

Curriculum Vitae

Personal Information

First Name: Farideh

Last Name: Iravanpour

Gender/Marital Status: Female/Married

Date/place of Birth: January 07, 1985/ Boushehr, Iran.

Academic Rank: Ph.D. in Neuroscience

Current Appointments

Research Assistant (Since January 2021).

Neuroscience research center, Shiraz University of Medical Sciences, Shiraz, Iran.

Address

Neuroscience Research Center, Chamran Hospital, Chamran Boulevard, Shiraz, Iran.

Tel: +9871-36234508

Fax: +9871-36234508

Phone number: +98 9177033933

E-mail: Faridehiravanpour@yahoo.com

Educations: Academic Preparations

2015-2021 **Ph.D. in Neuroscience**, Shahid Beheshti University of Medical Sciences (SBMU),
Tehran, Iran. CGPA: 18.37 /20 , Rank: 1st in class

2010-2014 **M.Sc. in Medical Physiology**, Shiraz University of Medical Sciences (SUMS), Shiraz,
Iran. CGPA : 17.30 /20

2006-2010 **B.Sc in Cellular & Molecular Biology**, Azarbaijan Shahid Madani University, Tabriz, Iran.

Dessertations

- **Ph.D. Thesis:** Investigating the insulin effects on nigrostriatal neurons survival and mitochondrial function in a rat model of Parkinson's disease.

Supervisors: Prof. Abolhassan Ahmadiani, *Professor in pharmacology*; Prof. Leila Dargahi, *Professor in pharmacology*.

Degree: Excellent, 20/20

- **M.sc. Thesis:** Role of calcium with or without Trolox on ROS generation and function of fresh and frozen-thawed human spermatozoa

Supervisors: Prof. Sara Keshtgar, *Professor in Medical Physiology*.

Degree: Excellent, 19/20

Research interests

- Molecular and Cellular Neuroscience.
- Neurodegenerative disease.
- Translational Neuroscience.
- Mitotherapy and Mitochondrial Transplantation.
- Stem Cell Therapy.

Publications

1) **Iravanpour, F.**, Farrokhi, M. R., Jafarina, M., & Oliaee, R. T. (2023). The effect of SARS-CoV-2 on the development of Parkinson's disease: the role of α -synuclein. *Hum Cell*. doi:10.1007/s13577-023-00988-2.

- 2) Wu, D., Jin, Y., Xing, Y., Abate, M. D., Abbasian, M., Abbasi-Kangevari, M., . . ., **Iravanpour, F.**,..., Tam, L.-s. (2023). Global, regional, and national incidence of six major immune-mediated inflammatory diseases: findings from the global burden of disease study 2019. *eClinicalMedicine*, 64. doi:10.1016/j.eclinm.2023.102193.
- 3) Firouzan, B., **Iravanpour, F.**, Abbaszadeh, F., Akparov, V., Zaringhalam, J., Ghasemi, R., & Maghsoudi, N. (2023). Dipeptide mimetic of BDNF ameliorates motor dysfunction and striatal apoptosis in 6-OHDA-induced Parkinson's rat model: Considering Akt and MAPKs signaling. *Behavioural Brain Research*, 452, 114585. doi:<https://doi.org/10.1016/j.bbr.2023.114585>.
- 4) Jamali, E., Shapoori, S., Farrokhi, M. R., Vakili, S., Rostamzadeh, D., **Iravanpour, F.**, . . . Jafarinia, M. (2023). Effect of Disease-Modifying Therapies on COVID-19 Vaccination Efficacy in Multiple Sclerosis Patients: A Comprehensive Review. *Viral Immunology*, 36(6), 368-377. doi:10.1089/vim.2023.0035.
- 5) Moradi, S., Parsaei, A., Saeedi Moghaddam, S., Aryannejad, A., Azadnajafabad, S., Rezaei, N., . . . , **Iravanpour, F.**,..., Farzadfar, P. F. (2023). Metabolic risk factors attributed burden in Iran at national and subnational levels, 1990 to 2019. *Frontiers in Public Health*, 11.
- 6) Farrokhi, M. R., **Iravanpour, F.**^{*}, & Nejabat, N. (2023). Development of Acute Transverse Myelitis following COVID-19 Infection: A Review on the Potential Pathways. *European Neurology*, 86(3), 209-216. doi:10.1159/000529927.
- 7) Zalpoor, H., Akbari, A., Nabi-Afjadi, M., Forghaniesfidvajani, R., Tavakol, C., Barzegar, Z., **Iravanpour, F.**,. . . , Farrokhi, M. R. (2022). Hypoxia-inducible factor 1 alpha (HIF-1 α) stimulated and P2X7 receptor activated by COVID-19, as a potential therapeutic target and risk factor for epilepsy. *Human Cell*, 35(5), 1338-1345. doi:10.1007/s13577-022-00747-9.
- 8) **Iravanpour, F.**, Dargahi, L., Rezaei, M., Haghani, M., Heidari, R., Valian, N., & Ahmadiani, A. (2021). Intranasal insulin improves mitochondrial function and attenuates motor deficits in a rat 6-OHDA model of Parkinson's disease. *CNS Neuroscience & Therapeutics*, 27(3), 308-319. doi:<https://doi.org/10.1111/cns.13609>
- 9) Keshtgar, S., **Iravanpour, F.**, Gharesi-Fard, B., & Kazerooni, M. (2016). Combined Effect of Trolox and EDTA on Frozen-Thawed Sperm Quality. *Iran J Med Sci*, 41(3), 230-237.
- 10) **Iravanpour, F.**, KESHTGAR, S., & EBRAHIMI, B.. (2022). The Relation Between Intracellular Calcium Concentration and Reactive Oxygen Species Production in Fresh and Cryopreserved-Thawed Human Spermatozoa. *ARMAGHAN DANESH*, 26(5 (148)), 729-743. SID. <https://sid.ir/paper/1008920/en>.
- 11) **Iravanpour F**, Farrokhi MR, Mousavi SR, Soltani A, Hosseini M. The frequency of various spinal cord tumors (SCTs) in surgically treated patients at Shiraz Shahid Chamran Hospital from 2012 to 2022. *Egyptian Journal of Neurosurgery*. 2023;38(1):60.
- 12) Safdarian M, Trinkka E, Rahimi-Movaghar V, Thomschewski A, Aali A,...., **Iravanpour F** ,..., Abady GG, et al. Global, regional, and national burden of spinal cord injury, 1990–2019: a systematic analysis for the Global Burden of Disease Study 2019. *The Lancet Neurology*.

2023;22(11):1026-47.

13) Ali Amirkafi, Faezeh Mohammadi, Arash Tehrani-Banihashemi, Maziar Moradi-Lakeh, Christopher JL Murray,...., **Iravanpour F**, Mohsen Naghavi, Ali H Mokdad. Drug-use disorders in the Eastern Mediterranean Region: a glance at GBD 2019 findings. *Social Psychiatry and Psychiatric Epidemiology*, 2023/11/24 2023.

14) Patricia Cullen, Amy E Peden, Kate L Francis, Karly I Cini, Peter Azzopardi, Holger Möller, Maragaret Peden, Susan M Sawyer,... , **Iravanpour F**, Sally Nathan, Rohina Joshi, George C Patton, Rebecca Q Ivers . Interpersonal violence and gender inequality in adolescents: a systematic analysis of Global Burden of Disease data from 1990 to 2019. *Journal of Adolescent Health*. 2023/11/21/ 2023.

15) Morteza Jafarinia, Majid Reza Farrokhi, Sina Vakili, Maryam Hosseini, Maryam Azimzadeh, Babak Sabet, Shima Shapoori, **Farideh Iravanpour**, Razieh Tavakoli Oliaee. Harnessing the therapeutic potential of mesenchymal stem/stromal cell-derived extracellular vesicles as a novel cell-free therapy for animal models of multiple sclerosis. *Experimental Neurology*. 2023/12/30/ 2023:114674.

16) Sharma R, Abbastabar H, Abdulah DM,...., **Iravanpour F**, et al. Temporal patterns of cancer burden in Asia, 1990-2019: a systematic examination for the Global Burden of Disease 2019 study. *The Lancet Regional Health - Southeast Asia*. 2024/1/2

Peresentations/ Conferences

- 1) IBRO/APRC Associate School on Neurological and Neuromuscular Disorders: An insight into its approach and Neurodiagnostic techniques, Dharan, Nepal, March 10-14, 2019.
- 2) **Farideh Iravanpour**, Abolhassan Ahmadiani, Mohsen Rezaei. Intranasal insulin ameliorate motor deficits via improvement of mitochondrial respiratory chain activity in 6-hydroxydopamine lesioned rats. *Poster Presentation, 3rd IBRO/APRC Chandigarh Neuroscience School, University Institute of Pharmaceutical Sciences, Panjab University, Chandigarh, India, 2018.*
- 3) *IANR VIII & 12th GCNN Congress, Tehran, Iran, 27th-30th April 2015.*
- 4) **Iravanpour F**, Keshtgar S, Gharesi-fard B. Intracellular Calcium Concentration and ROS Generation in Frozen-Thawed Sperms. *Oral Presentation, International Congress on Reproduction-ISERB 2015, Tehran, Iran, 2015.*
- 5) Keshtgar S, Forootan Jahromi F, Ghani E, **Iravanpour F**. Effectiveness of NBT test in evaluation of ROS generation by human sperm. *Poster Presentation, 1st International Congress on Reproductive Ethics & 3rd International Congress on Ethics and Modern Methods of Infertility Treatment, 2013, Jahrom, Iran, 2013.*

Major Laboratory Techniques Acquired

- Animal handling.
- Animal behavioral tests including Rotarod test, Beam test and Apomorphine-induced rotation test.
- Stereotaxic surgery.
- Animal models of Parkinson's disease.
- Intranasal administration of freely moving (non-anesthetized) animals rats.
- Dissection of animal's brain.
- Perfusion, brain fixation.
- Cryosectioning and Immunohistochemistry techniques.
- Immunocytochemistry.
- Fluorescence & Phase-contrast microscopy.
- DNA isolation, RNA isolation, Real-Time PCR.
- Isolation of mitochondria from rodents brain.
- Mitochondrial function evaluation techniques including:
 - Examining the activity of the mitochondrial dehydrogenases by MTT assay,
 - Measurement of mitochondrial ATP content using a Luciferaseluciferin based kit,
 - Evaluation of mitochondrial swelling by the light scattering method,
 - Estimation of mitochondrial depolarization using the cationic fluorescent probe Rhodamine 123,
 - Evaluation of ROS formation using the fluorescent probe DCFH-DA,
 - Determining mitochondrial GSH level using DTNB and spectrophotometric method.

- Statistical analysis of experimental data (SPSS, Prism and STATA software).
- Writing article (Original, Review, Systematic review and Meta-analysis).

Teaching activity

2011-2012 Teaching assistant for Physiology lab in the Department of Physiology at Shiraz University of Medical Sciences.

2023 Teaching of neurophysiology for medicine student and Speech therapy students.

Awards and honors

- Ranked first-place class (out of 6 students) in the Ph.D. course.
- Recognized as a brilliant talented student by the Office of Gifted Talents.
- Received Iran National Science Foundation (INSF) grant 2018 for Ph.D. students.
- Selected for participation in IBRO/APRC Associate School on Neurological and Neuromuscular Disorders, B.P. Koirala Institute of Health Sciences, 10-14 March 2019, Dharan, Nepal.
- Selected for participation in 3rd IBRO/APRC Chandigarh Neuroscience School, University Institute of Pharmaceutical Sciences, Panjab University, 25th November to 20th December 2018, Chandigarh, India.

Professional qualifications

- Member of the Iranian Neuroscience Society. Apr 25, 2023- present.
- Member of the GBD (Global Burden of Disease) Collaborator Network, as a co-author of GBD papers. Jul 11, 2022-present.
- Member of executive committee of "IBRO/APRC Tehran Advanced School of Neuroscience ", Tehran, Iran, April 29 - May 11, 2017.
- Member of executive committee of "IBRO/APRC 5th Tehran School of Neuroscience: Basic approaches in neurological diseases", Tehran, Iran, April 30 - May 11, 2016.
- Collaboration with journal of Metabolic Brain Disease as a reviewer.
- Collaboration with Galen Medical Journal as a reviewer.

Workshops and schools

- 1) The workshop of “Meta-analysis of Observational Studies”, Shiraz University of Medical Sciences, Shiraz, Iran, 8-10 Jul 2023.
- 2) IBRO/APRC Associate School on Neurological and Neuromuscular Disorders: An insight into its approach and Neurodiagnostic techniques, Dharan, Nepal, March 10-14, 2019.
- 3) 3rd IBRO/APRC Chandigarh Neuroscience School, University Institute of Pharmaceutical Sciences, Panjab University, Chandigarh, India, November 25 - December 2, 2018.
- 4) The workshop of The Introduction to Stereology for Neuroscientists, Shahid Beheshti University of Medical Sciences, Tehran, Iran, May 17-18, 2016.
- 5) Article writing held by Shahid Beheshti University of Medical Sciences (SBMU), Tehran, Iran, 2017.
- 6) DNA extraction, PCR and electrophoresis held by Shahid Beheshti University of Medical Sciences (SBMU), Tehran, Iran 2016.
- 7) Western blot held by Shahid Beheshti University of Medical Sciences (SBMU), Tehran, Iran 2016.
- 8) Cell culture held by Shiraz Shahid Beheshti University of Medical Sciences (SBMU), Tehran, Iran, 2016.
- 9) Electrophysiology and sharp intracellular recording held by Shahid Beheshti University of Medical Sciences (SBMU), Tehran, Iran, 2016.
- 10) Workshop on labchart and powerlab basics of data acquisition (two days) held by Eqlim danesh Company, in cooperation with Shiraz University of Medical Sciences, Shiraz-Iran, November 2011.
- 11) Safety and protection in biomedical laboratories held by Shiraz university of Medical Sciences, Shiraz-Iran, March 2011.

Language skills

- Persian: Native
- English: Level B2 in English on Busuu (Upper intermediate)

References

- **Prof. Abolhassan Ahmadiani (Professor)**
Neuroscience Research Center, Shahid Beheshti University of Medical Sciences, Tehran, Iran.
E-mail: aahmadiani@yahoo.com.
- **Dr. Leila Dargahi (Associate Professor)**
Neuroscience Research Center, Shahid Beheshti University of Medical Sciences, Tehran, Iran.
E-mail: l.dargahi@sbmu.ac.ir.
- **Dr. Mohsen Rezaei (Associate Professor)**
Department of Toxicology, Faculty of Medical Sciences, Tarbiat Modares University, Tehran, Iran.
E-mail: Rezaei.m@modares.ac.ir.