

Curriculum Vitae



Personal information

First name: Mehrdad

Surname: Ghorbanlou

Date of birth: April 9, 1991

Gender: Male

Education: Philosophy of Doctor (PhD) in Anatomical Sciences, assistant professor

Educational department: Anatomical Sciences

Mobile phone: 09365327025

E-mail address: mehrdad.ghorbanlou@gmail.com

Google scholar link (all the articles can be found in this link):

<https://scholar.google.com/citations?user=minc7VMAAAAAJ&hl=en>

Google scholar Citations (up to January 2025: 148)

Published articles: (up to January 2024: 26)

English articles: (up to January 2024: 22)

Persian articles: (up to January 2024: 4)

Google scholar h-Index: (up to January 2024: 9)

Google scholar i10-Index: (up to January 2024: 8)

Academic education

- Radiology technology (BSc), Tehran University of Medical Sciences, (2010-2014)
- Anatomical sciences (MSc), Zanjan University of Medical Sciences, (2014-2017)
- Anatomical sciences (PhD), Iran University of Medical Sciences, (2018 - 2024)

Educational experiences

- Teaching practical anatomy and histology during MSc education for medical students
- Teaching anatomy for rehabilitation students during MSc education
- Teaching English language for MSc students of anatomy at Zanjan University of Medical Sciences
- Teaching practical anatomy and histology during PhD education for medical students
- Teaching anatomy for rehabilitation students during PhD education
- Radiotechnologist in Shariati hospital in Mahdasht, Alborz for more than 7 years.
- English language teaching in Pouyavazhe language institute
- English language teaching in Hariri language institute
- Teaching neuroanatomy for international students in English
- Teaching general anatomy for international students in English

General Skills

- English language proficiency
- English language teaching
- English Language translation (English to Persian, Persian to English)
- Radiology technologist – CT scan, General Radiology, Dental Radiology
- SPSS software
- Word, PowerPoint, and excel

Laboratory skills

- Laboratory animals handling
- Tissue fixation, processing and sectioning for histological studies

- H&E and TUNEL staining
- Histopathological assessments of testis sections stained by H&E and TUNEL.
- Isolation, culture and proliferation of Bone marrow mesenchymal stem cells.
- In vitro techniques for cell toxicity including MTT, and Trypan blue assay
- Wound healing assay for testing proliferation
- Co-culture technique
- Real-time PCR evaluation
- Immunocytochemistry (ICC)
- Primer design (Bioinformatics)
- Guide-RNA design (Bioinformatics)
- Bacterial culture
- Plasmid extraction
- Gene-manipulation by CRISPR-Cas9

Research Activities

- **Published articles**

1. Bahrami M, **Ghorbanlou M**, Farrokhi A, Nejatbakhsh R. Effect of Low Doses Consumption of Alcohol on Rat's Fetal Liver – A Histological Study. ZUMS Journal. 2017; 25 (111):29-40.
2. Abdanipour A, Nejatbakhsh R, Jafari Anarkooli I, **Ghorbanlou M**, Nikfar A, Noriyan A. Proliferation and Anti-Apoptotic Effect of Hydroethanolic Extract of Lavandula officinalis on Rat Neural Stem Cells. ZUMS Journal. 2016; 24 (105):43-52.

3. Jannatifar R, Farrokhi A, Zargari S, **Ghorbanlou M**, Nejatbakhsh R. Effect of Copper Sulfate on the Wistar Rat's Fetal Liver Tissue. *The quarterly journal of animal physiology and development*. 2017; 10 (2): 75-81.
4. SOMAYEH ROSTAMKHANI, SANAZ MAHMAZI, **MEHRDAD GHORBANLOU**, SAEED SHOKRI, REZA NEJATBAKHS, VAHID BAYATI. EFFECTS OF AQUEOUS CINNAMON EXTRACT ON BODY MASS INDEX, ORGANS WEIGHT AND BIOCHEMICAL INDICES OF MALE WISTARRATS ON A HIGH-FAT DIET. *JUNDISHAPUR SCIENTIFIC MEDICAL JOURNAL*. 2017; 16 (600408): 693-703.
5. **Mehrdad Ghorbanlou**, Alireza Abdanipour, Reza Shirazi, Nasim Malekmohammadi, Saeed Shokri, Reza Nejatbakhsh. Indirect co-culture of testicular cells with bone marrow mesenchymal stem cells leads to male germ cell-specific gene expressions. *Cell journal (Yakhteh)*. 2019; 20 (4): 505-512
6. Ahmad Farrokhi, Masoume Soleymaninejad, **Mehrdad Ghorbanlou**, Ramazan Fallah, Reza Nejatbakhsh. Applied anatomy, today's requirement for clinical medicine courses. *Anatomy & cell biology*. 2017; 50 (3): 175-179.
7. Z Abdi, S Mohsenzadeh, I Jafari Anarkooli, A Ahmadi, **M Ghorbanlou**, M Arianmanesh. THE EFFECT OF HSP60 ON FERTILIZATION AND PRE-IMPLANTATION EMBRYO DEVELOPMENT IN MICE: AN IN VITRO STUDY. *Acta Endocrinologica (Bucharest)*. 2019; 15 (2): 153-157.
8. Alireza Abdanipour, Iraj Jafari Anarkooli, Saeed Shokri, **Mehrdad Ghorbanlou**, Vahid Bayati, Reza Nejatbakhsh. Neuroprotective effects of selegiline on rat neural stem cells treated with hydrogen peroxide. *Biomedical reports*. 2018; 8 (1), 41-46.
9. Samira Moghadam, Hamid Gharebaghi, Mohamad Javad Mohamadi, Ahmad Farokhi, **Mehrdad Ghorbanlou**, Mitra Arianmanesh. Clinically oriented system-based embryology; a significant course in clinical practice. *bioRxiv*. 2020.
10. **Mehrdad Ghorbanlou**, Somaye Rostamkhani, Saeed Shokri, Sanaz Mahmazi, Ramazan Fallah, Fateme Moradi, Reza Nejatbakhsh. Possible ameliorating effects of Glycyrrhiza Glabra (Licorice) on the sperm parameters in rats under high fat diet. *Endocrine Regulations*. 2020; 24 (1): 22-30.
11. Leila Afrigan, Iraj Jafari Anarkooli, Davood Sohrabi, Alireza Abdanipour, Alireza Yazdinezhad, Zahra Sayyar, **Mehrdad Ghorbanlou**, Mitra Arianmanesh. The effect of hydroethanolic extract of *Matricaria chamomilla* on the reproductive system of male rats exposed to formaldehyde. *Andrologia*, 2019; 51 (9): e13362.
12. Alireza Abdanipour, Fatemeh Moradi, Farzaneh Fakheri, **Mehrdad Ghorbanlou**, Reza Nejatbakhsh. The effect of lithium chloride on BDNF, NT3, and their receptor mRNA levels in the spinal contusion rat models. *Neurological research*. 2019; 41 (6): 577-583.
13. Nasim Malekmohammadi, Alireza Abdanipour, **Mehrdad Ghorbanlou**, Saeed Shokri, Reza Shirazi, Eva Dimitriadis, Reza Nejatbakhsh. Differentiation of bone marrow derived mesenchymal stem cells into male germ-like cells in co-culture with testicular cells. *Endocrine regulations*. 2019; 53 (2): 93-99.

14. **M Ghorbanlou**, F Moradi, R Shabani, M Mehdizadeh. COVID-19 and its effect on anatomical sciences education: viewpoint of anatomical sciences professors of Iran University of medical sciences. *Iranian Journal of Medical Education*. 21, 373-375
15. **M Ghorbanlou**, F Moradi. Azygos Lobe: The Prevalence, Dimensions, and Estimated Volume of Thirteen Cases Investigated by Computed Tomography. *Anatomical Sciences Journal* 18 (2), 72-77
16. **M Ghorbanlou**, F Moradi, M Mehdizadeh. Frequency, shape, and estimated volume of intracranial physiologic calcification in different age groups investigated by brain computed tomography scan: a retrospective study. *Anatomy and cell biology*. 2022 Mar 31;55(1):63-71.
17. **M Ghorbanlou**, F Moradi, HR Asgari. Morphometric study of sternum by computed tomography in an Iranian population: A method to discriminate between male and female. Volume 28, March 2022, 200501.
18. **M Ghorbanlou**, F Moradi. Possible Age and Sex Dependency of Costal Cartilage Calcification Degree Investigated by Computed Tomography: First Costal Cartilage Calcification is of Significance. *International Journal of Forensic Sciences*. 2022 April 11; 7 (2).
19. **M Ghorbanlou**, F Moradi. Rib abnormalities investigated by computed tomography: A report on common and uncommon cases. 2022, 19 (1).
20. AS Jeda, A Zarei, S Ghabeshi, A Tabibzadeh, M Lotfi, **M Ghorbanlou**. Evaluation of the prevalence of bovine leukemia virus DNA in peripheral blood mononuclear cells of multiple sclerosis patients. *IJID regions*. 2023; 7, 233-236.
21. **Mehrdad Ghorbanlou**, Fatemeh Moradi, Ronak Shabani & Mehdi Mehdizadeh (2023) Upregulation of apoptotic genes and downregulation of target genes of Sonic Hedgehog signaling pathway in DAOY medulloblastoma cell line treated with arsenic trioxide, *Journal of Chemotherapy*, DOI: 10.1080/1120009X.2023.2294574.
22. **Ghorbanlou M**, Moradi F, Kazemi-Galougahi MH, Abdollahi M. In search of subcortical and cortical morphologic alterations of a normal brain through aging: an investigation by computed tomography scan. *Anatomy & Cell Biology*. 2023 Dec. DOI: 10.5115/acb.23.219. PMID: 38073149.
23. **Mehrdad Ghorbanlou**, Fatemeh Moradi & Hamidreza Asgari (2023) Possible dependence of sternum non-metric features on sex, age, and stature from a forensic viewpoint: a study in an Iranian population, *Canadian Society of Forensic Science Journal*, DOI: 10.1080/00085030.2023.2285618.
24. A Asgari, HR Asgari, **M Ghorbanlou**, F Dobakhti, MA Ghorbanian. Cerumenolytic Effects of Carbamide Peroxide in Patients with Ear Wax Obstruction. *Iranian Journal of Otorhinolaryngology* 36 (2), 415 (2024).
25. Zahra Bashiri, Azita Afzali, Morteza Koruji, Hossein Torkashvand, **Mehrdad Ghorbanlou**, Nadia Sheibak, Zahra Zandieh, Fatemehsadat Amjadi. Advanced strategies for single embryo selection in assisted human reproduction: A review of clinical practice and research methods. *Korean Journal of Fertility and Sterility* (2024).

26. **M Ghorbanlou**, H Marzban, M Mehdizadeh. Targeting Positive Regulators of Sonic Hedgehog Signaling Pathway in Medulloblastoma by Designing CRISPR/Cas9 Single Guide RNAs. *Journal of Advances in Medical and Biomedical Research* 31 (149), 594-601 (2023).

• **Presentations in congress and seminars**

1. **Ghorbanlou M**, Shokri S, Safari M, Farrokhi A, Masoumi R, Nejatbakhsh. Effects of Conjugated Linoleic Acid (CLA) on spermatogenesis and apoptosis of germinal cells in male mice model of obesity. Poster presentation. The 3rd international congress on reproduction, 20-22 may 2017, Tehran Iran, held by Iranian Society of Embryology and Reproductive Biology (ISERB).
2. **Ghorbanlou M**, Bahrami M, Farrokhi A, Nejatbakhsh R. Effect of Low Doses Consumption of Alcohol on Rat's Fetal Liver – A Histological Study. Oral presentation. First congress of medical school students of Zanzan University of medical sciences. 25th of Aban, 1395. Zanzan, Iran.
3. **Ghorbanlou M**, Abdanipour A, Jafari Anarkooli I, Bayati V, Nejatbakhsh R. Proliferation and Anti-Apoptotic Effect of Hydroethanolic Extract of *Lavandula officinalis* on Rat Neural Stem Cells. Chosen Poster presentation. First congress of medical school students of Zanzan University of medical sciences. 25th of Aban, 1395. Zanzan, Iran.
4. **Ghorbanlou M**. Cotinine. Neuroimmunology and applied bioinformatics, X. Online seminar of university of Tübingen 6th of May 2016, Faculty of medicine, department of neuropathology division of immunopathology of the nervous system.
5. **Ghorbanlou M**. *Erythrina Senegalensis*. Life sciences, Neuroimmunology and applied bioinformatics, IX. Online seminar of university of Tübingen 16th of October 2015, Faculty of medicine, department of neuropathology division of immunopathology of the nervous system.
6. **Ghorbanlou M**, Nejatbakhsh R, Abdanipour A, Shokri S, Shirazi R, Malekmohamdi N. Differentiation of mouse bone marrow mesenchymal stem cells to male germ-like cells by indirect co-culture with testis tissue and retinoic acid induction. Oral presentation. 4th international congress on reproduction – ISERB 2018, Tehran, Iran, April 24-27.
7. **Ghorbanlou M**. Intracranial physiologic calcification investigated by computer tomography (CT) scan in different age groups. 8th basic and clinical neuroscience congress, December 18-20, 2019 Tehran, Iran.
8. **Ghorbanlou M**. In search of subcortical and cortical morphologic alterations of a normal brain through aging: an investigation by computed tomography scan. (Poster presentation) 14th national congress of anatomical sciences (2024).

9. **Ghorbanlou M.** Possible dependence of sternum non-metric features on sex, age, and stature from a forensic viewpoint: a study in an Iranian population. (Poster presentation) 14th national congress of anatomical sciences (2024).
10. **Ghorbanlou M.** Upregulation of apoptotic genes and downregulation of target genes of sonic hedgehog pathway in DOAY medulloblastoma cell line treated with arsenic trioxide. (Poster presentation) 14th national congress of anatomical sciences (2024).
11. **Ghorbanlou M.** In search of subcortical and cortical morphologic alterations of a normal brain through aging: an investigation by computed tomography scan. (Poster presentation) 13th basic and clinical neuroscience congress (2024).
12. **Ghorbanlou M.** Upregulation of apoptotic genes and downregulation of target genes of sonic hedgehog pathway in DOAY medulloblastoma cell line treated with arsenic trioxide. (Oral presentation) 13th basic and clinical neuroscience congress (2024).
13. **Ghorbanlou M.** Targeting Positive Regulators of Sonic Hedgehog Signaling Pathway in Medulloblastoma by Designing CRISPR/Cas9 Single Guide RNAs. (Poster presentation) 13th basic and clinical neuroscience congress (2024).

• Workshops

1. **Biostatistics**, 3th of September 2015, held by Iranian Biological Resource Center (IBRC), Tehran, Iran.
2. **Basic and Advanced SPSS**, 4, 5th of September 2015, held by Iranian Biological Resource Center (IBRC), Tehran, Iran.
3. **Real Time PCR**, 10, 11th of September 2015, held by Iranian Biological Resource Center (IBRC), Tehran, Iran.
4. **Biosafety**, 1st of February 2016, held by Zanzan University of Medical Sciences, Research and Technology division, Biosafety council.
5. **Online course research method**, 7th of March 2016, held by Zanzan University of Medical Sciences, Research and Technology division, Students research committee.
6. **How to write a scientific paper**, 19th of May 2015, held by Zanzan University of Medical Sciences, Research and Technology division, Students research committee.
7. **How to write an abstract**, 27th of September 2015, held by Zanzan University of Medical Sciences, Research and Technology division, Students research committee.

8. **Judging and criticizing of scientific papers**, 6th of November 2015, held by Zanjan University of Medical Sciences, Research and Technology division, Students research committee.
9. **Primer design**, 30th of December 2018, held by Iran University of Medical Sciences Core laboratory.
10. **Teaching basics and curriculum design**, 20-21th of November 2018 held by Iran University of Medical Sciences, department of medical education.
11. **gRNA design and genome editing by CRISPR/Cas9 technology**. 31th of December 2019 and 1st and 2nd of January 2020. Held by Iranian Biological Resource Center (IBRC), Tehran, Iran.

• **Book Translation**

1. Neuroanatomy: an illustrated color text – 5th edition.

نورواناتومی (درسنامه ایی شماتیک) – شابک: 978-622-282-410-5

2. Visually Memorable Neuroanatomy for beginners – 1st edition.

نورواناتومی به زبان ساده – شابک: 978-622-365-113-7

• **Book authorization:**

1. Boost your English vocabulary.

شابک:

978-622-282-411-2

۲. علوم تشریح سیستم پوششی (بافت شناسی، تکوین و ماکروآناتومی)

شابک:

978-622-365-310-0

• **References:**

1. Dr. Mehdi Mehdizadeh

- a. Professor of anatomical sciences, faculty of medicine, Iran University of medical sciences.
- b. E-mail Address: mehdizadeh.m@iums.ac.ir
- c. Tel: +98 21-86404543

2. Dr. Reza Nejatbakhsh

- a. Associate professor of anatomical sciences, faculty of medicine, Zanjan University of Medical Sciences.
- b. E-mail Address: reza_nejat@zums.ac.ir; reza_nejat@yahoo.com
- c. Tel: +98 24-33440301-3 (276)

3. Dr. Alireza Abdanipour

- a. Assistant professor of anatomical sciences, faculty of medicine, Zanjan University of Medical Sciences.
- b. E-mail Address: abdani.anatomy@yahoo.com; abdaniipour@zums.ac.ir
- c. Tel: +98 24-33440301-3