology; Acta Endocrinologica (Buc.), Romanian Journal of Laboratory Medicine, etc.
- Member in the scientific committees for PhD Students/academic members at Bucharest University - Faculty of Biology, Craiova University of Medicine and Pharmacy and Carol Davila University of Medicine and Pharmacy – 2016-2017
- Evaluator in the National Register of the Experts for Research and Education, from 2005-present.
- Member in the thesis advisory committee (TAC) for PhD stud. Diana Deca, Institute of Neuroscience, Munich, Germany – 2012
- Evaluator in the Neuroscience field for European Science Foundation (ESF), 2003-2004
- IBRO's Regional correspondent for Romania, 2003-2004

Coordination activity:

- Founder and Coordinator of the Neuronal Cell Culture Lab, Center for Excellence in Neuroscience, Division of Physiology and Neuroscience, Faculty of Medicine, University of Medicine and Pharmacy "Carol Davila", Bucharest, Romania (from 2003)
- Coordination/guidance of medical students for graduation thesis (from 2001)
- Coordination and supervision of research activity for undergraduate and doctoral students – Center for Excellence in Neuroscience, Division of Physiology and Neuroscience, Faculty of Medicine, University of Medicine and Pharmacy "Carol Davila" (from 2001)

Prizes/Awards/Travel Grants:

National:

- Gheorghe Marinesco Prize of the National Neuroscience Society of Romania for promoting Neuroscience in Romania, October 2012
- Prize of the University Publishing House "Carol Davila" Bucharest, 2003, in Biomedical Sciences Field for the book 'Neurosciences. Fundamental Principles' (Romanian language) - Leon Zagrean et al., ISBN 973-8047-67-6.
- The Prize of excellence of the Romanian College of Physicians (for the best book published in the field of basic science in 2002) – 'Neurosciences. Fundamental Principles', 'Carol Davila' Publishing House, Leon Zagrean, Mihai Moldovan, Ana-Maria Zagrean, Dragos A. Nita, Daniela Popa, Radu Braga. 2003
- 2000 Grand Prix Beaufour Ipsen Romania for: The most original neurology study: second place (Ischemic electrocortical suppression - an active mechanism? Moldovan M, Munteanu AM, Nita DA, Popa DP, Spulber S, Zagrean L.)

International

- Physiological Society Travel grant to attend Physiology2016, July 2016, Dublin, Ireland
- Young Investigators Award, 34th International Congress of Physiological Sciences, Christchurch, New Zealand, Aug. 26-31, 2001

Language skills:

Romanian (native), English (very good), French (fair)

h-index = 6 (WoS) and 9 (Google Scholar); Citations: 418;

<https://scholar.google.com/citations?hl=en&user=WtNZInMAAAAJ>

<http://www.researcherid.com/rid/M-5628-2015>; <http://orcid.org/0000-0002-4302-629X>

Publications:

Books/chapters published in books:

International:

1. Blood-Brain Barrier and Cognitive Function. **Ana-Maria Zagrean**, Bogdan Ianosi, Cosmin Sonea, Ioan Opris, and Leon Zagrean. Book chapter in “The Physics of the Mind and Brain Disorders. Integrated Neural Circuits Supporting the Emergence of Mind”. Eds I. Opris, M.F. Casanova. Part of the *Springer Series in Cognitive and Neural Systems book series* (SSCNS, volume 11). *Springer International Publishing* Switzerland. **2017**. p 713-740. ISBN. 2363-9105
2. EEG Assessment of Consciousness Rebooting from Coma. Cosmin-Andrei Serban, Andrei Barborica, Adina-Maria Roceanu, Ioana-Raluca Mîndruta, Jean Ciurea, **Ana-Maria Zagrean**, Leon Zagrean, and Mihai Moldovan. Book chapter in “The Physics of the Mind and Brain Disorders. Integrated Neural Circuits Supporting the Emergence of Mind”. Eds. I. Opris, M.F. Casanova. Part of the *Springer Series in Cognitive and Neural Systems book series* (SSCNS, volume 11). *Springer International Publishing* Switzerland. **2017**. p 361-381. ISBN. 2363-9105
3. Pathophysiology of the middle cerebral artery. A. Popa-Wagner, D. Pirici, **A.M. Zagrean**, E. Petcu, L. Mogoanta, L. Zagrean, C.L. Rosen, R. Leon, J. Huber. pp. 1-45. Book chapter in “Cerebral circulation: anatomy, distribution and pathophysiology”, “Advances in medicine and biology”. Vol 8. Eds: Leon V. Berhardt. *NOVA Publishers*, **2011**. ISBN 978-1-61728-454-0. ISBN. 2363-9105

National:

4. Physiology of Respiration, chapter in “Physiology – Practical laboratories” **Ana-Maria Zagrean** (co-author), “*Carol Davila*” *Publishing House*, Bucharest, **2012**. ISBN – 9789737086211.
5. Respiratory System Physiology. Practical Laboratory. **Zagrean A-M.**, Bubuianu A., Braga R. ‘*Carol Davila*’ *Publishing House*, Bucharest, **2007**, ISBN: 978-973-708-190-2.
6. Cerebral Circulation and Metabolism. Basic mechanisms of ischemia and reperfusion. **Zagrean A-M.** Book chapter in “Neurosciences. Fundamental Principles”, Ed. L. Zagrean, ‘*Carol Davila*’ *Publishing House*, Bucharest, ISBN 973-8047-67-6, p. 209 –284, **2002**.
7. Cerebral Circulation. **Munteanu A-M.**, Zagrean L. Book chapter in Basic Neurobiology. Ed. L. Zagrean. ‘*Carol Davila*’ *Publishing House*, Bucharest, ISBN 973-97350-3-7, p. 233-283, **1996**.

Papers:

1. Chemicogenetic recruitment of specific interneurons suppresses seizure activity. A Calin, M Stancu, **AM Zagrean**, J Jefferys, AS Ilie, C Akerman. bioRxiv 291179, **2018** - biorxiv.org, doi: <https://doi.org/10.1101/291179>
2. Sebastian Isac, Anca Maria Panaitescu, Ana Spataru, Mara Iesanu, Alexandra Totan, Amalia Udriste, Natalia Cucu, Gheorghe Peltecu, Leon Zagrean, **Ana-Maria Zagrean**. Trans-resveratrol enriched maternal diet protects the immature hippocampus from perinatal asphyxia in rats. *Neuroscience Letters* 653, June **2017** doi: 10.1016/j.neulet.2017.06.003
3. Bogdan Pavel, Camelia Alexandra Acatrinei, Maria Corbu, Carmen Mihaela Denise Zahiu, Adrian Eugen Rosca, Leon Zagrean, **Ana-Maria Zagrean**. ECoG changes during xenon-isoflurane anaesthesia ECoG spectrum changes at different xenon-isoflurane anaesthesia depths. *Romanian Journal of Anaesthesia and Intensive Care*. **2017** Vol 24 No 1, 41-46. doi: 10.21454/rjaic.7518.241.pav
4. Voiculescu SE, Le Duc D, Roșca AE, Zeca V, Chițimuş DM, Arsene AL, Drăgoi CM, Nicolae AC, Zăgrean L, Schöneberg T, **Zagrean AM**. Behavioral and molecular effects of prenatal continuous light exposure in the adult rat. *Brain Res*. **2016** Nov 1; 1650:51-59. doi: 10.1016/j.brainres.2016.08.031.
5. Bădescu SV, Tătaru CP, Kobylinska L, Zahiu CD, Georgescu EL, Zagrean L, **Zagrean AM**. Chronic Caffeine’s Effects on Behavioural Changes in Streptozotocin induced Diabetic Rats. *Acta Endo (Buc)* **2016**, 12 (3): 268-274 doi: 10.4183/aeb.2016.268
6. Bădescu SV, Tătaru CP, Kobylinska L, Georgescu EL, Zahiu DM, **Zăgrean AM**, Zăgrean L. Effects of caffeine on locomotor activity in streptozotocin-induced diabetic rats. *J Med Life*. **2016** Jul-Sep;9(3):275-279.
7. Bădescu SV, Tătaru C, Kobylinska L, Georgescu EL, Zahiu DM, **Zăgrean AM**, Zăgrean L. The association between Diabetes mellitus and Depression. *J Med Life*. **2016** Apr-Jun;9(2):120-5. Review.

8. Kobylinska, Liana; Geagulea, Gabriel; **Zagrean, Ana-Maria**; Zagrean, Leon. Behavioural effects of chronic inhalator oxytocin administration in mice. *Romanian Journal of Child & Adolescent Psychiatry*. Jan-Jul **2016**, Vol. 4 Issue 1/2, p41-55. 15p.
9. Kobylinska L, Geagulea G, Berbecar V, Stancu M, Stefan AM, **Zagrean AM**, Zagrean L. Inhalation versus intraperitoneal oxytocin administration in Swiss-Albino Mice. *Discover. Rep.* **2016**; 2: e5. DOI: 10.15190/drep.2016.1
10. Voiculescu SE, Rosca A, Zahiu CMD, Badiu C, **Zagrean AM**. Melatonin and monoaminergic system –behavioural aspects. *Romanian Journal of Neurology – Vol XV, No. 1, 2016*
11. Le Duc D, Spataru A, Ceanga M, Zagrean L, Schöneberg T, Toescu EC, **Zagrean AM**. Developmental exposure to ethanol increases the neuronal vulnerability to oxygen-glucose deprivation in cerebellar granule cell cultures. *Brain Res.* **2015** Jul 21; 1614:1-13. doi: 10.1016/j.brainres.2015.04.009.
12. Voiculescu SE, Rosca AE, Zeca V, Zagrean L, **Zagrean AM**. Impact of maternal melatonin suppression on forced swim and tail suspension behavioral despair tests in adult offspring. *J Med Life.* **2015** Apr-Jun;8(2):202-6.
13. Adrian Roșca, Suzana Elena Voiculescu, Bogdan Ovidiu Popescu, **Ana-Maria Zăgrean**. Taurine and vascular tone modulation. *J. Transl. Med. Res* **2015**;20(4):201-205
14. Bogdan Pavel, Camelia Alexandra Acatrinei, Fabien Menardy, Carmen Mihaela Denise Zahiu, Daniela Popa, **Ana-Maria Zagrean**, Leon Zagrean. Changes of cortical connectivity during deep anaesthesia. *Romanian Journal of Anaesthesia and Intensive Care* **2015** Vol 22 No 2, 83-88
15. Anca Maria Panaitescu, Suzana Elena Voiculescu, Nikolaos Zygouropoulos, Gheorghe Peltecu, Leon Zagrean, **Ana-Maria Zagrean**. Short and long-term evaluation of biochemical and behavioral consequences in rat after exposure to an experimental model of perinatal asphyxia. *Obstetrica si Ginecologie* 2(2015) · April **2015**
16. Voiculescu SE, Zygouropoulos N, Zahiu CD, **Zagrean AM**. Role of melatonin in embryo fetal development. *J Med Life.* **2014** Oct-Dec;7(4):488-92. Review.
17. Pavel B, Daneasa A, Rosca AE, Calin A, Zahiu D, Panaitescu A, **Zagrean AM**, Zagrean L. Fronto-parietal connectivity changes following noxious stimulation during anesthesia. *J Med Life.* **2014** Sep 15;7(3):387-90.
18. **Zagrean Ana-Maria**, Spataru Ana, Ceanga Mihai, Zagrean Leon, The single vs. combinatorial effects of MK-801, CNQX, nifedipine and DL-AP-3 on primary cultures of cerebellar granule cells in an oxygen-glucose deprivation model, *Rom J Morphol Embriol*, **2014**, vol. 55, no. 1
19. Balseanu AT, Buga AM, Catalin B, Wagner DC, Boltze J, **Zagrean AM**, Reymann K, Schaebitz W, Popa-Wagner A. Multimodal Approaches for Regenerative Stroke Therapies: Combination of Granulocyte Colony-Stimulating Factor with Bone Marrow Mesenchymal Stem Cells is Not Superior to G-CSF Alone. *Front Aging Neurosci.* **2014** Jun 23; 6:130. doi: 10.3389/fnagi.2014.00130.
20. Panaitescu, A.-M, Pavel, B, Iancu, G, Peltecu G, Zăgrean L, **Zăgrean A-M**. Oxytocin, more than a uterotonic. *Obstetrica si Ginecologie* 62 (1), pp.1, **2014**
21. Panaitescu A, Zagrean L, **Zagrean AM**, Demetrian M, Peltecu G. Neonatal encephalopathy: A new paradigm. *Obstetrica si Ginecologie* 62(2):77-82, June **2014**
22. Radu I. Braga, Anca Panaitescu, Silvia Bădescu, Leon Zăgrean, **Ana-Maria Zagrean (2013)**: Intranasal administration of oxytocin alters sleep architecture, *Biological Rhythm Research*, DOI:10.1080/09291016.2013.797641
23. Ceanga M, Spataru A, **Zagrean AM**. Oxytocin is neuroprotective against oxygen-glucose deprivation and reoxygenation in immature hippocampal cultures. *Neurosci Lett.* **2010** Jun 14;477(1):15-8. doi: 10.1016/j.neulet.2010.04.024.
24. Zamfir AD, Flangea C, Serb A, **Zagrean AM**, Rizzi AM, Sisu E. Separation and identification of glycoforms by capillary electrophoresis with electrospray ionization mass spectrometric detection. *Methods Mol Biol.* **2013**; 951:145-69. doi: 10.1007/978-1-62703-146-2_11.
25. Constantinescu AO, Ilie A, Ciocan D, **Zagrean AM**, Zagrean L, Moldovan M. Endogenous adenosine A1 receptor activation underlies the transient post-ischemic rhythmic delta EEG activity. *Clin Neurophysiol.* **2011** Jun;122(6):1117-26. doi: 10.1016/j.clinph.2010.09.015. Epub 2010 Oct 13.
26. Popa Wagner A, Pirici D, **Zagrean AM**, Petcu EB, Mogoanta L, Zagrean L, Rosen CL, Leon R, Huber J. Cerebral Circulation: Anatomy, Distribution and Physiopathology. *Advances in Medicine and Biology*, Vol 8, Pages: 1-45, **2010**
27. Ilie A, Ciocan D, Constantinescu A.O, **Zagrean AM**, Nita DA, Zagrean L, Moldovan M. Endogenous activation of adenosine A1 receptors promotes post-ischemic burst suppression electrocortical patterns. *Neuroscience, Jan.* **2009**;159(3):1070-1078.
28. Ilie A, Ciocan D, **Zagrean AM**, Nita DA, Zagrean L, Moldovan M. Endogenous activation of adenosine A(1) receptors accelerates ischemic suppression of spontaneous electrocortical activity. *J Neurophysiol.* **2006** Nov; 96(5):2809-14. Epub 2006 Aug 2.

29. Ilie A, Spulber S, Avramescu S, Nita DA, **Zagrean AM**, Zagrean L, Moldovan M. Delayed ischemic electrocortical suppression during rapid repeated cerebral ischemia and kainate-induced seizures in rat. *Eur J Neurosci.* **2006** Apr; 3(8):2135-44
30. Moldovan M, Spulber S, Saravan V, Iosifescu R, **Zagrean A-M**, Zagrean L, Relationship between respiratory sinus arrhythmia and heart rate during anesthesia in rat, *Rom. J. Physiol.* **2004**, vol. 41: 21-30.
31. Moldovan M, **Zagrean AM**, Avramescu S, Savaran V, Zagrean L. Electro-cortical signs of early neuronal damage following transient global cerebral ischemia in rat. *J Cell Mol Med.* **2004** Jan-Mar;8(1):135-40
32. Nita, DA, Nita V, Spulber St, Moldovan M, Popa DP., **Zăgrean A-M**, Zăgrean L. Oxidative damage following cerebral ischemia depends on reperfusion – a biochemical study in rat. *J.Cell.Mol.Med.* 5:163-170, **2001**
33. Nat R, Stanciu C, Vidulescu C, **Munteanu A-M**, Regalia T, Popescu LM, Still life: cerebellar neurons in early apoptosis. *J. Cell. Mol. Med.*, Jul-Sept, 4(3):228, **2000**
34. Zagrean L, Moldovan M, **Munteanu A-M**, Spulber St, Voiculescu BA, and Popescu BO. Early electrocortical changes consistent with ischemic preconditioning in rat. *J. Med..Biochem.* 4:103-111, **2000**
35. Moldovan, M., **Munteanu, A-M**, Nita, DA, Popa DP, Spulber St, Zagrean L. Ischemic electrocortical suppression - an active mechanism? *J. Med. Biochem.* 4(3):215-223, **2000**
36. Cristea A, Moldovan M, **Munteanu A-M**, Popa DP, Negres S, Zagrean L. EEG differences between the opioid and adrenergic psychoneuroendocrine rat types, *Rom. J. Physiol.* 35:153-159, **1998**
37. Moldovan, M., **Munteanu, A-M**., Nita, D.Al., Popa, D.P., and L. Zagrean. The quantification of intrahemispheric EEG asymmetry in rat. *Rom. J. Physiol.* 35:33-39, **1998**
38. Zagrean L, Vatasescu R, **Munteanu A-M**, Moldovan M, Nita DA, Coculescu M. Preliminary EEG study of protective effects of Tebonin in transient global cerebral ischemia in rats, *Rom. J. Physiol.*, **1998**, 35, 1-2, p. 161-168.
39. Serbanescu Al., **Munteanu A-M**., Vatasescu R., and Zagrean L. A computerized EEG analysis of the effects of nimodipine in global cerebral ischemia and reperfusion. *Rom. J. Neurol.*, 36: 27-34, **1998**
40. Zagrean L, Varlas V, Oprica M, **Munteanu AM**, Oltenschi C, Voicu T. EEG study of kainite induced epilepsy in non-anaesthetized freely moving rats. *Rom. J. Physiol.*, 30, 1-2, 115 –18 **1993**.

Selected Abstracts published in International Conferences' Volumes/Journals:

1. Cosmin Șerban, Andrei Barborică, Adina Roceanu, Ioana Mîndruță, Jean Ciurea, **Ana-Maria Zăgrean**, Leon Zăgrean, Mihai Moldovan. Novel measures for EEG monitoring in coma (S57). *Clinical Neurophysiology*, **2017**. Volume 128, Issue 9, e197. <https://doi.org/10.1016/j.clinph.2017.07.068>
2. **AM. Zagrean**, A. Panaiteșcu, S. Isac, M. Ceanga, A. Paslaru, M. Stancu, B. Pavel, D.Zahiu, L. Zagrean, M. Moldovan, Neuroprotective effect of oxytocin during in vivo neonatal hypoxia/hypercapnia in rats. *Physiology* **2016** (Dublin, Ireland), Proc. Physiol. Soc. 37 (**2016**) PCA270.
3. **AM Zagrean**, C Acatrinei, A Calin, D Zahiu, A Paslaru, A Stoian, M Stancu, L Zagrean, M Moldovan. Delayed neurovascular coupling after transient global cerebral ischemia in rat. *Proceedings of The Physiological Society.* **2014**. Publisher: The Physiological Society
4. **AM Zagrean**, A Calin, S Mirica, A Gonzales, L Zagrean, M Moldovan. An experimental model to evaluate the whole-brain neurovascular coupling during spontaneous cerebral activity. *Proceedings of The Physiological Society Proc 37th IUPS (2013)*, Publisher: The Physiological Society (UK).
5. Leon Zagrean, Alexandru Stoian, Bogdan David, Aldebarani Gonzalez, Alexandru Calin, Ovidiu Lucian Bajenaru, Mihaela Loghin, Andrei Ilie, **Ana-Maria Zagrean** and Mihai Moldovan, Reactivity of burst-suppression EEG patterns following transient global cerebral ischemia in rat (abstract A-471-0031-03302), 8th FENS Forum of Neuroscience, Barcelona, July **2012**
6. Alexandru Calin, Bogdan David, Alexandra Constantinescu, Andrei Ilie, Dragos Nita, **Ana-Maria Zagrean**, Leon Zagrean, Mihai Moldovan, Reactivity refractoriness of anesthetic burst-suppression EEG patterns is cumulative (abstract A-471-0031-03664), 8th FENS Forum of Neuroscience, Barcelona, July **2012**
7. Alexandra O. Constantinescu, Andrei Ilie, Dragos Ciocan, Bogdan Ionut David, **Ana-Maria Zagrean**, Leon Zagrean, Mihai Moldovan, To burst or not to burst during electro-cortical suppression: a question of stimulus strength, anesthetic depth and bursting history, 8th World Congress of IBRO, Florence, Italy, 14-19 July **2011**
8. **Zagrean A. M.**, Ceanga M., Spataru A., Le Duc D. & Toescu E. C. A comparative study of cellular viability assessment methods in cerebellar granule neurons cultures exposed to oxygen and/or glucose deprivation, 7th Forum of European Neuroscience, Amsterdam, July **2010**
9. Ceanga M., Spataru A., **Zagrean A. M.** Oxytocin is neuroprotective against oxygen-glucose deprivation in immature hippocampal cultures, 7th Forum of European Neuroscience, Amsterdam, July **2010**
10. David B.I., Ciocan D., Constantinescu A.O., Ilie A., Zagrean A.M., Zagrean L., Moldovan M. Ischemic electrocortical suppression is delayed during deep cerebral hypothermia in rat, 7th Forum of European Neuroscience, Amsterdam, July **2010**

11. Serb A. F., Schiopu C., Sisu E., **Zagrean A. M.**, Vukelic Z., Zamfir A. D., Zagrean L. Advanced chip-based mass spectrometry reveals a specific ganglioside expression in human brain hemangioma vs. normal human brain tissue, 7th Forum of European Neuroscience, Amsterdam, July **2010**
12. Zagrean L., Serb A. F., Udrescu V., Sisu E., **Zagrean A. M.**, Belengeanu V., Vukelic Z., Zamfir A. D. Chip-based nanoelectrospray multistage mass spectrometry in neuroglycolipidomics: characterization of ganglioside composition specificity in defined regions of fetal human brain, 7th Forum of European Neuroscience, Amsterdam, July **2010**
13. Constantinescu A. O., Chirvasuta R., Ilie A., Barborica A., **Zagrean A.M.**, Zagrean L., Moldovan M. Cortical excitability changes during deep anesthesia monitored by transcranial direct current stimulation, 7th Forum of European Neuroscience, Amsterdam, July **2010**
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