

Hamdollah Panahpour

Professor in Medical Physiology

Personal info

Nationality: Iranian

Date of birth: 01 / 12 / 1972

E-mail: panahpour.h@gmail.com

Tel & Fax: 0098-451-33516167

<https://orcid.org/0000-0002-3315-7624>

Scopus Author ID: 21834981800

Education

Research fellowship (2007& 2013), Ludwig-Maximilians-university, Munich, Germany

Project title: Effects of the renin inhibition by Aliskiren on ischemic brain injury and brain edema formation following transient focal cerebral ischemia in mice

Supervisor: Professor Nikolaus Plesnila

Ph.D (2008) Shiraz University of Medical Sciences

Thesis title: Role of the angiotensin converting enzyme and AT1 receptors in brain injury, edema and BBB disruption following transient focal cerebral ischemia in rat.

Supervisor: Professor G. A. Dehghani

M. Sc. (1999) Kerman University of Medical Sciences

Thesis title: Evaluation of the effects of three novel calcium channel blockers on blood pressure, cardiac contractility and heart rate in the rabbits.

Supervisor: Professor H. Najafipour

Research interest

- Cerebrovascular and Ischemic Stroke
- Cardiovascular and Hypertension

Skills

1. In vivo surgical skills specially for induction of ischemic stroke models in both mice and rats by middle cerebral artery occlusion (MCAO) using the intraluminal filament method.
2. Cerebral blood flow recording by means of laser Doppler flowmeter.
3. Evaluation of the stroke induced blood brain barrier permeability using Evans Blue extravasation technique.
4. Determination of cerebral edema formation
5. Brain tissue processing by cryostat machine and tissue staining by crystal violet and 2,3,5-triphenyltetrazolium chloride (TTC) staining protocols.
6. Neurobehavioral studies and evaluation of the stroke induced sensorimotor dysfunctions
7. Different injection and inhalation anesthesia methods in rodents
8. Cannulation of the heart, arteries, veins and recording of the cardiovascular hemodynamic parameters as MAP and dp/dt.
9. Biochemical and molecular studies using flow cytometer, spectrophotometer and Elysia reader and ...
10. Design and implementation of the eight research projects in the field of ischemic stroke.
11. Designing and conducting more than ten research projects as thesis for MD, M.Sc. and Ph.D students in the field of ischemic stroke as a supervisor.
12. Sufficient skills to write specialized articles and work with required software such as SPSS, Excel, SigmaPlot, Endnote, ACDsee, Photoshop and digital image analyzing.

Work experience

- Head of Department of physiology, Medical school, Ardabil University of Medical Sciences (2012-2020).
- Head of the pharmaceutical sciences research center (PSRC), Ardabil University of Medical Sciences (2018-2022).
- Director of University Research Development, Ardabil University of Medical Sciences (2019-2022).

- Contributed in teaching medical physiology for post graduate (M.Sc. and Ph.D of Physiology) and Undergraduate students (General Practitioner, Pharmacy, Dentistry, Nursing and Midwifery students) since 1999

Publications

Books:

1. [Hamdollah panahpour](#). Principals of experimental studies in stroke. Yavareian Publication Co. Ardabil, Iran, 2017.
2. [Hamdollah panahpour](#). Physiology of Human Body. Yavareian Publication Co. Ardabil, Iran, 2008.

Articles:

1. Saadati H, Sadegzadeh F, Sakhaie N, [Panahpour H](#), Sagha M. Serotonin depletion during the postnatal developmental period causes behavioral and cognitive alterations and decreases BDNF level in the brain of rats. International Journal of Developmental Neuroscience. 2021 Apr;81(2):179-90.
2. Aslani MR, Ghobadi H, [Panahpour H](#), Ahmadi M, Khaksar M, Heidarzadeh M. Modification of lung endoplasmic reticulum genes expression and NF-kB protein levels in obese ovalbumin-sensitized male and female rats. Life Sciences. 2020 Apr 15;247:117446.
3. [Panahpour H](#), Terpolilli NA, Schaffert D, Culmsee C, Plesnila N. Central application of Aliskiren, a renin inhibitor, improves outcome after experimental stroke independent of its blood pressure lowering effect. Frontiers in neurology. 2019:942.
4. Sadeghian N, Shadman J, Moradi A, ghasem Golmohammadi M, [Panahpour H](#). Calcitriol protects the Blood-Brain Barrier integrity against ischemic stroke and reduces vasogenic brain edema via antioxidant and antiapoptotic actions in rats. Brain research bulletin. 2019 Aug 1;150:281-9.
5. Shadman J, Sadeghian N, Moradi A, Bohlooli S, [Panahpour H](#). Magnesium sulfate protects blood-brain barrier integrity and reduces brain edema after acute ischemic stroke in rats. Metabolic Brain Disease. 2019 Aug;34(4):1221-9.

6. Azar AH, Oryan S, Bohlooli S, [Panahpour H.](#) Alpha-tocopherol reduces brain edema and protects blood-brain barrier integrity following focal cerebral ischemia in rats. *Medical Principles and Practice.* 2017;26(1):17-22.
7. Pasban E, [Panahpour H.](#), Vahdati A. Early oxygen therapy does not protect the brain from vasogenic edema following acute ischemic stroke in adult male rats. *Scientific reports.* 2017 Jun 12;7(1):1-7.
8. [Panahpour H.](#), Nekooeian AA, Dehghani GA. Blockade of central angiotensin II AT1 receptor protects the brain from ischemia/reperfusion injury in normotensive rats. *Iranian journal of medical sciences.* 2014 Nov;39(6):536.
9. [Panahpour H.](#), Dehghani GA, Bohlooli S. Enalapril attenuates ischaemic brain oedema and protects the blood-brain barrier in rats via an anti-oxidant action. *Clinical and Experimental Pharmacology and Physiology.* 2014 Mar;41(3):220-6.
10. [Panahpour H.](#), Dehghani GA. Attenuation of focal cerebral ischemic injury following post-ischemic inhibition of angiotensin converting enzyme (ACE) activity in normotensive rat. *Iranian Biomedical Journal.* 2012 Oct;16(4):202.
11. Najafipour H., [Panahpour H.](#), Esmaili F., Foromadi A. Evaluation of the effects of three novel calcium channel blockers on blood pressure, cardiac contractility and heart rate in the rabbits. *Physiology and Pharmacology.* 2000, 4(2): 197-211
12. Nemati A., Alimohamadi H., [Panahpour H.](#), Sezavar H. Effects of fat diet on clotting factors in healthy individuals. *Research & Scientific journal of Ardabil University of Medical Sciences.* 2004, 3(No11): 50-57
13. [Panahpour H.](#), Nekooeian A.A., Dehghani G.A. Quantitative evaluation of Blood Brain Barrier permeability in transient focal cerebral ischemia in rats. *Physiology and Pharmacology,* 2007 11(2), 99 – 106.
14. [Panahpour H.](#), Nekooeian A.A., Dehghani G.A. Inhibition of Angiotensin-Converting Enzyme Reduces Cerebral Infarction Size in Experimental-Induced Focal Cerebral Ischemia in the Rat. *Iran J Med Sci,* 2007; 32(1): 12-17.
15. [Panahpour H.](#), Dehghani G.A. Inhibition of central angiotensin-converting enzyme with enalapril protects the brain from ischemia/reperfusion injury in normotensive rat. *DARU,* 2010, 18: (1) 35-40.

16. [Panahpour H.](#), Plesnila N. presentation of a standard model of focal cerebral ischemia induction for evaluating of brain edema in mice. Research & Scientific journal of Ardabil University of Medical Sciences, 2009, 9; (1)33-43.
17. [Panahpour H.](#), Dehghani G.A. Effects of renin –angiotensin system inhibition on ischemic brain edema formation and blood – brain barrier disruption following focal cerebral ischemia in rat. Journal of Ardabil University of Medical Sciences, 2011, 11; (1)14-23.
18. [Panahpour H.](#), Induction of focal cerebral ischemia by continuous recording of cerebral blood flow using laser Doppler flowmeter in rat. Journal of Ardabil University of Medical Sciences, 2012, 11; (1)14-23.
19. [Panahpour H.](#), Dehghani G.A. Effects of renin –angiotensin system inhibition on ischemic brain edema formation and blood – brain barrier disruption following focal cerebral ischemia in rat. Journal of Ardabil University of Medical Sciences, 2011, 11; (1)14-23.
20. [Panahpour H.](#), Induction of focal cerebral ischemia by continuous recording of cerebral blood flow using laser Doppler flowmeter in rat. Journal of Ardabil University of Medical Sciences, 2012, 11; (1)14-23.
21. [Panahpour H.](#), [Dehghani GA.](#), [Bohlooli S.](#) Enalapril attenuates ischaemic brain oedema and protects the blood-brain barrier in rats via an anti-oxidant action. Clin Exp Pharmacol Physiol. 2014 Mar;41(3):220-6. doi: 10.1111/1440-1681.12210.
22. [H. Panahpour.](#), [Sh. Bohlooli.](#), [S. E. Motavallibashi](#) Antioxidant Activity-Mediated Neuroprotective Effects of an Antagonist of AT1 Receptors, Candesartan, against Cerebral Ischemia and Edema in Rats. Neurophysiology. November 2013, Volume 45, Issue 5-6, pp 441-447