# **Curriculum Vitae**

First Name: Mahboobeh

Surname: Erfanizadeh

**Date of birth:** 28/3/1981

Marital Status: Married

**Nationality:** Iranian

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# **Summary**

Anatomy expert with 15+ years of experience teaching human anatomy, embryology, and histology to medical and paramedical students, and other health care professionals in Shiraz University of medical sciences. Possess a B.Sc. degree in nursing, M.Sc. and Ph.D. in Anatomical Sciences from the Shiraz University of Medical Sciences. My research interest is Histomorphometry & Stereology, Clinical Neuroscience Research and Sleep Disorders.

# **Qualifications**

Ph.D.	Anatomical Sciences Thesis Title: Stereological study of the effects of Curcumin on the histology of the nervous system (the Suprachiasmatic nucleus, Paraventricular nucleus, Superior cervical ganglion, and Pineal gland) after sleep deprivation in the male rats.	School of Medicine, Shiraz University of Medical Science, Shiraz, Iran.	2014-2020
MSc.	Anatomical Sciences Thesis Title: The effects of the sodium benzoate, ascorbic acid, benzene, copper sulfate and olive oil on the structure and function of the rat cerebellum.	School of Medicine, Shiraz University of Medical Science, Shiraz, Iran.	2011-2014
B.Sc.	Nursing	School of Nursing, Fatemeh School of Nursing and Midwifery, Shiraz, Iran.	2000-2005

# **Work Experience**

Lecturer of human anatomy	Darab University of Paramedical Sciences	Darab-Iran	2021-2022
Lecturer of human anatomy and histology	Fatemeh School of Nursing and Midwifery, Paramedical Science school, Rehabilitation Sciences School, School of Health, and management and medical informatics school of Shiraz University of Medical Sciences	Shiraz-Iran	2011-2021
Anatomy employee	Anatomical department, Shiraz University of Medical Sciences	Shiraz-Iran	2009-2021
Fulfilling the commitment to serve as a bachelor	Anatomical department, Shiraz University of Medical Sciences	Shiraz-Iran	2007-2009

#### **Honors and Awards**

- First top student in anatomical sciences **PhD.** program, School of Medicine, SUMS in 2020
- First top student in anatomical sciences M.Sc. program, School of Medicine, SUMS in 2014
- First top student in nursing **B.Sc.** program, School of Nursing and Midwifery, SUMS in 2005
- Exemplary national student in the Anatomical Science in Iran and Receive the National Sacrifice Award, 2019.
- Top scientific-research student in PhD in Anatomical Science, 2th January 2019, SUMS, Shiraz, Iran.
- Prize for the Best Poster Presented at the 1st National Congress on Microscopic Studies in Experimental Medical Sciences, 30th May 2014, SUMS, Shiraz, Iran.

#### **Professional Experience**

#### **Teaching Experience**

- Present Courses on Neuroanatomy, Head and Neck, Trunk and Limbs Anatomy for Medical and Dental Students, Shiraz University of Medical Sciences, Shiraz, Iran.
- Present Courses on Histology lab for Medical and Dental Students, University of Medical Sciences, Shiraz, Iran.
- Present Courses on Neuroanatomy, Head and Neck, Trunk, Limbs and Osteology, for Radiology Students, Shiraz University of paramedical Sciences, Shiraz, Iran.
- Present Courses of Surface Anatomy for Physiotherapy and Occupational therapy Students, in Rehabilitation Sciences School of Shiraz University of Medical Sciences, Shiraz, Iran
- Present Courses of General Anatomy for Nursing, Midwifery, Anesthesia and Operating Room Students, in Nursing and Midwifery School of Shiraz University of Medical Sciences
- Present Courses of General Anatomy for health information technology Students, in management and medical informatics school of Shiraz University of Medical Sciences
- Present Courses of General Anatomy for Speech Therapy, Audiology Students, in Rehabilitation Sciences School of Shiraz University of Medical Sciences, Shiraz, Iran.
- Present Courses on General Anatomy for the Students of Environmental Health, General Health, in School of Health of Shiraz University of Medical Sciences, Shiraz, Iran
- Present Courses on General Anatomy for the Students of Medical Laboratory Sciences, in Darab University of paramedical Sciences, Darab, Iran.

#### **Research Interests**

- Histomorphometry & Stereology (Modern Quantitative Microscopy)
- Clinical Neuroscience Research
- Sleep Disorders

# **Research Techniques**

- Histomorphometry & Stereology (Modern Quantitative Microscopy)
- Microanatomy Techniques (Tissue preparation, H&E, Cresyl violet, Golgi, Geimsa staining, Paraffin section, fluorescent microscope)
- Behavioral test (Rotarod and Elevated Plus Maze Test)
- Immunohistochemistry
- Apoptosis assay (TUNEL)
- Elisa (enzyme-linked immunosorbent assay)
- Tessellation
- 3D Reconstruction of histological images

# **Computer Skills**

- Microsoft office (Word, PowerPoint, Excel,...)
- Internet
- Endnote
- Prism and SPSS
- Adobe Photo Filter
- Adobe Photoshop
- Stereology Software
- Camtasia and Snagit
- Image J

#### **Publications**

#### **Journal Papers**

- Erfanizadeh M, Noorafshan A, Naseh M, Karbalay-Doust S. The effects of copper sulfate on the structure and function of the rat cerebellum: A stereological and behavioral study. IBRO Neuroscience Reports. 2021 Dec 1;11:119-27.
- Khodabandeh Z, Mehrabani D, Dehghani F, Gashmardi N, **Erfanizadeh M**, Zare S, Bozorg-Ghalati F. Spinal cord injury repair using mesenchymal stem cells derived from bone marrow in mice: A stereological study. Acta histochemica. 2021 Jun 1:151720.
- **Erfanizadeh M**, Noorafshan A, Namavar MR, Karbalay-Doust S, Talaei- Khozani T. Curcumin prevents neuronal loss and structural changes in the superior cervical (sympathetic) ganglion induced by chronic sleep deprivation, in the rat model. Biological research. 2020 Dec; 53(1):1-5.
- Mohamadpour M, Mollajani R, Sarabandi F, Hosseini F, Mohsenkia M, Erfanizadeh M, Soleimani A, Kargar E, Mosallaei H, Yavarahmadi M. Protective Effect of Grape Seed Extract on Dexamethasone-Induced Testicular Toxicity in Mice. Crescent Journal of Medical and Biological Sciences. 2020;7(1):59-65.
- Noorafshan A, Asadi-Golshan R, **Erfanizadeh M**, Karbalay-Doust S. Beneficial Effects of Olive Oil on the Rats' Cerebellum: Functional and Structural Evidence. Folia medica. 2018; 60(3):454-63.
- Rafati A, **Erfanizadeh M**, Noorafshan A, Karbalay-Doust S. Effect of benzene on the cerebellar structure and behavioral characteristics in rats. Asian Pacific Journal of Tropical Biomedicine. 2015 Jul 1; 5(7):568-73.
- Noorafshan A, Erfanizadeh M, Karbalay-Doust S. Stereological studies of the effects

- of sodium benzoate or ascorbic acid on rats' cerebellum. Saudi medical journal. 2014; 35(12):1494.
- Noorafshan A, Erfanizadeh M, Karbalay-Doust S. Sodium benzoate, a food preservative, induces anxiety and motor impairment in rats. Neurosciences (Riyadh). 2014 Jan 1; 19(1):24-8.
- Erfanizadeh M, Noorafshan A, Namavar MR, Karbalay-Doust S, Talaei- Khozani T. Curcumin mitigates the detrimental impacts of REM sleep deprivation on hypothalamic Paraventricular nucleus in male rats. (Submission in IBRO Neuroscience Reports. 23 June 2023).

# **Meeting & Conference Presentations**

#### **Oral presentation**

• Noorafshan A, **Erfanizadeh M**, Karbalay-Doust S. "Benzene changes the rotarod performance test and cerebellar structure and induces anxiety in rats". 1th The National Conference on Microscopic Studies, 29-30 May 2014, Shiraz, Iran.

# **Posters presentation**

- Noorafshan A, **Erfanizadeh M**, Karbalay-Doust S. "Stereological study of the effects of sodium benzoate or ascorbic acid on the rats, cerebellum". 2th The National Conference on Microscopic Studies, 24-26 May 2016, Shiraz, Iran.
- Noorafshan A, **Erfanizadeh M**, Karbalay-Doust S. "Stereological study of the effects of sodium benzoate and/or ascorbic acid on the rat cerebellum". *1th The National Conference on Microscopic Studies*, 29-30 May 2014, Shiraz, Iran.
- Noorafshan A, **Erfanizadeh M**, Karbalay-Doust S. "Olive oil induces the better motor performance, anxiolytic and neuroprotective effects on the rat cerebellum." *Ith The National Conference on Microscopic Studies*, 29-30 May 2014, Shiraz, Iran.
- Certificate of the first interdisciplinary seminar on neuroscience, 13 Oct 2013, Shiraz University of Medical Sciences, Shiraz, Iran.

# **Workshops Attended**

- Types of water required by laboratories, July 2014, SUMS, Shiraz, Iran
- RNA and DNA extraction, September 2014, SUMS, Shiraz, Iran
- PCR training, September 2014, SUMS, Shiraz, Iran
- Real time PCR Education, October 2015 and June 2018, SUMS, Shiraz, Iran
- RNA and DNA extraction, July 2016, SUMS, Shiraz, Iran
- Familiarity with Material Safety data Sheet(MSDS), August 2016, SUMS, Shiraz, Iran
- Safety in biomedical research laboratories, August 2016, SUMS, Shiraz, Iran
- SPSS training, September 2016, SUMS, Shiraz, Iran
- Introduction to UV rays, May 2018, SUMS, Shiraz, Iran
- sds page, May 2018, SUMS, Shiraz, Iran
- PCR, June 2018, SUMS, Shiraz, Iran
- Distilled water and purification methods, June 2018 and April 2019, SUMS, Shiraz, Iran

- Volumetric measurement by stereology method, June 2018, SUMS, Shiraz, Iran
- Biosafety, July 2018 and March 2019, SUMS, Shiraz, Iran
- Imono histochemistry, April 2019 and April 2020, SUMS, Shiraz, Iran
- Elisa, April 2019, SUMS, Shiraz, Iran
- Method of sterilization of laboratory equipment, April 2019, SUMS, Shiraz, Iran
- How to cell culture, April 2019 and April 2020, SUMS, Shiraz, Iran
- Theory and principles of gel electrophoresis, April 2019, SUMS, Shiraz, Iran
- Solubilization, April 2019, SUMS, Shiraz, Iran
- Application of clothing and personal protective equipment, April 2020, SUMS, Shiraz, Iran
- Familiarity with Endnote software, April 2020, SUMS, Shiraz, Iran
- MTT technique, April 2020, SUMS, Shiraz, Iran
- Protein detection method by Western blotting, April 2020, SUMS, Shiraz, Iran
- Familiarity with databases and how to search for articles in the laboratory, April 2021, SUMS, Shiraz, Iran
- New laboratory diagnostic methods in thalassemia, May 2021, SUMS, Shiraz, Iran
- Search for clinical evidence at PubMed, October 2020, SUMS, Shiraz, Iran
- Endonote X 8 Resource Management Software, November 2020, SUMS, Shiraz, Iran
- Principles of health & Safty in biomedical research labratories, May 2009 and March 2012, SUMS, Shiraz, Iran
- Principles of radiation protection, July 2009, SUMS, Shiraz, Iran
- Systematic review, November 2020, SUMS, Shiraz, Iran
- Scientometrics, July 2020, SUMS, Shiraz, Iran
- English for Academic Writing, July 2020, SUMS, Shiraz, Iran
- Strategic plan design and business plan, September 2016, SUMS, Shiraz, Iran
- The need to commercialize scientific activities and how to register companies, December 2016, SUMS, Shiraz, Iran
- Familiarity with Prism software, June 2019, SUMS, Shiraz, Iran
- umbilical cord Wharton's jelly Mesenchymal Stem Cells, October 2011, SUMS, Shiraz, Iran
- Stereological techniques (area and length calculation), November 2011, SUMS, Shiraz, Iran

#### **Recommendation letters**

- Seyed Fakhreddin Mesbah (full professor), Department of Anatomy, School of Medicine, Shiraz University of Medical Sciences, Shiraz, Iran.
- Tahereh Talaei Khozani (full professor), Department of Anatomy, School of Medicine, Shiraz University of Medical Sciences, Shiraz, Iran.
- Mohammad Reza Namavar (associate professor), Department of Anatomy, School of Medicine, Shiraz University of Medical Sciences, Shiraz, Iran.
- Nehleh Zarei fard (assistant professor), Department of Anatomy, School of Medicine, Shiraz University of Medical Sciences, Shiraz, Iran.
- Saied Karbaly Doust (assistant professor), Department of Anatomy, School of Medicine, Shiraz University of Medical Sciences, Shiraz, Iran.