

Curriculum Vitae

Personal information:

Name: Mahdieh Azin

Date of Birth: Tuesday, November 25, 1980

City of Birth: Rafsanjan, Kerman, Iran

Citizenship: Iranian

Religion: Shia, Islam

Marital status: Married

Children: One son

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Postal address: Rafsanjan, Persian Gulf Blvd., Pistachio St., School of Medical Sciences, Faculty of Medicine, Department Of Physiology-Pharmacology

Academic profile:

Academic Position: Faculty Member

Academic Degree: Assistant Professor

University: Rafsanjan University of Medical Sciences

Department: Physiology-Pharmacology Departement, Rafsanjan University of Medical Sciences

Google Scholar Profile:

<https://scholar.google.com/citations?hl=en&user=r1zSx5EAAAAJ>

Academic Education:

- Bachelor: Biology of Animal Science, University of Tehran, Tehran; 2000-2004

-Masters: Physiology; Tarbiat Modarres University, Tehran; 2006-2009

-Ph.D.: Neuroscience; Kerman University of Medical Sciences and Health Services, Kerman; 2010-2015

M.Sc Thesis Title: Mollecular and electrophysiological study of the remyelination process in rat hippocampus following lysolecithin-induced demyelination

Ph.D Dissertation Title: The effect of Transcranial Magnetic Stimulation (TMS) on rehabilitation of motor imagery and motor function in patients with multiple sclerosis

Honors:

- Third grade in the Olympiad of Biology Student in 1998;
- The first grade of Ph.D. 's degree in Kerman University of Medical Sciences;
- The first grade of a master's degree in Tarbiat Modarres University.

Workshops & Conferences Attended:

- ✓ The use and care of laboratory animals Workshop on Tarbiat Modarres University, 2007.
- ✓ Cell Therapy conference, Iran University of Medical Sciences, 28/2/1387;
- ✓ 4th Congress of Stem Cells, Royan Research Institute, 2008/8/8;
- ✓ 19th Iranian Physiology and Pharmacology congress, Shahid Beheshti University, 2009.
- ✓ Molecular Neuroscience Workshop, Neuroscience Research Center, 21/2/1390;
- ✓ Patch-clamp workshop, Neuroscience Research Center, Kermak, 22/2/1390;
- ✓ The 2nd Basic and Clinical Neuroscience Congress, Razi Hall, Tehran; 18-20 Dec 2013;
- ✓ The 1st International Conference on Challenges in Clinical Neurology, Kerman University of Medical Sciences, 19-21 Feb 2014.
- ✓ 21st Congress of Neurology & Electrophysiology Clinical of Iran, Olympic Hotel, Tehran; 10-13 June 2014.
- ✓ 1st National Pistachio Conference, Rafsanjan University of Medical Sciences, 15-16 September 2015.
- ✓ 4th Basic and Clinical Neuroscience Congress, Razi Hall, Tehran; 13-25 Dec 2013.
- ✓ 5th Basic and Clinical Neuroscience Congress, Razi Hall, Tehran; 7-9 Dec 2016.
- ✓ 1st Iranian International neurorehabilitation Congress, Imam Khomeini Hall, Shahid Beheshti University, 16-18 Oct 2016.
- ✓ The 1st congress of paramedical Sciences in Great Zone-8, Rafsanjan University of Medical Sciences.
- ✓ laboratory animals use Workshop, Rafsanjan University of Medical Sciences, 15, 2017.
- ✓ 6th Basic and Clinical Neuroscience Congress, Razi Hall, Tehran; 20-22 Dec 2017.
- ✓ Traditional medicine Workshop, Rafsanjan University of Medical Sciences, March 10, 2018.
- ✓ English Grammar and Vocabulary Learning tips Workshop, Rafsanjan University of Medical Sciences, April 25, 2018.

Medicinal Herbs Workshops, Tehran, 1 May 2018.

Teaching experiences:

★ Start teaching from 23 September 2014 to now

Primary and Advanced Neurophysiology (M.Sc.);

Primary and advanced cell physiology (M.Sc.);

General physiology (bachelor);

General Cell physiology (dental students);

Practical Physiology (M.Sc. and Cbachelor);

Neurophysiology (Medical students).

Research projects participation:

✓ Study the effect of propolis on some clinical, sonography, inflammatory and antioxidant parameters in patients with ischemic stroke- a randomized, double-blind, placebo-controlled clinical trial; Co-researcher.

✓ Study the effect of crocin on outcomed severity of ischemic stroke patients in neurology ward of Ali-Ebn-Abitaleb hospital in Rafsanjan; Co-researcher.

✓ Study the effect of intracerebroventricular (ICV) injection of TRPV1 receptors antagonist on the, Co-researcher.

✓ The effect of powdered green tea enriched with EGCG on some clinical, biochemical, inflammatory, antioxidant and cognitive parameters in stroke patients; a double-blind, placebo-controlled clinical trial; Research administrator.

✓ Effect of tactile stimulation on creative thinking, memory and motor imagery in 18-30 year-old subjects; Research administrator.

✓ The effects of repetitive tactile stimulation on upper limb sensory - motor function, hand motor imagery and cognitive function in multiple sclerosis patients; Research administrator.

✓ Investigation of the correlation between vertigo and exposure to agricultural pesticides in Rafsanjan in 1396-97; Research administrator.

✓ The study of Oleuropein polyphenol effect on cognitive deficits, brain derived nerve factor (BDNF) and some antioxidant factor levels in hippocampus of morphine treated rats; Co-researcher.

✓ Study of epigallocatechin gallate (EGCG) effects on cognitive deficits, apoptosis. inflammation, brain derived nerve factor (BDNF) and some antioxidant factors in hippocampus of morphine treated rats; Co-researcher.

✓ The effect of upper extremity mental imagery exercise on rehabilitation of upper extremity motor imagery and movement in multiple sclerosis patients; Co-researcher.

- ✓Investigation on the effects of Wi-Fi radiations on electrophysiological properties of barrel cortex neurons in male rats, Research administrator.
- ✓The renoprotective effect of troxerutin following unilateral ureteral obstruction in male rats; Co-researcher.
- ✓The effect of oleuropine on renal hemodynamic, histopatologic and functional parameters following unilateral ureteral obstruction in male rats; Co-researcher.
- ✓Survey of the effect of pistachio peptides on the lipid profile in hyperlipidemic male Wistar rat; Co-researcher.
- ✓The effect of peptides separated from pistachio on blood sugar in diabetic Wistar male rats; Co-researcher.
- ✓Evaluation of behavioral dysfunctions due to polycystic ovary syndrome in female rats; Co-researcher.
- ✓Study of the metformin effect on morphine withdrawal syndrome and some antioxidant factors in male morphine dependent rats; Co-researcher.

Thesis Supervision and Advice:

- ✓ The effect of intravenous injection of TRPV1 receptor antagonists on binding process (convergence of different sensory information) in male rats, Advisor, Master's Thesis.
- ✓Effect of tactile stimulation on creative thinking ,memory and motor imagery in 18-30 year-old subjects; Supervisor II, Master's Thesis.
- ✓ The effect of powdered green tea enriched with EGCG on some clinical, biochemical, inflammatory, antioxidant and cognitive parameters in stroke patients; a double-blind, placebo-controlled clinical trial, Supervisor I, Medical Student Thesis.
- ✓ The effects of repetitive tactile stimulation on upper limb sensory - motor function, hand motor imagery and cognitive function in multiple sclerosis patients; Supervisor I, Medical Student Thesis.
- ✓ Investigation of the correlation between vertigo and exposure to agricultural pesticides in Rafsanjan city in 1396-97, Supervisor I, Medical Student Thesis.
- ✓Investigation on the effects of Wi-Fi radiations on electrophysiological properties of barrel cortex neurons in male rats, Advisor, Master's Thesis.

Research Interests:

- ✱Cognitive Neuroscience;
- ✱ Magnetic and electrical stimulation of the brain;
- ✱Brain mapping;
- ✱Multiple sclerosis, Schizophrenia, Autism and Attention-deficit hyperactivity disorder diseases.

Technical Skills:

- PCR techniques and primer design;
- Field potential recording;
- Evoked potential recording;
- Nervous conduction velocity recording (NCV);
- EMG recording;
- EEG recording;
- Transcranial magnetic stimulation;
- cognitive test for neurological diseases;
- PSYTASK software and the possibility of designing cognitive tasks in this software;
- SPSS and PRISM software.

Professional Membership:

- Member of Physiology-Pharmacology Research Center;
- Member of Iranian Scientific Society of Neuroscience;
- Member of Iranian Scientific Society of Cognitive Science;
- Member of the Iranian Association for the Death of Cell;
- Referee of CLINICAL REHABILITATION jurnal;
- Referee of Scientific Journal of Rafsanjan University of Medical Sciences.

Abstract publications in Seminars:

- **Possible involvement of endogenous neural stem cells in remyelination process following local injection of lysolecithin in adult rats hippocampus**, 19th Iranian Physiology and Pharmacology congress, Shahid Beheshti University, 2009.
- **Electrophysiological assessment of demyelination and remyelination processes following local injection of lysolecithin in adult rats**, 19th Iranian Physiology and Pharmacology congress, Shahid Beheshti University, 2009.
- **Comparison of two measures of cognition SDMT and PASAT in MS patients with mild disability**, The 1st International Conference on Challenges in Clinical Neurology, Kerman University of Medical Sciences, 2014.
- **Repetitive transcranial magnetic stimulation of motor cortex improves upper extremity function in patients with multiple sclerosis**, The 2nd Basic and Clinical Neuroscience Congress, Tehran; 2013.
- **Motor imagery ability in multiple sclerosis patients and its relation with upper and lower motor function**, 21st Congress of Neurology & Electrophysiology Clinical of Iran, Tehran; 2014.

- **Is there association between mental rotation ability and cognitive function in multiple sclerosis patients?** 4th Basic and Clinical Neuroscience Congress, Tehran; 2013.
- **The effect of transcranial magnetic stimulation (TMS) on rehabilitation of upper limb dexterity in patients with multiple sclerosis.** 1st Iranian International neurorehabilitation Congress, Shahid Beheshti University, 2016.
- **Is motor imagery ability the same in different gender in multiple sclerosis patients?** 5th Basic and Clinical Neuroscience Congress, Tehran; 2016.
- **Influence of motor imagery practice on upper-extremity function in multiple sclerosis patients.** 6th Basic and Clinical Neuroscience Congress, Tehran; 2017.

Full Text Publications:

- Azin, M., Zangiabadi, N., Iranmanesh, F., Baneshi, M. R. (2014). The comparison of information processing speed in the symbol digit modalities test and paced auditory serial addition test in relapse-remitting multiple sclerosis patients, *Pensee Journal*, 76, 227-233.
- Azin, M., Zangiabadi, N., Iranmanesh, F., Baneshi, M. R., Banihashem (2016). S. Effects of intermittent theta burst stimulation on manual dexterity and motor imagery in patients with multiple sclerosis: A quasi-experimental controlled study, *Iranian Red Crescent Medical Journal*, In press.
- Azin, M., Goudarzvand, M., Mirnajafi-Zadeh, J., Javan, M. (2013). Field potential recording from rat hippocampus provides a functional evaluation method for assessing demyelination and myelin repair, *Neurological Research*, 35(8), 837-843.
- Azin, M., Mirnajafi-Zadeh, J., Javan, M (2015). Fibroblast growth factor-2 enhanced the recruitment of oligodendrocyte and neural progenitors and myelin repair following lysolecithin induced demyelination in hippocampal formation of rats, *Cell Journal (Yakhteh)*, 17(3), 540-546.
- Azin, M., Zangiabadi, N., Tabrizi, Y. M., Iranmanesh, F., Baneshi, M. R. (2014). Deficiency in mental rotation of upper and lower-limbs in patients with multiple sclerosis and its relation with cognitive functions, *Acta Medica Iranica*, 54(8), 510-517.
- Bannazadeh, M., Fatehi, F., Fatemi, I., Roohbakhsh, A., Allahtavakoli, M., Nasiri, M., Azin, M., Shamsizadeh, A. (2017). The role of transient receptor potential vanilloid type 1 in unimodal and multimodal object recognition task in rats, *Pharmacological Reports*, 69(3), 526–531.