

Date of birth: February 26, 1956.

Nationality: German; Romanian

Education:

1976-1981 **Diploma** in Biochemistry, University of Bucharest, Romania
1988–1990 **PhD** in Biochemistry Institute of Biochemistry, University of Karlsruhe, Germany

1990-1991: **Postdoc**, Ethel Percy Andrus Gerontology Center, University of Southern California, Los Angeles, USA

2004: **Habilitation** in Internal Medicine and Experimental Neurology, Medical Faculties of Erlangen-Nuerenberg and Greifswald, Germany



Positions held:

1987-1990 **Research Assistant**, Insitute of Organic Chemistry, University of Karlsruhe, Germany

1990–1991 **Research Assistant** Ethel Percy Andrus Gerontology Center, University of Southern California

1991-1995 **Assistant Professor**, Institute of Gerontology, Medical Faculty Erlangen-Nuremberg

1996-1998 **Laboratory Head**, Clinic of Neurology, Medical University, Greifswald

1999–2004 **Associate Professor** of Neurobiology, Clinic of Neurology, Medical University, Greifswald, Ernst-Moritz-Arndt University, Greifswald.

2004-2012 **Professor of Experimental Neurology** at the Department of Neurology and Head of the Research Department, Medical University, Greifswald.

2008-2012 **Coordinator** of Neuroscience Research Programme at the Medical University, Greifswald;

2010-2012 **Coordinator** of the platform “Molecular Imaging in Neuroscience” at the Medical University, Greifswald.

In Greifswald I established a suitable model for stroke in aged rodents; Establish appropriate behavioral methods to study functional recovery after stroke in aged animals; Expertise on MRI imaging in small animals; Expertise on Proteomics and Transcriptomics; Establish gaseous hypothermia as a successful anti-inflammatory therapy after stroke in aged rats; Coordinator of three major projects, two EU-funded projects on brain imaging and one funded by the Ministry of Research on stem cell therapy after stroke in aged animals. Habilitation

2008-present **Professor of Patobiochemistry**, University of Medicine and Pharmacy, Craiova, Romania.

2012-present **Professor of Experimental Neurology** at the Department of Psychiatry and Head of the Research Laboratory, University of Medicine, Rostock, Germany.

Membership in editorial committees

Associate Editor: BMC Geriatrics (London)

Associate Editor: Frontiers Ageing Neuroscience

Member of the Editorial Board:

„Oxidative Medicine and Cellular Longevity“

“Current Neurovascular Research”

“Aging Research”

“Reviews in Health Care”

“Frontiers in Ageing Neuroscience”

“Frontiers in Alzheimers’ Disease”

“Biochemistry & Analytical Biochemistry”

"Romanian Journal of Morphology and Embryology";
"Clujul Medical"
"Reactive Oxygen Species"
"SRL Neurological Disorders"

Ad hoc Reviewer: Brain Research, Experimental Neurology, Epilepsia, Frontiers in Bioscience, Journal Cerebral Blood Flow and Metabolism, Journal Cellular and Molecular Medicine, Journal Neurochemistry, Neuroscience Letters; Stroke; Cerebrovascular Dis; Aging Cell, Acta Neurobiol Exp.; J Neurosci. Methods; Plos One; J Clinical Investigation; Neuroscience; Pharmacol Biochem Behavior; BMC Neurosci; Gerontology; Neuropharmacology

Reviewer for grant applications for:

Netherlands Organisation for Scientific Research
CURE Epilepsy (USA)
Irish Grant Agency
Swish Grant National Agency
Polish Grant Agency
Romania Grant Agency
Hong Kong Grant Agency
Hungarian Grant Agency
MRC (UK)

„International Advisory Board” Member, *“Society for the Study of Neuroprotection and Neuroplasticity”*

Honorary Membership, *“Serbian Association for anti-Aging Medicine”*

IBRO Board, Member of the Pan-European Regional Committee

Awards

NATO PostDoc Stipend University of Southern California, Los Angeles, USA

Rene Schubert Prize for Research on Ageing

Venture Cup prize for development of immunohistochemical devices for automatic staining

Coordination/Networking activity

2008-present **Coordinator** of Neuroscience Research Programme at the Medical Faculty, Ernst-Moritz-Arndt University, Greifswald; 2010-present **Coordinator** of the platform “Molecular Imaging in Neuroscience” at the Medical Faculty, Ernst-Moritz-Arndt University, Greifswald. **Coordinator** of two FP7 projects, one focused on “Molecular mechanisms underlying neurorehabilitation after brain injuries” and the other one on “Molecular imaging in aging and neural repair”

Research interest and expertise

The aim my group is to unravel cellular and molecular mechanisms underlying aging progression and its significance for brain diseases. The group has a long-standing interest in molecular mechanisms of brain remodelling in the aged rat brain. My group has studied the plasticity of the aging brain in response to stimuli for more than 15 years and to stroke injury in aged animals for the last 10 years. Overall our results suggest that: (1) although older animals retain the potential for brain plasticity-related cytogetic events after injury, the expression of key brain plasticity-

associated genes and proteins is often attenuated and temporally altered; (2) an important cellular event associated with restricted axonal growth after stroke in aged animals is the early formation of a scar in the infarcted region; (3) Granulocyte-Colony Stimulating Factor lowers mortality and enhances neurogenesis in the brains of post-stroke aged animals; (4) vascular wall reactivity is exacerbated in the post-stroke aged animals. (4) (4) vascular wall reactivity is exacerbated in the post-stroke aged animals; (5) Multimodal approaches for regenerative stroke therapies: Combination of G-CSF with BM MSC is not superior to G-CSF alone in aged animals.

Expertise: aged animals models of cerebral ischemia; behavioral analysis; recording of EEG and various physiological parameters by telemetric measurements; MRI for small animals; immunohistochemical procedures, proteomics, genomics.

Recent GRANTS: 6

Amount: 6,5 millions EUROS

2008-2011

Neuroprotective effect of hypothermia. An MRI study.

Grant agreement no: 0314107

Grant money: 3,05 millions Euro

2009-2012

FP7: Improvement of the research competitiveness in neuroscience^{[[[SEP]]]} at the Ernst Moritz Arndt University of Greifswald

Acronym: ImpactG

Grant agreement no.: 229750

Grant money: 1,05 millions Euro

2009-2012

Multimodal Approaches for Regenerative Stroke Therapies. Therapeutic benefit of bone marrow stem cells administered to aged rats after stroke.

Acronym: MARS

Grant agreement no: 01GN0982;

Grant money: 760.000 Euro

2010-2013

FP7: Improvement of the research competitiveness in molecular imaging at the Ernst Moritz Arndt University of Greifswald

Acronym: EnVision

Grant agreement no.: 264143

Grant money: 2,15 millions Euro

2011-2014

Age-related deterioration of biological pathways and their significance for brain tissue regeneration and functional recuperation after stroke

Acronym: Regeneratome

Grant agreement no: PN-II-ID-PCE-2011-3-0848 IDEI

Grant money: 410.000 Euro

2012-2015

Cellular therapy of stroke

Acronym: CELEST

Grant agreement no: PCCA 80/2012

Grant money: 410.000 Euro

2011-2012 "Systemic regulatory mechanisms to cope with persistent energy excess in aging systems"

Grant agreement no: MOE 10/73

Grant money: 24.000 EURO

2016-2021 Horizont 2020 "Comorbid Conditions of ADHD (CORA)"

Grant Agreement no 667302

Grant money: 6 mil EURO

Leadership and Mentoring Skills

Invited to the EU sponsored 'Next generation leaders in Biology of Aging' for Master and PhD students; University of Bologna, Rimini Campus.

- 1) The Role of Aging in Cerebrovascular Disorder
- 2) Cellular Responses to Brain Injuries

Supervisor of:

20 PhD works

Learning and Teaching

1) Postgraduate lectures on Neurobiology of Ageing at the University of Medicine Greifswald, Germany

2) Currently teaching Pathobiochemistry for the English Section at the University of Medicine and Pharmacy Craiova, Romania

International visibility

Invited Lectures: 90, some are listed below

University of Southern California, Los Angeles, 1990

On the strategy of directed assembly and its relevance to ageing

International Centre of Genetic Engineering and Biotechnology, Padriciano 99, 34012 Trieste, Italy (1991)

Differential Expression of Fibronectin and N-CAM mRNA Isoforms During Development and Aging of Rat Hippocampus.

World Congress of Gerontology, Budapest, 1993

Dynamics of Gene Expression for Fibronectin, GFAP, S100 β , Microtubule-Associated Protein MAP1B, Embryonic α -Tubulin and Late Neural β -Tubulin mRNAs in the Brain of Aged Rats

Institut of Physiology, The University of Veterinary Medicine, Vienna, 1994

Dynamics of Gene Expression for Cytoskeletal Proteins mRNAs in the Brain of Aged Rats

University of Erlangen-Nuremberg, 1996

Pentylene-tetrazole-Induced Seizure Upregulates Levels of Microtubule-Associated Protein 1B mRNA and Protein in the Hippocampus of Rat

Institut of Physiology, The University of Veterinary Medicine, Vienna, 1996

Pentylentetrazole-Induced Seizure Upregulates Levels of Microtubule-Associated Protein 1B mRNA and Protein in the Hippocampus of Rat. Effects of aging.

University of Erlangen-Nuremberg, 1997

Beta-Amyloid Peptide Immunoreactivity in the Aged Rat Brain Following Middle Cerebral Artery Occlusion

University of Lund, Sweden, 1997

Evidence that V⁺ Fibronectin, GFAP and S100 β mRNAs are Increased in the Hippocampus of Aged Rats

University of Erlangen-Nuremberg, 1998

Synaptic plasticity is preserved in the temporal cortex of 20-mo-old rats

University of Erlangen-Nuremberg, 1999

Increased Expression of Microtubule-Associated Protein 1B in the Hippocampus, Subiculum, and Perforant Path of Rats Treated with a High Dose of Pentylentetrazole

University of Erlangen-Nuremberg, 2000

Upregulation of MAP1B and MAP2 in the Rat Brain Following Middle Cerebral Artery Occlusion: Effect of Age

Symposium on the Neurobiology and Neuroendocrinology of Aging. Bregenz, Austria, 2002.

Brain plasticity: to what extent do aged animals retain the capacity to coordinate gene activity in response to acute challenges

Faculty of Medicine, University of Heidelberg-Mannheim, 2002

Brain plasticity: to what extent do aged animals retain the capacity to coordinate gene activity in response to stroke and epileptic seizures

University of Heidelberg-Mannheim, 2003. German Society of Neurology

Kindling Status in Sprague-Dawley Rats Induced by Pentylentetrazole: Involvement of a Critical Development Period

University of Erlangen-Nuremberg, Germany, 2003. German Society for Aging Research

1. *Functional rehabilitation after stroke. The role of scar, neurogenesis and age*
2. *Premature appearance of proliferating cells in the aged brain following stroke*

University of Erlangen-Nuremberg, Germany, 2004. German Society for Aging Research

Inhibition of inflammation after stroke improves the endogenous neurogenesis and functional recuperation after stroke.

University of Karlsruhe, Germany, 2005. German Society for Aging Research.

Neurorehabilitation after Stroke in Aged Rats: Role of Scar and Neurogenesis

University of Karlsruhe, Germany, 2006. German Society for Aging Research

The response of the aged brain to stroke: Too much, too soon?

Romanian Society for Cell Biology, June 13th, 2006

Cellular and Molecular Mechanisms underlying Neurorehabilitation after Stroke in Aged Rats

Bucharest, September 3rd, 2007. Romania. The 2nd International Conference of the National Neuroscience Society of Romania. *Cellular and molecular mechanisms of neurorehabilitation after stroke* ISBN[10]: 973-708-153-6

University of Lund, Sweden, 2007

Cellular and Molecular Mechanisms underlying Neurorehabilitation after Stroke in Aged Rats. Role of stem cells.

Medical School, University of West Virginia, Morgentown, USA, 2007

Cellular and Molecular Mechanisms underlying Neurorehabilitation after Stroke in Aged Rats. Role of hypothermia.

University of California at Los Angeles (UCLA), USA, 2007

Cellular and Molecular Mechanisms underlying Neurorehabilitation after Stroke in Aged Rats. Role of enriched environment.

University of Freiburg, Germany, 2007

Cellular and Molecular Mechanisms underlying Neurorehabilitation after Stroke in Aged Rats. Role of stem cells.

Bucharest, June 2-3, 2007, Romania

„Gheorghe Marinescu” Symposium of The National Neuroscience Society of Romania with international participation. *Molecular mechanisms underlying neurorehabilitation after stroke in aged animals*, ISBN 978-073-708-240-4

University of Magdeburg. Neuroscience Center, March 17, 2008

Cellular and Molecular Mechanisms underlying Neurorehabilitation after Stroke in Aged Rats

University of Chisinau, April 2008, Moldova. International Conference.

Temporal dynamics of degenerative and regenerative events associated with cerebral ischemia in aged rats.

Bucharest, May 30, Romania, 2008. Al IV-lea Simpozion al Societatii Nationale de Neurostiinte.

Cellular and molecular mechanism underlying post-stroke neurorehabilitation ISBN 978-973-708-323-4

Cluj, Romania October 2008. International Workshop

Molecular strategies to improve neurorehabilitation after stroke in aged rats

Cluj, Romania October 2008. International Workshop

Imaging in Neuroscience

Craiova, September 2008. International Workshop.

Gene expression signature in neuroscience

University of Hamburg, September 10, 2008. German Society of Neurology

The enriched environment significantly improved the rate and extent of recovery in aged animals.

University of Karlsruhe, November 2008. German Society for Aging Research
Improvement of functional recuperation after stroke by enhanced neurogenesis

University of Regensburg, July 18th. Clinic of Neurology. International Workshop. *Strategies to improve recuperation after stroke in aged subjects*

Vienna, March 2009: 6th World Congress of Neurorehabilitation (WCNR2010): *Neurobiology of post-ischemic recuperation in the aged rodent brain*

Lund, September, 2009. The 3rd International Hypothermia Symposium: *Long-term hypothermia using H₂S acts neuroprotectively in aged rats after focal ischemia.*

Belgrade, Serbia, June 2010: Congress on Anti-Aging Medicine: *Stimulation of neurogenesis in aged subjects improves behavioural recuperation and tissue indices after stroke*

Eforie, Romania, June 2010: Society for the Study of Neuroprotection and Neuroplasticity: *Stimulation of neurogenesis in aged subjects improves behavioural recuperation and tissue indices after stroke*

Bucharest, Romania, September 2010: DIASPORA, Exploratory Workshop Meeting:
Transcriptomics of Stroke in Aged Rodents and its Relevance for Neurorehabilitation Strategies

Mannheim, Germany, September 2010: German Society for Neurology
Improved functional recovery after stroke through enhancement of the endogenous neurogenesis in aged rats

Rostock, Germany, October 2010. 6th International Conference on Neuroprotection and Neurorepair: *Improved functional recovery after stroke through enhancement of the endogenous neurogenesis in aged rats*

Hamburg, Germany, May 2011. German Society for Neurology. *Improved functional recovery after stroke through enhancement of the endogenous neurogenesis in aged rats by G-CSF treatment.*

Belgrade, Serbia, June 2011. Congress on Anti-Aging Medicine: *Strategies to improve functional recovery after stroke through enhancement of the endogenous neurogenesis in aged rats*

Ulm, Germany, October 2011. Annual Meeting of the German Association for Aging Research.
Genomics of Stroke in Aged Rodents

Rostock, Germany, September 2011: Bioinformatics in Aging Research: *Identification of new therapeutics targets by genome-wide analysis of gene expression in the ipsilateral cortex of aged rats after stroke*

Homburg, Germany, November 2011. Special lecture: *Strategies to improve functional recovery after stroke through enhancement of the endogenous neurogenesis in aged rats*

Potsdam, Germany, May 2012. International Conference on Neurorepair: *Multimodal Approaches for Regenerative Stroke Therapies (MARS)*

Belgrade, Serbia, May 2012. Congress on Anti-Aging Medicine: *Strategies to improve functional recovery after stroke through enhancement of the endogenous neurogenesis in aged rats*

Galway, August 2012, Ireland. Meeting of the European Aging Project, FLARE 2.
Animals Models of Aging

Rostock, September 6th, Germany. 4th Hanse Symposium.
Molecular Neuroscience: Bridging the Gap between Neurology and Psychiatry

IBRO Lecture, Bucharest, September 26, 2012. The 2nd International Conference of the National Neuroscience Society of Romania. *Identification of new therapeutic targets by strokeomics.*

Cluj, Romania, November 2nd, 2012. International Workshop
Cell therapy of stroke. From bench to clinical applications.

Dead Sea, March 2013, Israel. 8th European Congress of Biogerontology.
Multimodal approaches for regenerative stroke therapies. Role of the fibrotic scar.

Barcelona, April 9th, 2013, Spain. Clinic of Neurology. Special lecture:
Multimodal approaches for regenerative stroke therapies. Role of Hypothermia.

Cluj, May 29th, 2013, Romania. Erasmus-Exchange Programme.

1. *Neuroinflammation after stroke*
2. *Cell therapy of Stroke. Targeting endogenous neurogenesis*

IBRO Lecture, Bucharest, October 17th, 2014. The 3th International Conference of the National Neuroscience Society of Romania. „*Post-stroke depression and aging*“

Rimini, 2014. EU sponsored ‘Next generation leaders in Biology of Aging’
for Master and PhD students; University of Bologna, Rimini Campus.

- 1) *The Role of Aging in Cerebrovascular Disorder*
- 2) *Cellular Responses to Brain Injuries*

Romanian Society for Morphology and Embryology, May, 2014. *Post-stroke angiogenesis. Role of inflammation*

Hermannstadt/Sibiu, June 2014. Annual Meeting of the European Association of Psychosomatic Medicine. *Poststroke depression: mechanisms, translation and therapy*

Nottingham University, October 2014. *Current Therapies of Stroke in Experimental Models and Humans*

IBRO Lecture, Bucharest, October 24, 2014. The 4th International Conference of the National Neuroscience Society of Romania. *The Brain Reserve and Post-Stroke Depression in the Aged*

10.01.2015 Manchester Metropolitan University, UK

THERAPEUTIC STRATEGIES TO ENHANCE POSTSTROKE RECOVERY OF AGED BRAINS

03.06.2015 BRAIN DAYS, CLUJ-NAPOCA, ROMANIA

Combination of granulocyte colony-stimulating factor with and BM MSC and BM MNCs for stroke treatment in aged rats is not superior to G-CSF alone

05.06.2015 Romanian Society of Morphology, Craiova, Romania

THERAPEUTIC STRATEGIES TO ENHANCE POSTSTROKE RECOVERY OF AGED BRAINS

11.07.2015 "STEFAN ODOBLEJA", SYMPOSIA, TN. SEVERIN

MOLECULAR PSYCHIATRY: BRIDGE BETWEEN NEUROLOGY AND PSYCHIATRY

22.09.2015 GERMAN SOCIETY FOR NEUROLOGY, DUESSELDORF, GERMANY

CURRENT CELL THERAPIES OF STROKE IN AGED ANIMALS

25.09.2015 Society for Neuropsychopharmacology and Pharmacopsychiatry

Munich, Germany. *Molecular Psychiatry: Lighty therapy for ADHD Patients*

28.10.2015 ROMANIAN SOCIETY FOR NEUROSCIENCE, BUCHAREST, ROMANIA

The promise and pitfalls of cell therapy for stroke in the aged brain

07.11.2015 Romanian Society for Psychosomatics, Brasov, Romania.

Post-Stroke Depression: Models and Mechanisms

26.11.2015 GERMAN SOCIETY FOR PSYCHIATRY AND PSYCHOTHERAPY, BERLIN

Human dermal fibroblasts: a tool to study *in vitro* circadian rhythmicity in adult ADHD patients.

20.04.2016 9th Symposium on Neuroprotection and Neuroplasticity, Leipzig, Germany.

Is the aged brain microenvironment refractory to cell therapy?

ISI PUBLICATIONS: 106

SUMMARY: 2788 CITATIONS; h = 29

PUBLICATIONS

ISI PUBLICATIONS

106. Sandu RE, Balseanu A, Bogdan C, Slevin M, Petcu E, **Popa-Wagner A.** (2017) Stem cell therapies in preclinical models of stroke. Is the aged brain microenvironment refractory to cell therapy? *Exp Gerontol.* pii: S0531-5565(17)30029-3. doi: 10.1016/j.exger.2017.01.008. (IF = 3.6)

105. A **Popa-Wagner**, AM Buga (2016) Identification of New Therapeutic Targets for Cerebral Ischemia by Genome-Wide Analysis. *Biochem Anal Biochem*, 5:e162. (IF = 2.4).

104. Gaman AM, Uzoni A, **Popa-Wagner A**, Andrei A, Petcu EB. (2016). The Role of Oxidative Stress in Etiopathogenesis of Chemotherapy Induced Cognitive Impairment (CICI)-"Chemobrain". *Aging Dis.* 2016 May 27;7(3):307-17. doi: 10.14336/AD.2015.1022. eCollection 2016. (IF = 4.57).

103. Eugen B Petcu, K. Sherwood, A. **Popa-Wagner**, AM Buga, L. Aceti, Rodica I Miroiu. Artistic skills recovery and compensation in visual artists after stroke (2016). *Frontiers Neurology*, :76. doi: 10.3389/fneur.2016.00076. eCollection 2016. (IF = 3.1).

102. Ana-Maria Buga, Ovidiu Ciobanu, Catalin Bogdan, Ria Weston, Mark Slevin, Mario DiNapoli, Aurel **Popa-Wagner** (2016) Up-regulation of serotonin receptor 2B mRNA and protein in the peri-infarcted area of aged rats and stroke patients. *Oncotarget*, Mar 22. doi: 10.18632/oncotarget.8277. [Epub ahead of print] (IF = 6.4).
101. Uzoni A, Sandu RE, Mihai Moldovan, Ovidiu Ciobanu, Andrei Anghel, Eugen Radu, Andrew N. Coogan, and Aurel **Popa-Wagner**. (2016) Post-stroke gaseous hypothermia increases vascular density in the ischemic penumbra of aged rats. *Rest. Neurol. Neurosci.* 2016 Feb 24. [Epub ahead of print] (IF = 2.7).
100. Di Napoli M, Zha AM, Godoy DA, Masotti L, Schreuder FH, **Popa-Wagner** A, Behrouz R (2016); from the MNEMONICH Registry. Prior Cannabis Use Is Associated with Outcome after Intracerebral Hemorrhage. *Cerebrovasc Dis.* 41(5-6):248-255. (IF = 3.75).
99. Coogan Andrew N, Baird Alison L, **Popa-Wagner** Aurel, Thome Johannes (2016). Circadian rhythms and attention deficit hyperactivity disorder: The what, the when and the why. *Progress in Neuropsychopharmacol & Biol Psychiatry*, doi: 10.1016/j.pnpbp.2016.01.006 (IF = 3.7).
98. Raluca Elena Sandu, Ana-Maria Buga, Adrian Tudor Balseanu, Mihai Moldovan and Aurel **Popa-Wagner**. (2016) Twenty four hours hypothermia has temporary efficacy in reducing brain infarction and inflammation in aged rats. *Neurobiology of Aging*, 38:127-140. (IF = 5.3).
97. Behrouz R, Azarpazhooh MR, Godoy DA, Hoffmann MW, Masotti L, Parry-Jones AR, **Popa-Wagner** A, Schreuder FH, Slevin MA, Smith CJ, Di Napoli M (2015). MNEMONICH Steering Committee. [The Multi-National survey on Epidemiology, Morbidity, and Outcomes in Intracerebral Haemorrhage \(MNEMONICH\)](#). *Int J Stroke*. 10:E86. doi: 10.1111/ijis.12629. PubMed PMID: 26745705. (IF = 3.8).
96. Slevin M, Matou S, Zeinolabediny Y, Corpas R, Weston R, Liu D, Boras E, Di Napoli M, Petcu E, Sarroca S, **Popa-Wagner** A, Love S, Font MA, Potempa LA, Al-Baradie R, Sanfeliu C, Revilla S, Badimon L, Krupinski J (2015). [Monomeric C-reactive protein--a key molecule driving development of Alzheimer's disease associated with brain ischaemia?](#) *Sci Rep*. 5:13281. doi: 10.1038/srep13281. PubMed PMID: 26335098; PubMed Central PMCID: PMC4558604. (IF = 5.6).
95. Sandu RE, Buga AM, Uzoni A, Petcu EB, **Popa-Wagner** A (2015). [Neuroinflammation and comorbidities are frequently ignored factors in CNS pathology](#). *Neural Regen Res*. 10(9):1349-55. doi: 10.4103/1673-5374.165208. Review. PubMed PMID: 26604877; (IF = 0.22).
93. **Popa-Wagner** A, Buga AM, Popescu B, Muresanu D. [Vascular cognitive impairment, dementia, aging and energy demand. A vicious cycle](#). *J Neural Transm* (Vienna). 2015 Aug;122 Suppl 1:S47-54. doi: 10.1007/s00702-013-1129-3. Epub 2013 Dec 14. PubMed PMID: 24337666. (IF = 2.4).
92. Hermann DM, Buga AM, **Popa-Wagner** A. (2015) [Neurovascular remodeling in the aged ischemic brain](#). *J Neural Transm* (Vienna). 122 Suppl 1:S25-33. doi: 10.1007/s00702-013-1148-0. (IF = 2.4).
91. Freret T, Gaudreau P, Schumann-Bard P, Billard JM, **Popa-Wagner** A. [Mechanisms underlying the neuroprotective effect of brain reserve against late life depression](#). *J Neural Transm* (Vienna). 2015 Aug;122 Suppl 1:S55-61. doi: 10.1007/s00702-013-1154-2. (IF = 2.4).
90. **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* (Vienna). 2015 Jul 15. [Epub ahead of print] PubMed PMID: 26175004.
89. Bucur O, Almasan A, Friedman M, Nicolson GL, Godwin AK, Adami HO, Richardson DR, Schmitt-Ulms G, Westerblad H, Keniry M, Grau GE, Carbonetto S, **Popa-Wagner** A, Baron BW, Galardy PJ, Yang F, Data D, Nelson MA, Liehn EA (2015). [An updated h-index measures both the primary and total](#)

- [scientific output of a researcher](#). Discoveries Jul-Sep;3(3). pii: e50. Epub 2015 Sep 30. PubMed PMID: 26504901; PubMed Central PMCID: PMC4617786.
88. Buga AM, Scheibe J, Moller K, Ciobanu O, Posel C, Boltze J, **Popa-Wagner A.** (2015) [Granulocyte colony-stimulating factor and bone marrow mononuclear cells for stroke treatment in the aged brain](#). *Curr Neurovasc Res.* 2015;12(2):155-62. PubMed PMID: 25760217.
87. **Popa-Wagner A**, Filfan M, Uzoni A, Pourgolafshan P, Buga AM (2015). [Poststroke Cell Therapy of the Aged Brain](#). *Neural Plast.* 839638. doi: 10.1155/2015/839638. Epub 2015 Aug 11. Review. PubMed PMID: 26347826; PubMed Central PMCID: PMC4548142. (IF = 3,6).
86. Manole E, Ceafalan LC, Oproiu AM, **Popa-Wagner A**, Popescu BO (2015). [Claudin-1 and occludin expression in demyelinating peripheral neuropathies](#). *Rom J Morphol Embryol.* 56(3):1097-102. PubMed PMID: 26662145. (IF = 0.7)
85. Sandu RE, Uzoni A, Coman C, **Popa-Wagner A.** [Cerebral ischemia in the aged. Limited anti-inflammatory efficacy of the indomethacin treatment](#). *Rom J Morphol Embryol.* 56(3):1111-7. PubMed PMID: 26662147. (IF = 0.7)
84. Gaman AM, Buga AM, Gaman MA, **Popa-Wagner A** (2014). The role of oxidative stress and the effects of antioxidants on the incidence of infectious complications of chronic lymphocytic leukemia. *Oxid Med Cell Longev.* 158135. doi: 10.1155/2014/158135. Epub 2014 Oct 14. (IF = 3,4)
83. Scheller A, Vivien D, Kirchhoff F, Orset C, Sandu RE, **Popa-Wagner A.** (2014) Imaging neuroinflammation after brain injuries by ultrasensitive MRI and two-photon laser-scanning microscopy. *Rom J Morphol Embryol.* 55:735-43. (IF = 0,80)
82. M F-Stanculete, AM Buga, A **Popa-Wagner** and D Dumitrascu (2014). The relationship between irritable bowel syndrome and psychiatric disorders: from molecular changes to clinical manifestations. *Journal of Molecular Psychiatry 2014, 2:4* doi:10.1186/2049-9256-2-4
81. M Sanmarti, L Ibáñez, S Huertas, D Badenes, D Dalmau, M Slevin, J Krupinski, A **Popa-Wagner** and A Jaen (2014) HIV-associated neurocognitive disorders. *Journal of Molecular Psychiatry 2014, 2:2* doi:10.1186/2049-9256-2-2
80. **Popa-Wagner A**, Buga A-M, Doepfner TR and Hermann DM (2014) Stem cell therapies in preclinical models of stroke associated with aging. *Front. Cell. Neurosci.* 8:347. doi: 10.3389/fncel.2014.00347 (IF = 4.3)
79. Popa-Wagner A, Buga AM, Tica AA, Albu CV (2014) Perfusion deficits, inflammation and aging precipitate depressive behaviour. *Biogerontology* 15:439-48. doi: 10.1007/s10522-014-9516-1 (IF = 3,4)
78. Balseanu, A, A-Ma Buga, D-C Wagner, J Boltze, K Reymann, W Schaebitz and A **Popa-Wagner** (2014). Multimodal approaches for regenerative stroke therapies: Combination of G-CSF with BM MSC is not superior to G-CSF alone. *Frontiers Aging Neurosci.* *Front Aging Neurosci.* 6:130. doi: 10.3389/fnagi.2014.00130. eCollection 2014 (IF = 5,4)
77. Tatarishvili, Oki K, Buga AM, Popa-Wagner A, Brüstle O, Lindvall O, Kokaia Z. (2014) Human induced pluripotent stem cells improve recovery in stroke-injured aged rats. *Restor Neurol Neurosci.* 2014 32(4):547-58. (IF = 4,9)
76. Muresanu DF, **Popa-Wagner A**, Stan A, Buga AM, Popescu BO (2014). The vascular component of Alzheimer's disease. *Curr Neurovasc Res.* 11:168-76. (IF = 2,9)

75. Buga AM, Margaritescu C, Scholz CJ, Radu E, Zelenak C, **Popa-Wagner A.** (2014) Transcriptomics of post-stroke angiogenesis in the aged brain. *Front Aging Neurosci.* Mar 18;6:44. doi:0.3389/fnagi.2014.00044. (IF = 5,4)
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II. BOOK CHAPTERS

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