

CURRICULUM VITAE

Personal information

- **First name:** Ana – Maria
- **Last name:** Buga
- **Born on:** 7 August 1973
- **Address:** Department of Biochemistry, University of Medicine and Pharmacy, str.Petru Rares nr 2, 200349, Craiova, Romania
- **E-mail:** anamaria.buga@webmail.umfcv.ro
- **Nationality:** Romanian

Education

- 1992- 1998** **Medical degree:** University of Medicine and Pharmacy, Faculty of Medicine, Craiova, Romania
- 1998 - 1999** **Internship:** Emergency Hospital, Craiova, Romania
- 2001 - 2006** **Residency:** Laboratory Medicine
- 2004 – 2012** **Teaching:** Assistant professor in Biochemistry
- 2006 -** **Specialty:** Laboratory medicine
- 2009** **MD, PhD:** Neuroscience
- 2013 -** **Resident:** Neurology

Teaching

- 2004 – 2012** **Assistant professor** in Biochemistry for Medical Students
- 2008** Erasmus **Teaching Staff**, Ernst –Moritz-Arndt University, Greifswald, Molecular Neurobiology Laboratory

- 2012-** **Lecturer** in Biochemistry for Medical Students
- 2013** Erasmus *Teaching Staff*, Rostock University, Molecular Psychiatry Laboratory, Germany
- 2014** Erasmus *Teaching Staff*, *Next Generation Leaders in Biology of Aging Sumer School (Erasmus LLC)*, *Universitatea din Bologna, Rimini, Italia*

Research activities

- 2006 – 2007** *Fellowship* of Romanian Government, Ernst –Moritz-Arndt University, Greifswald, Molecular Neurobiology Laboratory;
- 2007 - 2009** *Research assistant*, Ernst –Moritz-Arndt University, Greifswald, Molecular Neurobiology Laboratory;
- 2009** *MD, PhD*, summa cum laude, Ernst –Moritz-Arndt University, Greifswald, Molecular Neurobiology Laboratory;
- 2009 - 2010** **Postdoctoral** position Ernst –Moritz-Arndt University, Greifswald, Molecular Neurobiology Laboratory;
- 2013 -** **Director of *Clinical and Experimental Medicine Research Center***

International know-how exchange experience:

- 2009** Know-how exchange experience in **Laboratory of Stem Cell and Restorative Neurology**, Stem Cell Center, Lund, Sweden
- 2010** Know-how exchange experience in **Brain Research Institute**, Zurich, Switzerland

Projects:

- 2007- 2008** Automatisiertes immunhistologisches Analyse-Gerät (research assistant);
- 2008** Multimodal Approaches for Regenerative Stroke Therapies. Acronym: MARS. Proiect V: Therapeutic benefit of therapeutic concepts in aged rats after stroke. (research assistant)

- 2009** **Project FP7: Improvement of the research competitiveness in neuroscience** at the Ernst Moritz Arndt University of Greifswald. Project acronym: **ImpactG**. Grant agreement no.: 229750.
- 2011** ***FLARE2 Project – PI:*** „Identification of axonal growth-relevant genes in the aged post-stroke brain”, PN II- IDEI- 2011- FL2
- 2011** **Project PNII-IDEI- 2011 – *Project Age-related deterioration of biological pathways and their significance for brain tissue regeneration and functional recuperation after stroke – member of research team,***
- 2012** **Project PNII- PT-PCCA – 2012 – *member of research team: Cellular Therapeutic Approach for Regenerative Stroke,***

Honours:

- 2008** ***The National University Research Council Prize*** for research results, Romania;
- 2009** ***Promotions prize*** from Ernst-Moritz-Universität Greifswald for MD, PhD work;
- 2009** ***VentureCup-MV Ideenwettbewerb des Landes M-V:*** Development of immunohistochemistry automatic analyzer for human and animal tissue;
- 2009** ***National Romanian Society of Physiology.*** Prize for the best oral communication of research results.
- 2010** ***The National University Research Council Prize (UEFISCDI)*** for research results, Romania;
- 2011** ***The National University Research Council Prize (UEFISCDI)*** for research results, Romania;
- 2012** ***The National University Research Council Prize (UEFISCDI)*** for research results, Romania;
- 2014** ***The National University Research Council Prize (UEFISCDI)*** for research results, Romania;

Published books and papers

Papers:

In extenso:

- Sandu RE, **Buga AM**, Uzoni A, Petcu EB, Popa-Wagner A. *Neuroinflammation and comorbidities are frequently ignored factors in CNS pathology*. *Neural Regen Res* 2015;10:1349-55
- Adriana Uzoni, Ovidiu Ciobanu, Raluca Elena Sandu, **Ana Maria Buga**, Aurel Popa-Wagner. *Life style, Perfusion deficits and Co-morbidities Precipitate Inflammation and Cerebrovascular Disorders in Aged Subjects*. *DISCOVERIES* 2015, Jan-Mar, 3(1): e39. DOI: 10.15190/d.2015.31
- Popa-Wagner A, Filfan M, Uzoni A, Pourgolafshan P, **Buga AM**. *Poststroke Cell Therapy of the Aged Brain*. *Neural Plast.*; 2015:839638. doi:10.1155/2015/839638.
- Popa-Wagner A, **Buga AM**, Dumitrascu DI, Uzoni A, Thome J, Coogan AN. *How does healthy aging impact on the circadian clock?* *J Neural Transm*. 2015 Jul 15.
- **Buga AM**, Scheibe J, Moller K, Ciobanu O, Posel C, Boltze J, Popa-Wagner A. *Granulocyte Colony-stimulating Factor and Bone Marrow Mononuclear Cells for Stroke Treatment in the Aged Brain*. *Curr Neurovasc Res*. **2015**;12(2):155-62.
- Adriana Uzoni, Ovidiu Ciobanu, Raluca Elena Sandu, **Ana Maria Buga**, Aurel Popa-Wagner. *Life style, Perfusion deficits and Co-morbidities Precipitate Inflammation and Cerebrovascular Disorders in Aged Subjects*. *DISCOVERIES* 2015, Jan-Mar, 3(1): e39. DOI: 10.15190/d.2015.31
- Popa-Wagner A, **Buga AM**, Tica AA, Albu CV. *Perfusion deficits, inflammation and aging precipitate depressive behaviour*. *Biogerontology*. **2014** Oct;15(5):439-48. doi: 10.1007/s10522-014-9516-1.
- Popa-Wagner A, **Buga AM**, Doepfner TR, Hermann DM. *Stem cell therapies in preclinical models of stroke associated with aging*. *Front Cell Neurosci*. 2014 Nov 3;8:347. doi: 10.3389/fncel.2014.00347

- 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.
- Tatarishvili J, Oki K, Monni E, Koch P, Memanishvili T, **Buga AM**, Verma V, Popa-Wagner A, Brüstle O, Lindvall O, Kokaia Z. *Human induced pluripotent stem cells improve recovery in stroke-injured aged rats*. Restor Neurol Neurosci. **2014**;32(4):547-58. doi: 10.3233/RNN-140404.
- Muresanu DF, Popa-Wagner A, Stan A, **Buga AM**, Popescu BO. *The vascular component of Alzheimer's disease*. Curr Neurovasc Res. **2014** May;11(2):168-76.
- **Buga AM**, Margaritescu C, Scholz CJ, Radu E, Zelenak C, Popa-Wagner A. *Transcriptomics of post-stroke angiogenesis in the aged brain*. Front Aging Neurosci. **2014** Mar 18;6:44. doi: 10.3389/fnagi.2014.00044.
- Mihaela Fadgyas-Stanculete, **Ana-Maria Buga**, Aurel Popa-Wagner and Dan L Dumitrascu. *The relationship between irritable bowel syndrome and psychiatric disorders: from molecular changes to clinical manifestations*. Journal of Molecular Psychiatry **2014**, 2:4
- **Buga AM**, Di Napoli M, Popa-Wagner A. *Preclinical models of stroke in aged animals with or without comorbidities: role of neuroinflammation*. Biogerontology. 2013 Sep 22, in press.
- Cojocaru GR, Popa-Wagner A, Stanciulescu EC, Babadan L and **Buga AM**. *Post-stroke depression and the aging brain*. Journal of Molecular Psychiatry 2013, 1:14.
- **Buga AM**, Vintilescu R, Balseanu AT, Pop OT, Streba C, Toescu E, Popa-Wagner A. *Repeated PTZ Treatment at 25-Day Intervals Leads to a Highly Efficient Accumulation of Doublecortin in the Dorsal Hippocampus of Rats*. PLoS One. 2012;7(6):e39302. **I.F = 4.540**
- Popa-Wagner A, **Buga AM**, Turner RC, Rosen CL, Toescu E. *Cerebrovascular disorders: role of aging*. J Aging Res. 2012; 2012:128146.

- Joseph C*, **Buga AM***, Vintilescu R, Balseanu AT, Moldovan M, Junker H, Walker L, Lotze M, Popa-Wagner A. *Prolonged gaseous hypothermia prevents the upregulation of phagocytosis-specific protein Annexin 1 and causes low-amplitude EEG activity in the aged rat brain after cerebral ischemia*. J Cereb Blood Flow Metab. 32(8):1632-42, 2012. doi: 10.1038/jcbfm.2012.65. **I.F = 5.008**
- **Buga AM**, Vintilescu R, Balseanu AT, Pop OT, Streba C, Toescu E, Popa-Wagner A. *Repeated PTZ treatment at 25-day intervals leads to a highly efficient accumulation of doublecortin in the dorsal hippocampus of rats*. PLoS One. 2012;7(6):e39302. doi: 10.1371/journal.pone.0039302. **I.F = 4.540**
- **Buga AM**, Scholz CJ, Kumar S, Herndon JG, Alexandru D, Cojocaru GR, Dandekar T, Popa-Wagner A. *Identification of new therapeutic targets by genome-wide analysis of gene expression in the ipsilateral cortex of aged rats after stroke*. PLoS One. 2012;7(12):e50985. doi: 10.1371/journal.pone.0050985. **I.F. = 4.540**
- Popa-Wagner A, **Buga AM**, Kokaia Z. *Perturbed cellular response to brain injury during aging*. Ageing Res Rev. 2011 Jan;10(1):71-9. **I.F = 6.174**
- **Buga AM**, Vintilescu R, Pop OT, Popa-Wagner A. *Brain Aging and Regeneration after Injuries: an Organismal approach*. Aging Dis. 2011 Feb;2(1):64-79.
- **Ana-Maria Buga**, Adrian Tudor Balseanu, Aurel Popa-Wagner. *Regeneration of tissue function after cerebral ischemia in the aged rats: New therapeutic strategies*. Clujul medical, vol 83, nr 1, 2010
- Popa-Wagner A, Pirici D, Petcu EB, Mogoanta L, **Buga AM**, Rosen CL, Leon R, Huber J. *Pathophysiology of the vascular wall and its relevance for cerebrovascular disorders in aged rodents*. Curr Neurovasc Res. 2010 Aug;7(3):251-67. **I.F = 3.187**
- **Buga AM**, Sascau M, Pisoschi C, Herndon JG, Kessler C, Popa-Wagner A. *The genomic response of the ipsilateral- and contralateral cortex to stroke in aged rats*. J Cell Mol Med. 2008, 12(6B):2731-53. **I.F = 5.9**

- Petcu EB, Kocher T, Kuhr A, **Buga AM**, Klötting I, Herndon JG, Kessler C, Popa-Wagner A. *Mild systemic inflammation has a neuroprotective effect after stroke in rats*. Curr Neurovasc Res. 2008 Nov;5(4):214-2. **I.F = 3.187**
- Florian B, Vintilescu R, Balseanu AT, **Buga AM**, Grisk O, Walker LC, Kessler C, Popa-Wagner A. *Long-term hypothermia reduces infarct volume in aged rats after focal ischemia*. Neurosci Lett. 2008 Jun 20; 438(2):180-5. Epub 2008 Apr 10. **I.F = 2.168**

Books chapters:

- "Depression: A Silent Culprit in Health and Disease". Benthamscience. ISBN: 978-1-68108-145-8-15-0003. Chapter: "The Impact of Aging on Post-Stroke Depression"-51-67. Ana-Maria Buga, Madalina Filfan, Badescu M. George and Aurel Popa- Wagner.
- "Neuroinflammation and Neurodegeneration. Philip Peterson, Michal Toborek – Springer, **2014**. ISBN 978-1-4939-1070-0. Chapter: „Neuroinflammation and Immune Regulation in Ischemic Stroke: Identification of New Pharmacological Targets -199 – 247. Mario Di Napoli, Craig J. Smith , Stephen J. Hopkins , Aurel Popa-Wagner , Ana Maria Buga , and Mark Slevin.

Associate Editor:

- **2012 – Guest editor** Special Issue on Multimodal Imaging Strategies in Pre-Clinical Stroke Models in Aged Animals. Jurnalul Stroke Research and Treatment (Hindawi publishing Corporation)
- **2013** Austin Journal of Cerebrovascular Disease and Stroke <http://austinpublishinggroup.org/cerebrovascular-disease-stroke/editorialboard.php>
- **2014** Frontiers Endocrinology of Aging http://www.frontiersin.org/Endocrinology_of_Aging/editorialboard

Review-er for:

2012- BMC Geriatrics

2013-Peak Journal of Pharmacy and Pharmaceutical Sciences (PJPPS)

2013-Journal of Molecular Psychiatry

2015- SM Journal of Neurological Disorders and Stroke

Index h (Hirsch) - ISI Web of Science: 10