Curriculum Vitae

Personal Information

Dr. Seyed Zanyar Athari

Birth: 1995/09/10 **Nationality**: Iranian

Academic Position: Assistant Professor **Languages:** Kurdish, Persian, English

Work Address: Department of Physiology, Tabriz University of Medical Sciences, Tabriz, Iran

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Educations and Thesis

Doctor of Veterinary Medicine (DVM) - 2020

Islamic Azad University, Tabriz Branch, Tabriz, Iran.

Thesis Title: Study on protective effects of aerobic exercise with simultaneous Cerebrolysin drug administration on 6-hydroxy dopamine-induced model of Parkinson's disease (PD) in adult male rats.

PhD of Medical Physiology - 2025

Tabriz University of Medical Sciences, Tabriz, Iran.

Thesis Title: Effect of AdipoRon on motor impairment, mitochondrial function and dopaminergic system in 6-hydroxy dopamine-induced Parkinson's disease model adult male rats.

Professional Memberships

- Iranian Veterinary Organisation 2020.
- Iranian Society of Physiology and Pharmacology Since 2020.
- International Brain Research Organization (IBRO) Since 2021.
- Iranian Society of Parkinson's Disease Since 2023.

Teaching and Advising

- 1. Lectures and courses in the Neurophysiology.
- 2. Supervising and advising MSc and GP students.
- 3. Holding courses on the principles of working with laboratory animals.
- 4. Holding a workshop on cognitive disorders and behavioral tests in laboratory animals.

- 5. Holding a workshop on the principles of working with stereotaxic devices and brain sampling in laboratory animals.
- Teaching practical physiology courses at undergraduate and doctoral levels in general medicine, dentistry, and pharmacy.
- 7. Teaching physiology of nervous system, endocrine system, cells, heart and blood circulatory system, respiratory system, Renal system, and Gastrointestinal system.

Honors and Awards

- Outstanding PhD student in the Department of Physiology, Faculty of Medicine, Tabriz University of Medical Sciences. 2022 – 2023.
- Encouragement from the Vice Chancellor of Graduate Studies of the Faculty of Medicine for active participation in educational and research fields and the establishment of the Medical Physiology Student Scientific Association 2024.
- The best PhD student in the Department of Physiology, Faculty of Medicine, Tabriz University of Medical Sciences in the academic year 2022-2023.
- Selected as a National Outstanding Research Student by the National Committee for Student Research
 2024.
- National Outstanding Education Student at PhD Course 2024.
- Member of the Office of Brilliant Talents, Tabriz University of Medical Sciences 2024.
- Key speaker at the Stroke Panel of the 13th Congress of Basic and Clinical Neurosciences 2024.
- Member of the Executive Committee of the 3rd Neuromethod Summer School at Tabriz University of Medical Sciences – 2023.
- Member of the Executive Committee of the 4th Neuromethod Summer School at Tabriz University of Medical Sciences – 2024.
- Secretary of the Medical Physiology Student Scientific Association of Tabriz University of Medical Sciences - 2024.
- Setting up the Morris Water Maze setup and the stereotaxic setup for laboratory animals, Faculty of Veterinary Medicine, Islamic Azad Tabriz University of Medical Sciences 2020.
- Selection of the poster presented at the 5th International Congress and the 26th Iranian Congress of Physiology and Pharmacology as the best poster 2022.

Publications

Fabrication

- Fabrication of tissue chamber to record brain tissue In vitro, A01N 1/02 C12M 3/00 2021.
- Laboratory Rodents' Universal Surgery Station, A61B50/00; A61D 3/00 2024

Book

- An overvie on parkinson's disease and rat models – Pazhvak Alborz Publication - 9786226021937.

Certificates and courses completed

- 1. Laboratory techniques (cell culture, ELISA, Real-Time PCR)
- 2. ICDL certificate from a technical and professional organization
- 3. Mendeley and End Note
- 4. Working with Corel Draw software
- 5. Working with statistical software (SPSS and Graph-Pad Prism)
- Modeling in laboratory animals (Parkinson's, Alzheimer's, stroke, diabetes, ischemia/reperfusion)

Published Articles

ISI, PubMed, Scopus

- Athari, S. Z., Kazmi, S., Vatandoust, S. M., Mahmoudi, J., Farajdokht, F., Hajihosseinlou, F., ... & Sadigh-Eteghad, S. (2025). Varenicline Attenuates Memory Impairment in Amyloid-Beta-Induced Rat Model of Alzheimer's Disease. *Neurochemical Research*, 50(2), 86.
- 2. <u>Athari, S. Z.,</u> Farajdokht, F., Mohajeri, D., Nourazar, M.A., (2024). Synergistic effects of Cerebrolysin and aerobic exercise on 6-hydroxydopamine-inducedmodel of Parkinson's disease in adult male rats. Basic and Clinical Neuroscience, **Accepted.**
- 3. Athari, S. Z., Keyhanmanesh, R., Farajdokht, F., Karimipour, M., Azizifar, N., Alimohammadi, S., & Mohaddes, G. (2024). AdipoRon improves mitochondrial homeostasis and protects dopaminergic neurons through activation of the AMPK signaling pathway in the 6-OHDA-lesioned rats. European Journal of Pharmacology, 177111.
- Alimohammadi, S., Mohaddes, G., Keyhanmanesh, R., <u>Athari, S. Z.</u>, Azizifar, N., & Farajdokht, F. (2024). Intranasal AdipoRon mitigates motor and cognitive deficits in hemiparkinsonian rats through neuroprotective mechanisms against oxidative stress and synaptic dysfunction. Neuropharmacology, 110180.
- Mahmoudi, J., Kazmi, S., Vatandoust, S., <u>Athari, S. Z.</u>, Sadigh-Eteghad, S., Morsali, S., ... & Farajdokht,
 F. (2024). Coenzyme Q10 and Vitamin E Alleviate Heat Stress-Induced Mood Disturbances in Male
 Mice: Modulation of Inflammatory Pathways and the HPA Axis. *Behavioural Brain Research*, 115259.
- Azizifar, N., Mohaddes, G., Keyhanmanesh, R., <u>Athari, S. Z.</u>, Alimohammadi, S., & Farajdokht, F. (2024). Intranasal AdipoRon Mitigated Anxiety and Depression-Like Behaviors in 6-OHDA-Induced Parkinson's disease Rat Model: Going Beyond Motor Symptoms. *Neurochemical Research*, 1-13.
- 7. Mohammadzadeh, M., <u>Athari, S. Z.</u>, Ghiasi, F., Keyhanmanesh, R., Ghaffari-Nasab, A., Roshangar, L., ... & Bavil, F. M. (2024). Bone Marrow-Derived C-Kit+ Cells Improved Inflammatory IL-33/ST-2/ILC2 Axis in the Lung Tissue of Type 2 Diabetic Rats. *Applied Biochemistry and Biotechnology*, 1-15.
- 8. <u>Athari, S. Z.</u>, Farajdokht, F., Keyhanmanesh, R., & Mohaddes, G. (2024). AMPK signaling pathway as a potential therapeutic target for Parkinson's disease. *Advanced Pharmaceutical Bulletin*. *14*(1), 120-131.

- 9. Athari, S. Z., Mirzaie Bavil, F., Keyhanmanesh, R., Lotfi, H., Sajed, Y., Delkhosh, A., & Ghiasi, F. (2024). Voluntary exercise improves pulmonary inflammation through NF-κB and Nrf-2 in type 2 diabetic male rats. *Iranian Journal of Basic Medical Sciences*, 27(1), 74-80.
- 10. Mokhtari, B., Abdi, A., <u>Athari, S. Z.</u>, Nozad-Charoudeh, H., Alihemmati, A., & Badalzadeh, R. (2023). Effect of troxerutin on the expression of genes regulating mitochondrial biogenesis and microRNA-140 in doxorubicin-induced testicular toxicity. *Journal of Research in Medical Sciences: The Official Journal of Isfahan University of Medical Sciences*, 28, 31.
- 11. <u>Athari, S. Z.</u>, Karamouz, Z., Nourazar, M. A., Doustar, Y., & Anzabi, Y. (2022). Effect of hydroalcoholic extract of Panax ginseng and Ampicillin treatment in an animal model of Listeria monocytogenes-induced endocarditis. *Avicenna Journal of Phytomedicine*, 13(2), 109-117.
- 12. <u>Athari, S. Z.</u>, Farajdokht, F., Sadigh-Eteghad, S., Mohajeri, D., Nourazar, M. A., & Mohaddes, G. (2022). Hydroxychloroquine attenuated motor impairment and oxidative stress in a rat 6-hydroxydopamine model of Parkinson's disease. *International Journal of Neuroscience*, 1-10.
- **13.** Athari, S. Z., Mohajeri, D., Nourazar, M. A., & Doustar, Y. (2020). Updates on coronavirus (COVID-19) and kidney. *Journal of Nephropathology*, *9*(4), e34.

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- 14. <u>Athari, S. Z.</u>, Nasirzadeh, M. R., & Nourazar, M. A. Study on the effect of alcoholic extract of flaxseed and aerobic exercise on osteoporosis parameters on ovariectomized rats. *Razi Journal of Medical Sciences*, 29(8), 267-277.
- 15. <u>Athari, S. Z.</u>, Anzabi, Y., Karamouz, Z., & Nourazar, M. A. (2022). Effect of ginseng hydro-alcoholic extract along with aerobic exercise on antioxidant levels and inflammatory factors of cardiac tissue in male rat model of endocarditis caused by Listeria Monocytogenes (ATCC: 19114). *Veterinary Clinical Pathology*, *16*(63), 240-254.
- 16. <u>Athari, S. Z.</u>, Nourazar, A., & Mohajeri, D. (2022). Effects of aerobic exercise with simultaneous cerebrolysin drug administration on spatial memory in adult male rat model of Parkinson's disease. *Veterinary Clinical Pathology The Quarterly Scientific Journal*, 16(61), 87-102.
- 17. <u>Athari, S. Z.</u>, Nourazar, M., & Nasirzadeh, M. (2022). The effect of flaxseed alcoholic extract and aerobic exercise on oxidative status of heart tissue in ovariectomized rats. *Journal of Practical Studies of Biosciences in Sport*, 10(22), 30-40.
- **18.** <u>Athari, S. Z.</u>, Nourazar, M. A., & Nasirzadeh, M. R. (2022). Effect of Oleuropein Extract from Olive on Brain Oxidative Stress in Ovariectomized Diabetic Rats. *Medical Laboratory Journal*, *16*(3), 36-41.
- Hasanzadeh-Moghadam, M., Norouzi-Bonab, F., Zabihi, K., Motlagh Asghari, K., & <u>Athari, S. Z.</u>
 (2024). Mouse Model ofInternal Capsule Stroke Induced by Laser: A Novel Approach. *Biomedical Research Bulletin*, Accepted. (<u>Corresponding Author</u>)
- Norouzi-Bonab, F., Zabihi, K., Hasanzadeh-Moghadam, M., & <u>Athari, S. Z.</u> (2024). Rapid Extraction of Prefrontal Cortex and Hippocampus for Molecular Analysis in Rats. . *Biomedical Research Bulletin*, 2(1), 1-3. (<u>Corresponding Author</u>)

- 21. Norouzi-Bonab, F., Zabihi, K., & <u>Athari, S. Z.</u> (2023). Combination of Vitamin D Intake and Aerobic Exercise Protected Young Female Rats From Oxidative Stress and Memory Impairment Caused by Maternal Vitamin D Deficiency. *Biomed Res*, *1*(4), 136. (Corresponding Author)
- 22. Norouzi-Bonab, F., Zabihi, K., Hasanzadeh-Moghadam, M., & <u>Athari, S. Z.</u> (2023). Visualized Rapid Brain Extraction in Rats. *Biomedical Research Bulletin*, 1(3), 109-112. (<u>Corresponding</u> Author)

Articles Presented in Seminars and Congresses

- Immunological and histopathological study on the effect of Ginseng extract and Ampicillin on endocarditis caused by Listeria monocytogenes - The 5th International Congress on Biomedicine (ICB2021) - Poster - 2021.
- Effects of Ginseng extract on immunopathological changes in experimental renal infection caused by Listeria monocytogeneses in mice - The 5th International Congress on Biomedicine (ICB2021) – Poster – 2021.
- 3. Effects of Cerebrolysin drug administration and aerobic exercise on spatial memory impairment in adult male rat model of Parkinson's disease (PD) 4th international and 25th Iranian Congress of Physiology and Pharmacology Poster 2021.
- 4. Citicoline Attenuate Oxidative Stress and Motor Complication in Rat Model of Parkinson's Disease 5th International Congress and 26th Congress of Physiology and Pharmacology Poster 2023.
- Cerebrolysin and Environmental Enrichment attenuate on Hippocampal Oxidative Stress Status and Neuroinflammation in Post-Ischemic Depression Model in Mice - 12th Basic and Clinical Neuroscience Congress – 2023.
- 6. Effect of Hydroxychloroquine on Locomotor disturbances and Oxidative Stress Status in Parkinson's disease in Adult Male Rat 12th Basic and Clinical Neuroscience Congress Poster 2023.

Research Projects

- Evaluation of the effects of hydroxychloroquine on behavioral, histopathological, biochemical, and alphasynuclein levels of the brain in 6-hydroxy dopamine-induced Parkinson's model in adult male rats, Neurosciences Research center, Tabriz University of Medical Sciences, 2021-2022.
- Protective effect of Eplerenone on renal ischemic-reperfusion injury in rat animal model, Kidney Research Center, Tabriz University of Medical Sciences, 2022
- Effects of voluntary exercise and insulin glargine on learning and memory, oxidative stress indices, and synaptic proteins of young male offspring born to gestational diabetic dams, Drug Applied Research Center, Tabriz University of Medical Sciences, 2023.
- 4. The effect of AdipoRon on learning and memory, oxidative stress indices, BDNF and PSD95 in the hippocampus of 6-hydroxy dopamine-induced Parkinson model in adult male rats, Neurosciences Research center, Tabriz University of Medical Sciences, 2023.

- The effect of intranasal AdipoRon administration on depressive- and anxiety-like behaviors and inflammatory factors in the prefrontal cortex in 6-hydroxy dopamine-induced Parkinson's model in adult male rats, Drug Applied Research Center, Tabriz University of Medical Sciences, 2023.
- 6. The effect of voluntary exercise on renal tissue fibrosis and the expressions of miR27a, Smad / TGF-β and PPAR-γ in type 2 diabetic male rats, Drug Applied Research Center, Tabriz University of Medical Sciences, 2023.
- 7. Effect of AdipoRon on motor impairment, mitochondrial function and dopaminergic system in adult male rats model of Parkinson's disease, Drug Applied Research Center, Tabriz University of Medical Sciences, 2023.
- 8. Effect of AdipoRon on the rate of neurogenesis in nigrostriatal pathway in adult male rats model of Parkinson's disease, Stem Cell Research Center, Tabriz University of Medical Sciences, 2023.
- Effect of pretreatment with transcranial low-level laser on migraine-like symptoms and the expression of
 inflammatory proteins in the trigeminal ganglion in the nitroglycerin-induced migraine model in male
 mice, Drug Applied Research Center, Tabriz University of Medical Sciences, 2023.
- 10. Effect of transcranial low-Level Laser Therapy on cognitive disorders and protein levels of Tau and BACE-1 in a chronic sleep restriction model in male mice, Neurosciences Research center, Tabriz University of Medical Sciences, 2023.
- Effect of pretreatment with transcranial low-level laser therapy on anxiety- and depressive-like behaviors and neuroinflammatory markers in chronic sleep deprivation model in male mice, Drug Applied Research Center, Tabriz University of Medical Sciences, 2023.
- 12. Intranasal thermosensitive hydrogel containing coenzyme Q10 and green synthesized cerium oxide/chitosan nanoparticles for the treatment of stroke, Neurosciences Research center, Tabriz University of Medical Sciences, 2024.
- 13. The effect of Wharton's Jelly-derived Mesenchymal stem cell secretome on learning and memory impairment and anxiety in offspring of dams exposed to gestational hypoxia, Stem Cell Research Center, Tabriz University of Medical Sciences, 2024.

Research Interests

- 1. Cognition and behavior and the molecular basis.
- 2. Neurodegenerative diseases and molecular basis.
- 3. Neurogenesis.
- 4. Endocrine disorder specifically Diabetes.

References

• Upon on request.