Curriculum Vitae

Personal Data:

Name & Surname: Samira Choobani

Date & Place of Birth: 1360/6/30, Tehran, Iran.

Gender: Female

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Work address: Dept. of Physiology and Pharmacology, Pasteur Institute of Iran, No. 69,

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Academic Record:

2025 Ph.D. student in Medical physiology, Shahid Beheshti university of medical scince, Tehran, Iran.

2000-2004 B.Sc in Biology, Azad University, Tehran, Iran.

2004-2007 M.Sc. in Animal Physiology, Azad University, Damghan, Iran.

EMPLOYMENT

October 2007 up to now; Full time laboratory research at the Physiology & Pharmacology department of Pasteur Institute of Iran.

Publications:

- Choopani S, Kiani B, Aliakbari S, Babaie J, Golkar M, Pourbadie HG, Sayyah M. Latent toxoplasmosis impairs learning and memory yet strengthens shortterm and long-term hippocampal synaptic plasticity at perforant pathwaydentate gyrus, and Schaffer collatterals-CA1 synapses. Scientific report . 2023 Jun.
- Azizi Z, <u>Choopani S</u>, Salimi M, Majlessi N, Naghdi N. Protein Kinase C Involvement in Neuroprotective Effects of Thymol and Carvacrol Against Toxicity Induced by Amyloid-β in Rat Hippocampal Neurons. Basic Clin Neurosci. 2022 May-Jun.



- Radpour M, <u>Choopani S</u>, Pourbadie HG, Sayyah M. Activating toll-like receptor 4 after traumatic brain injury inhibits neuroinflammation and the accelerated development of seizures in rats. Exp Neurol. 2022 Nov.
- Azizi Z, Majlessi N, <u>Choopani S</u>, Naghdi N. <u>Neuroprotective effects of carvacrol against Alzheimer's disease and other neurodegenerative diseases:</u> A review. Avicenna J Phytomed. 2022 Jul-Aug.
- Enshaeieh M, Saadatnia G, Babaie J, Golkar M, <u>Choopani S</u>, Sayyah M. <u>Valproic Acid Inhibits Chronic Toxoplasma Infection and Associated Brain Inflammation in Mice.</u> Antimicrob Agents Chemother. 2021 Sep.
- Heysieattalab S, Doostmohammadi J, Darvishmolla M, Saeedi N, Hosseinmardi N, Gholami M, Janahmadi M, <u>Choopani S</u>. <u>Non-selective COX inhibitors impair memory formation and short-term but not long-term synaptic plasticity.</u> <u>Naunyn Schmiedebergs Arch Pharmacol. 2021 Sep.</u> Naunyn Schmiedebergs Arch Pharmacol. 2021 Sep.
- Afsharinasab A, Moayer F, Amini M, <u>Choopani S</u>, Tahmasvand R, Dehghani S, Mousavi SZ, Salimi M. <u>Two Novel Compounds with Tri-aryl Structures as</u> <u>Effective Anti-Breast Cancer Candidates In-vivo.</u> Iran J Pharm Res. 2020 Spring.
- Pourbadie HG, Sayyah M, Khoshkholgh-Sima B, <u>Choopani S</u>, Nategh M, Motamedi F, Shokrgozar MA. <u>Early minor stimulation of microglial TLR2 and TLR4 receptors attenuates Alzheimer's disease-related cognitive deficit in rats: behavioral, molecular, and electrophysiological evidence.</u> Neurobiol Aging. 2018 Oct.
- Babaie J, Sayyah M, <u>Choopani S</u>, Asgari T, Golkar M, Gharagozli K. <u>Toxoplasmosis accelerates acquisition of epilepsy in rats undergoing chemical kindling.</u> Epilepsy Res. 2017 Sep.
- Goudarzvand M, <u>Choopani S</u>, Shams A, Javan M, Khodaii Z, Ghamsari F, Naghdi N, Piryaei A, Haghparast A. <u>Focal Injection of Ethidium Bromide as a Simple Model to Study Cognitive Deficit and Its Improvement.</u> Basic Clin Neurosci. 2016 Jan.

- Dehghan-Shasaltaneh M, Naghdi N, <u>Choopani S</u>, Alizadeh L, Bolouri B, Masoudi-Nejad A, Riazi GH. <u>Determination of the Best Concentration of Streptozotocin to Create a Diabetic Brain Using Histological Techniques.</u> J Mol Neurosci. 2016 May.
- Eslami M, Ghanbari E, Sayyah M, Etemadi F, <u>Choopani S</u>, Soleimani M, Amiri Z, Hadjighassem M. <u>Traumatic brain injury accelerates kindling epileptogenesis in rats</u>. Neurol Res. 2016 Mar.
- Soodi M, Naghdi N, Hajimehdipoor H, <u>Choopani S</u>, Sahraei E. <u>Memoryimproving activity of Melissa officinalis extract in naïve and scopolamine-treated rats.</u> Res Pharm Sci. 2014 Mar-Apr.
- Farahmandfar M, Kadivar M, Naghdi N, <u>Choopani S</u>, Zarrindast MR. <u>Influence of pre-exposure to morphine on cannabinoid-induced impairment of spatial memory in male rats.</u>Behav Brain Res. 2013 Nov.
- Moradpour F, Naghdi N, Fathollahi Y, Javan M, *Choopani S*, Gharaylou Z. <u>Prepubertal castration improves spatial learning during mid-adolescence in rats.</u> Prog Neuropsychopharmacol Biol Psychiatry. 2013 Oct.
- Mehdizadeh M, Dabaghian F, Nejhadi A, Fallah-Huseini H, <u>Choopani S</u>, Shekarriz N, Molavi N, Basirat A, Mohammadzadeh Kazorgah F, Samzadeh-Kermani A, Soleimani Asl S. <u>Zingiber Officinale Alters 3,4-methylenedioxymethamphetamine-Induced Neurotoxicity in Rat Brain.</u>Cell J. 2012 Fall.
- Ahmadi A, Sayyah M, Khoshkholgh-Sima B, *Choopani S*, Kazemi J, Sadegh M, Moradpour F, Nahrevanian H. <u>Intra-hippocampal injection of lipopolysaccharide inhibits kindled seizures and retards kindling rate in adult rats.</u> Exp Brain Res. 2013 Apr.
- Torkaman-Boutorabi A, Ali Shahidi G, <u>Choopani S</u>, Reza Zarrindast M. <u>Association of monoamine oxidase B and catechol-O-methyltransferase polymorphisms with sporadic Parkinson's disease in an Iranian population.</u> Folia Neuropathol. 2012.

- Torkaman-Boutorabi A, Shahidi GA, <u>Choopani S</u>, Rezvani M, Pourkosary K, Golkar M, Zarrindast MR. <u>The catechol-O-methyltransferase and monoamine oxidase B polymorphisms and levodopa therapy in the Iranian patients with sporadic Parkinson's disease. Acta Neurobiol Exp (Wars). 2012.</u>
- Abbasian M, Sayyah M, Babapour V, Mahdian R, <u>Choopani S</u>, Kaviani B. <u>Upregulation of connexins 30 and 32 gap junctions in rat hippocampus at transcription level by chronic central injection of lipopolysaccharide.</u> Iran Biomed J. 2012.
- Sayyah M, Kaviani B, Khoshkholgh-Sima B, Bagheri M, Olad M, *Choopani S*, Mahdian R. Effect of chronic intracerebroventricluar administration of lipopolysaccharide on connexin43 protein expression in rat hippocampus.Iran Biomed J. 2012.
- Majlessi N, <u>Choopani S</u>, Kamalinejad M, Azizi Z. <u>Amelioration of amyloid β-induced cognitive deficits by Zataria multiflora Boiss. essential oil in a rat model of Alzheimer's disease.</u>CNS Neurosci Ther. 2012 Apr.
- Zarifkar A, *Choopani s*, Ghasemi R, Naghdi N, Maghsoudi AH, Maghsoudi N, Rastgar K, Moosavi M. Agmatin prevents LPS-induced spatial memory impairment and hippocampal apoptosis. Eur j pharmacol, 2010 feb 23.
- Emamian S, Naghdi N, Sepehri H, Jahanshahi M, Sadeghi Y, <u>Choopani S.</u> Learning impairment caused by intra-CA1 microinjection testosterone increases the number of astrocytes. Behav Brain Res, 2010 mar.
- Nahid Majlessi, <u>Samira Choopani</u>, Tahereh Bozorgmehr, Zahra Azizi, Involvement of hippocampal nitric oxide in spatial learning in the rat. Neurobiology of Learning and Memory, 2008.
- <u>Choopani S</u>, Moosavi M, Naghdi N. Involvement of nitric oxide in insulin induced memory improvement. Peptides. 2008 Jan 18.
- Moosavi M, Naghdi N, *Choopani S*. Intra CA1 insulin microinjection improves memory consolidation and retrieval. Peptides. 2007 May; 28(5):1029-34.

Abstracts presented in Scientific Meetings:

- 5th International and 26th National Iranian Congress of Physiology and PharmacologyOctober 11-13, 2023Semnan, Iran, Title of poster presented: Investigating the effect of Toxoplasma gondii infection on spatial learning and memory in rats.
- 20th Congress on Physiology & Pharmacology, 2011, Hamedan, Iran. Title of poster presented: Agmatine prevent LPS-induced spatial memory impairment and hippocampal apoptosis.
- 19th Congress on Physiology & Pharmacology, 2009, Tehran, Iran, Title of poster presented: Involvement of nitric oxide in insulin induced memory improvement.
- 3rd International Congress on Brain and Behaviour, 28 November-2 December 2007, Thessaloniki, Greece. Title of poster presented: Effects of nitric oxide synthase inhibition in the CA1 region of rat hippocampus on spatial learning.
- 3rd International Congress on Brain and Behaviour, 28 November-2 December 2007, Thessaloniki, Greece. Title of poster presented: Post-training nitric oxide synthase inhibition in the CA1 region of rat hippocampus does not impair spatial memory consolidation.
- 3rd International Congress on Brain and Behaviour, 28 November-2 December 2007, Thessaloniki, Greece. Title of poster presented: Intra CA1 insulin microinjection improves memory consolidation.
- 18th Congress on Physiology & Pharmacology, 2007, Mashhad, Iran, Title of poster presented: Effect of nitric oxide synthase inhibition in the Ca1 region of rat hippocampus on spatial memory.

Research Projects:

- The effect of carvacrol on synaptic plasticity and cognitive deficits in Amyloid β induced Alzheimer's disease model in rats.
- Induced expression of C-terminal peptide of rabies glycoprotein in brain and evaluation of its role on synaptic function and behavioral performance in rats.
- Improving effect of monophosphoryl lipid A on memory deficit induced by traumatic brain injury in rats.

- Evaluation of synaptic function of cerebral neurons infected with rabies virus at different time points: An in-vivo study with rabies treatment approach.
- Induced expression of glycoprotein of rabies virus in neural cells and its protective role in a rat model of Alzheimer's disease.
- The study of changes in synaptic transmission in the rat hippocampus in male puberty
- The role of voltage gated potassium and NMDA channels in the pathogenesis of rabies G protein.
- The effect of exercise and insulin on stress-induced changes in learning.
- A study of association between cystain C and clusterin genes polymorphisms and late-onset Alzheimer's disease.
- A study on therapeutic effects of Cinnamomum zeylanicum extract on cognitive deficits in an animal model of Alzheimer's disease.
- Catechol-O-methyltransferase and monoamine oxidase susceptibility to sporadic Bgenes polymorphism and Parkinson disease in an Iranian population.
- The study on the protective effect of agmatin against LPS-induced spatial memory impairment.
- Catechol-O-methyltransferase polymorphism and response to levodopa treatment in the Iranian Parkinson's disease patients.
- The effect of zinc deficiency and zinc supplement diets the last week gestation and during lactation on learning, memory and motor function in rat's offspring.
- The study on the role of nitric oxide in insulin induced spatial learning memory improvement.
- Interaction of hippocampal nitric oxide (NO) and cholinergic system with testosterone as assessed spatial learning & memory in morris water maze.
- Effect of calcium blockers on spatial learning and memory in rats.
- Effects of nitric oxide synthase inhibition in the CA1 region of rat hippocampus on spatial learning in the Morris water maze.

Laboratory Skills:

- Sterotaxic surgery
- Animal behavioral studies, especially learning and memory by Morris Water Maze, passive avoidance learning by shuttle Box, Anxiety by Plus Maze
- Molecular biology techniques:
 - -Protein extraction and Western blothing
 - -DNA Extraction
 - -Polymerase chain reaction (PCR)
 - Restriction fragment length polymorphism (RFLP)
 - -Electrophoresis.
- Electrophysiology (field potential recording)

- Immunohistochemistry
- The preparation of tissue sections and specific staining