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CURRENT POSITION

University of Shahid Beheshti, Tehran, Iran	Tehran, Iran
Associate Professor, Department of Pharmacology, School of Medicine	2018-Present
Assistant Professor, Department of Pharmacology, School of Medicine	2011-2018

EDUCATION

Mashad University, School of Medicine	Mashad, Iran
Ph.D., Pharmacology	2005
Dissertation: "Study of thymoquinone effect on neurotransmission in the central and peripheral nervous systems"	
Azad University, Faculty of Pharmaceutical Sciences	Tehran, Iran
Pharm.D.	1998
Dissertation: "Determination of lead and cadmium in biological samples using atomic absorption spectrometry"	

GRANTS AND AWARDS

Vice Chancellor of Research Grant, School of Medicine	2020, 2021
Shahid Beheshti University, Tehran, Iran	
University Excellence in Teaching Award	2015, 2018
Shahid Beheshti University, Tehran, Iran	

RESEARCH EXPERIENCE

Shahid Beheshti University Medical School	Tehran (2012-Present)
Study of neuroprotective effects of paroxetine, minocycline, dimethyl fumarate, and terpenoid compounds	
• Used two-vessel and middle cerebral artery occlusion models to induce cerebral ischemia	
• Used <i>in vivo</i> recording of LTP in anesthetized rats	
• Used chronic constriction injury in rat sciatic nerve to induce neuropathic pain	
• Used ELISA and western blotting methods to measure cytokines and apoptotic markers in neural tissue	
• Used biochemical methods to measure antioxidant enzymes in biological samples	
• Used immunohistochemistry staining methods for evaluating neural cells	

University Health Network (Toronto Western Hospital)

Toronto, Canada

Visiting Graduate Student; Supervisor: Prof. Liang Zhang

2004

Electrophysiological studies of neuronal rhythms in mice hippocampus

- Used extracellular recording of field potentials and patch-clamp techniques in hippocampal slices

Mashad University Medical school

Mashad, Iran

Graduate Student Researcher; Supervisors: Hossein Hosseinzadeh, Mohammad Fatehi

2000-2005

Effect of thymoquinone on neurotransmission in the central and peripheral nervous systems

- Used *in vivo* models of seizure and cerebral ischemia
- Developed Morris water maze method to assess spatial memory
- Measured lipid peroxidation in the brain

SKILLS and TECHNIQUES

- Electrophysiological recording techniques: field recording and patch-clamp
- Animal models of cerebral ischemia (2-VO, 4-VO, MCAO)
- Animal models of seizure (*in vivo* & *in vitro*)
- Animal models of nociceptive and neuropathic pain
- Proficiency in stereotaxic surgeries
- ELISA, western blotting, and immunohistochemistry methods
- Medical and pharmacological statistics (SPSS, GraphPad Prism)

TEACHING EXPERIENCE

University of Shahid Beheshti Medical School

Tehran, Iran

- Teaching basic and clinical pharmacology to medical and dental students

2011-Present

- Teaching pharmacology to postgraduate students

- Supervision of three PhD theses as principal supervisor at the University of Shahid Beheshti

SELECTED CONFERENCE PRESENTATIONS

Parvardeh, S., Samadi, S., Koohsari, S., Ghafghazi, S., Sheykholeslami, M.A. Anticonvulsant effect of 4-isopropylbenzyl alcohol, a major constituent found in the essential oil of *Cuminum cyminum* and *Bunium presicum*, in mice. Poster presentation delivered at the 23rd Congress of Physiology and Pharmacology, Chabahar, Iran, February 2018.

Parvardeh, S., Moghimi, M., Moini Zanjani, T. The stimulatory effects of α -Terpineol on the long term potentiation recorded from the hippocampus of rats with cerebral ischemia induced memory impairment. Poster presentation delivered at the 22nd Congress of Physiology and Pharmacology, Kashan, Iran, September 2015.

Parvardeh, S., Hosseinzadeh, H. Effects of thymoquinone on epileptiform activity induced by magnesium free medium in the CA1 region of rat hippocampal slices. Poster presentation delivered at the 18th Congress of Physiology and Pharmacology, Mashhad, Iran, August 2007.

SELECTED PEER-REVIEWED PUBLICATIONS

Zafari, R., Goudarzi, N., Kamroo, A., Falah Tafti, M., Ghorbani, A., Talebian, N., Najafi, S., Shahbazian, S., Rahmanian, M., **Parvardeh, S.**, Dargahi, L., Nassiri-Asl, M. The effects of polyphenols on gut microbial metabolites and composition in neurodegenerative diseases: a systematic review. *Nutrition and Metabolism* 2025; 22: 142.

Shirzadi, P., Farokh, P., Osouli Meinagh, S., Izadi-Jorshari, G., Hajikarimloo, B., Mohammadi, G., **Parvardeh, S.**, Nassiri-Asl, M. The influence of the probiotics, ketogenic diets, and gut microbiota on epilepsy and epileptic models: a comprehensive review. *Molecular Neurobiology* 2025; <https://doi.org/10.1007/s12035-025-04993-4>

Golpour, F., Abbasi-Alaei, M., Babaei, F., Mirzababaei, M., **Parvardeh, S.**, Mohammadi, G., and Nassiri-Asl, M. Short chain fatty acids, a possible treatment option for autoimmune diseases. *Biomedicine & Pharmacotherapy* 2023; 163, 114763.

Sheikholeslami, M.A., **Parvardeh, S.**, Ghafghazi, S., and Sabetkasaei, M. Curcumin attenuates morphine dependence by modulating μ -opioid receptors and glial cell-activated neuroinflammation in rat. *Neuropeptides* 2022; 102318.

Khodabakhsh, P., Bazrgar, M., Mohagheghi, F., **Parvardeh, S.**, and Ahmadiani, A. MicroRNA-140-5p inhibitor attenuates memory impairment induced by amyloid- β oligomer in vivo possibly through Pin1 regulation. *CNS Neuroscience & Therapeutics* 2022; 29:91-103.

Parvardeh, S., Sheikholeslami, M.A., Ghafghazi, S., Pouriran, R., and Mortazavi, S.E. Minocycline improves memory in a passive avoidance task following cerebral ischemia-reperfusion by enhancing hippocampal synaptic plasticity and restoring antioxidant enzyme activity in rats. *Basic and Clinical Neuroscience* 2022;13(2):225-36.

Mesgar, S., Jameie, S.B., Aliaghaei, A., **Parvardeh, S.**, Torabi, A., and Haghparast, A. Dopamine D1 Receptor-Mediated Regulation of Per1, Per2, CLOCK, and BMAL1 Expression in the Suprachiasmatic Nucleus in Adult Male Rats. *Journal of Molecular Neuroscience* 2022;72(3):618-25.

Khodabakhsh, P., Bazrgar, M., Dargahi, L., Mohagheghi, F., Taei, A.A., **Parvardeh, S.** and Ahmadiani, A. Does Alzheimer's disease stem in the gastrointestinal system? *Life Sciences* 2021; 287:120088.

Sheikholeslami, M.A., Ghafghazi, S., **Parvardeh, S.**, Koohsari, S., Aghajani, S.H., Pouriran, R., and Vaezi, L.A. Analgesic effects of cuminic alcohol (4-isopropylbenzyl alcohol), a monocyclic terpenoid, in animal models of nociceptive and neuropathic pain: Role of opioid receptors, L-arginine/NO/cGMP pathway, and inflammatory cytokines. *European Journal of Pharmacology* 2021; 900:174075.

Sheikholeslami, M.A., Ghafghazi, S., Pouriran, R., Mortazavi, S.E. and **Parvardeh, S.** Attenuating effect of paroxetine on memory impairment following cerebral ischemia-reperfusion injury in rat: the involvement of BDNF and antioxidant capacity. *European Journal of Pharmacology* 2021; 893: 173821.

Koohsari, S., Sheikholeslami, M.A., **Parvardeh, S.**, Ghafghazi, S., Samadi, S., Poul, Y.K., Pouriran, R. and Amiri, S. Antinociceptive and antineuropathic effects of cuminaldehyde, the major constituent of *Cuminum cyminum* seeds: Possible mechanisms of action. *Journal of Ethnopharmacology* 2020; 255:112786.

Dastaran, S., Sabetkasaei, M., **Parvardeh, S.**, Ghafghazi, S. and Pouramini, A. Protective effect of dimethyl fumarate on memory impairment after cerebral ischemia-reperfusion injury in rats. *Jundishapur Journal of Natural Pharmaceutical Products* 2020;15(1):1-e69310.

Khoshnazar, M., **Parvardeh, S.** and Bigdeli, M.R. Alpha-pinene exerts neuroprotective effects via anti-inflammatory and anti-apoptotic mechanisms in a rat model of focal cerebral ischemia-reperfusion. *Journal of Stroke and Cerebrovascular Diseases* 2020;29(8):104977.

Soleimani, M., Sheikholeslami, M.A., Ghafghazi, S., Pouriran, R. and **Parvardeh, S.** Analgesic effect of α -terpineol on neuropathic pain induced by chronic constriction injury in rat sciatic nerve: Involvement of spinal microglial cells and inflammatory cytokines. *Iranian Journal of Basic Medical Sciences* 2019;22(12):1445-1451.

Khoshnazar, M., Bigdeli, M.R., **Parvardeh, S.** and Pouriran, R. Attenuating effect of α -pinene on neurobehavioural deficit, oxidative damage and inflammatory response following focal ischaemic stroke in rat. *Journal of Pharmacy and Pharmacology* 2019; 71(11):1725-1733.

Sheikholeslami, M.A., **Parvardeh, S.**, Ghafghazi, S., Zanjani, T.M. and Sabetkasaei, M. The attenuating effect of curcumin on morphine dependence in rats: the involvement of spinal microglial cells and inflammatory cytokines. *Iranian Journal of Pharmaceutical Research* 2019; 18(Suppl1):198-207.

Heidari Khoei, H., Fakhri, S., **Parvardeh, S.**, Shams Mofarahe, Z., Ghasemnejad-Berenji, H., Nazarian, H. and Baninameh, Z. Testicular toxicity and reproductive performance of streptozotocin-induced diabetic male rats: the ameliorating role of silymarin as an antioxidant. *Toxin Reviews* 2019; 38(3):223-233.

Aminianfar, M., **Parvardeh, S.** and Soleimani, M. In vitro and in vivo assessment of silver nanoparticles against *Clostridium botulinum* type A botulinum. *Current Drug Discovery Technologies* 2019; 16(1):113-119.

Heidari Khoei, H., Fakhri, S., **Parvardeh, S.**, Shams Mofarahe, Z., Baninameh, Z. and Vardiani, M. Astaxanthin prevents the methotrexate-induced reproductive toxicity by targeting oxidative stress in male mice. *Toxin Reviews* 2019; 38(3):248-254.

Parvardeh, S., Sabetkasaei, M., Moghimi, M., Masoudi, A., Ghafghazi, S. and Mahboobifard, F. Role of L-arginine/NO/cGMP/K_{ATP} channel signaling pathway in the central and peripheral antinociceptive effect of thymoquinone in rats. *Iranian Journal of Basic Medical Sciences* 2018; 21(6):625-633.

Safaripour, S., Nemati, Y., **Parvardeh, S.**, Ghafghazi, S., Fouladzadeh, A. and Moghimi, M. Role of L-arginine/SNAP/NO/cGMP/K_{ATP} channel signalling pathway in antinociceptive effect of α -terpineol in mice. *Journal of Pharmacy and Pharmacology* 2018;70(4):507-515.

Naderi, Y., **Parvardeh, S.**, Zanjani, T.M. and Sabetkasaei, M. Neuroprotective effect of paroxetine on memory deficit induced by cerebral ischemia after transient bilateral occlusion of common carotid arteries in rat. *Iranian Journal of Pharmaceutical Research* 2018;17(1):215-224.

Naderi, Y., Sabetkasaei, M., **Parvardeh, S.** and Zanjani, T.M. Neuroprotective effect of minocycline on cognitive impairments induced by transient cerebral ischemia/reperfusion through its anti-inflammatory and anti-oxidant properties in male rat. *Brain Research Bulletin* 2017;131:207-213.

Moghimi, M., **Parvardeh, S.**, Zanjani, T.M. and Ghafghazi, S. Protective effect of α -terpineol against impairment of hippocampal synaptic plasticity and spatial memory following transient cerebral ischemia in rats. *Iranian Journal of Basic Medical Sciences* 2016;19(9):960-969.

Hosseinzadeh, H., **Parvardeh, S.**, Asl, M.N., Sadeghnia, H.R. and Ziaee, T. Effect of thymoquinone and Nigella sativa seeds oil on lipid peroxidation level during global cerebral ischemia-reperfusion injury in rat hippocampus. *Phytomedicine* 2007;14(9):621-627.

Hosseinzadeh, H., Nassiri Asl, M. and **Parvardeh, S.** The effects of carbenoxolone, a semisynthetic derivative of glycyrrhizinic acid, on peripheral and central ischemia-reperfusion injuries in the skeletal muscle and hippocampus of rats. *Phytomedicine* 2005;12:632-637.

Hosseinzadeh, H., Nassiri-Asl, M., **Parvardeh, S.** and Mansouri, M.T. The effects of carbenoxolone on spatial learning in the Morris Water Maze task in rats. *Medical Science Monitor* 2005;11:88-94.

Wu, C.P., Cheung, G., Rakhshani, N., **Parvardeh, S.**, Asl, M.N. and Zhang, L. CA3 Neuronal activities of dorsal and ventral hippocampus are differentially altered in rats after prolonged post-ischemic survival. *Neuroscience* 2005;130:527-539.

Hosseinzadeh, H. and **Parvardeh, S.** Anticonvulsant effects of thymoquinone, the major constituent of Nigella sativa seeds, in mice. *Phytomedicine* 2004;11(1):56-64.