

Curriculum Vitae

Name: Faezeh

Surname: Faghihi

Date of Birth: 19 September 1981

Place of Birth: Sary, Iran

Marital Status: Married; **Children:** 2

Position: Associate Professor at Iran University of Medical Sciences (IUMS)

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H-index

Google Scholar: 20

Scopus: 16

Citations

Scopus Author ID: [56095462300](https://orcid.org/0000-0003-1657-6242)

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Google Scholar Address: <https://scholar.google.com/citations?user=wW3HdyEAAAAJ&hl=en>

Research Interests

Stem Cell Biology, Regenerative Medicine, Cellular and Molecular Biology, Tissue Engineering, Developmental Biology.

Educational Background

Field of Study	University	Year	Degree/ Course
Animal Biology	University of Tehran, Tehran, Iran	2000- 2004	B.Sc.
Cellular- Developmental Biology	Arak University, Arak, Iran	2004- 2006	M.Sc.
Animal Biology- Developmental	University of Science and Culture	2007- 2013	Ph.D.
Tissue Engineering	University Hospital Basel, Basel, Switzerland	2012	Sabbatical Period
Neural Tissue Engineering	Iran University of Medical Sciences	2013-2015	Postdoc.
Molecular Biology	Nanjing University of Agriculture, Nanjing, China	2015	Fellowship
MBA	Tehran University, Tehran, Iran	2017-2018	in- service program

Teaching Experiences

Molecular Cell Biology (M.Sc.), Biotechnology (B.Sc.), Molecular Biology Techniques (M.Sc. & Ph.D.), Cell Culture Techniques (MSc., Ph.D.), Histology (B.Sc.), Laboratory of Histology (B.Sc.), Embryology (B.Sc.), Laboratory of Embryology (B.Sc.), Biosystematics(M.Sc.).

Publications:

Papers:

Total Number of **79 peer- reviewed papers** listed in Google Scholar (<https://scholar.google.com/citations?user=wW3HdyEAAAAAJ&hl=en>):

Number of 56 peer- reviewed papers indexed in Scopus (ID: 56095462300)

44 peer- reviewed papers indexed in Pubmed

31 peer- reviewed papers indexed in ISI.

Book Authorship:

Year	Authorship	Colleagues	Publication	Book Title
2011	Authorship	M.B. Eslaminejad, F. Faghihi	Intech publisher, Austria	Chapter: "Mesenchymal Stem Cell- based Bone Engineering for Bone Regeneration", in the book "Regenerative Medicine and Tissue Engineering; From Cells to Organs"
2008	Translation	Abbas Piriaei, Faezeh Faghihi, Reza Moghadasali, ...	House of Biology	Developmental Biology, 8th ed. (2006), Gilbert S.F, House of Biology Press

Awards

- 1- Good Researcher Award at Iran University of Medical Sciences (2022).
- 2- Young Researcher under 35 Years Old Award at Iran University of Medical Sciences (2015).
- 3- The Best Scientific Translation Award for the book "Developmental Biology" in the festival of "The Student Book of the Year" in Basic Science; ISBA(2009).

Patents

Development of a Perfusion Bioreactor for Fabrication of Tissue Engineered Cell Construct.
National Registration No. 84286; State Organization for Registration of Deeds and Properties;
Industrial Properties General Office, Iran.

Abstracts

Place/ Date	Presentation	Title of the Congress	Topic
20-22 December 2017	Lecture	6 th Basic and Clinical Neuroscience Congress	Large-Scale Analysis of MicroRNA Expression in Motor Neuron-like Cells derived from Human Umbilical Cord Blood Mesenchymal Stem Cells
September 2016 31 August-2 September 2016	Poster	Royan Intl Tween Congress Reproductive Biomedicine & Stem Cells	Differentiation Potential of Human Umbilical Cord Blood- Derived Mesenchymal Stem Cells into Motor Neuron-Like Cells
Tehran- Iran; 2015	Lecture	The 8 th International Association of Neurorestoratology and 12 th GCNN Congress	Differentiation Potential of Human Chorion-derived Mesenchymal Stem Cells into motor neuron- like Cells in Two and Three Dimensional Culture Systems
Tehran- Iran; 2015	Poster	2nd Iranian Congress on Progress in Tissue Engineering and Regenerative Medicine	The Effect of Perfusion Bioreactor System on Osteogenic Differentiation of Human Bone Marrow Mesenchymal Stem Cells
Iran University of Medical Sciences, Iran -2014	Poster	3 rd Basic and Clinical Neuroscience Congress	Differentiation Potential of Human Bone Marrow Mesenchymal Stem Cells into Motorneuron- like Cells on electrospun Gelatin Membrane
Iran University of Medical Sciences, Iran -2014	Poster	3 rd Basic and Clinical Neuroscience Congress	Molecular Pathway alteration in Alzheimer's Disease

Iran University of Medical Sciences, Iran -2014	Poster	3 rd Basic and Clinical Neuroscience Congress.	An Introduction to Biomarkers for Alzheimer's Disease
Iran University of Medical Sciences, Iran -2013	Lecture	2 nd Basic and Clinical Neuroscience Congress.	Cell- based therapy in spinal cord injury
Royan Institute, Iran -2010	Lecture	First Royan International Summer School	Stem cells and developmental biology
Babol Medical University; 2012	Lecture	4 th Student Congress of North Research Center	Tissue Engineering
Shiraz Medical University; 2012	Lecture	Application of Mesenchymal Stem Cells in Orthopedics	Application of Mesenchymal Stem Cells in Orthopedics
Shahid Beheshti Medical University; 2012	Lecture	Workshop of Tissue Engineering in Dentistry	Approaches to Isolate and Characterize Mesenchymal Stem Cells
Yokohama,Japan - 2012	Poster	10th Annual meeting of International Society for Stem Cell Research; (ISSCR)	The efficacy of purmorphamine in promotion of osteogenesis in human bone marrow- derived mesenchymal stem cells: Appropriate dose and response time
Yokohama,Japan - 2012	Poster	10th Annual meeting of International Society for Stem Cell Research; (ISSCR)	Rapamycin attenuates osteogenic properties of dexamethasone on human bone marrow derived mesenchymal stem cells.

Barcelona, Spain - 2009	Poster	7th Annual meeting of International Society for Stem Cell Research; (ISSCR),	A method for mice Mesenchymal Stem Cell isolation and expansion in hypoxic conditions on Fibronectin
Munich, Germany - 2007	Poster	17th European Cong. of clinical microbiology & Infectious Disease	Serology and Immunological study on the infectivity of host animals and ticks (Ixodidae, Argasidae) to CCHF virus in Ardabil Province, Iran
Tarbiat Modares University; 2008	Poster	14 th Intl. Congress of Biology	The Effect of Staurosporine on the Expression of Neural genes in hematopoietic Stem Cells
Innsbruck, Austria - 2006	Poster	14th Congress of Order and Disorder in Differentiation and Cancer	Transdifferentiation of CD133+ human umbilical cord blood hematopoietic stem cells into neural cells by the anti-cancer drug, Staurosporine
Marseille, France - 2005	Poster	Medicine and Health in the Tropics	Fauna and Geographical Distribution of ticks in foci of Boreliasis in Meshkin Shahr, Ardabil province, Iran
Paris, France - 2008	poster	X th European multicolloquium of parasitology	Tick infestation rate of sheep and temporal distribution of Ticks
Jeju, Korea - 2008	Poster	XVII th international congress for tropical medicine and malaria	Crimean-Congo hemorrhagic fever: A seroepidemiological and molecular survey in Poshete Kooh of Sari, Mazandaran Province, Iran
Jeju, Korea - 2008	Poster	XVII th international congress for tropical medicine and malaria	Immunological and serological study on the infectivity of host animals and ticks (Ixodidae, Argasidae) to CCHF virus in west Azerbaijan, Iran
Tehran- Iran; 2015	Lecture	The 8 th International Association of Neurorestoratology and 12 th GCNN Congress	Differentiation Potential of Human Chorion-derived Mesenchymal Stem Cells into motor neuron-like Cells in Two

			and Three Dimensional Culture Systems
Tehran- Iran; 2015	Poster	2 nd Iranian Congress on Progress in Tissue Engineering and Regenerative Medicie	The Effect of Perfusion Bioreactor System on Osteogenic Differentiation of Human Bone Marrow Mesenchymal Stem Cells

Projects

Date	Contribution	Sponsor	Title of the Project
2022	Director	Iran University of Medical Sciences	Investigating the effect of alginate-chitosan hydrogel loaded with quercetin on type 2 diabetic rat wounds
2022	Director	Iran University of Medical Sciences	Designing and constructing of the michigan instrument for investigating postural control (falling slipping) and movement (freezing of gait) and investigating the effect of attention distractions
2021	Director	Iran University of Medical Sciences	Construction of the CHO Cell Line Expressing Artificial Multi-miR Sponge Using CRIS-PITCh and RNP Based Delivery Method and Bxb1 Recombinase (RMCE)
2020	Director	Iran University of Medical Sciences	Investigation on Safety and Efficacy of Autologous Human Fibroblasts Transplantation in Regeneration of Atrophic Cutaneous Leishmaniasis Scar.
2020	Director	Iran University of Medical Sciences	Fabrication of Cellulose- Based Scaffolds for culture and chondrogenic differentiation of human mesenchymal stem cells.

2018- now	Director	Iran University of Medical Sciences	Evaluation of Auto transplantation of melanocyte-keratinocyte co-culture model for vitiligo :clinical Trial
2017- now	Director	Iran Stem Cell Council (SCC), Iran University of Medical Sciences	Assessment of the halloperidol effect on canonical WNT pathway by focus on cellular oxidative stress and glutamate level in neural progenitor cells drive from human induce pluripotent stem cells prepare from schizophrenic patients
2017- now	Colleague	Iran University of Medical Sciences	Study of the morphologic and functional properties of synapse in the cellular model of autism by means of Induced Pluripotent Stem Cell (iPSC)
2016- now	Director	Iran University of Medical Sciences	Epigenome Analysis of the Candid Genes responsible for Differentiation of Human Bone Marrow Mesenchymal Stem Cells to Motorneuron- like Cells
2016- now	Director	Iran University of Medical Sciences, Iran National Science Foundation	Analysis of Histone Modifications in Candid Genes responsible for Differentiation of Motorneuron- like Cells from Human Cord Blood Mesenchymal Stem Cells.
2018-now	Director	Iran University of Medical Sciences	Instruction of a user Friendly Perfusion Bioreactor for cell seeding into Large Scale scaffolds homogeneously
2016- 2019	Director	Iran University of Medical Sciences	Assessment of Cholinergic Differentiation Potential of Human Adipose- derived Mesenchymal Stem Cells
2016-2019	Director	Iran National Science Foundation , Iran Stem Cell Council (SCC), Iran University of Medical Sciences	Analysis of differential microRNA expression profile in human cord blood Mesenchymal stem cell- derived motor neurons.
2015-2017	Director	Iran University of Medical Sciences	Differentiation of human CD133+ hematopoietic stem cells to Motor neuron- like cells in Two Dimensional Culture System.
2015-2017	Director	Iran University of Medical Sciences	A Comparative study on Differentiation potential of human chorion-derived Mesenchymal stem cells(HC-MSCs) and Human Cord Blood mesenchymal Stem cells to Myoblast-like cells.

2015- 2017	Director	Iran National Science Foundation(INSF) and Iran University of Medical Sciences	Cholinergic Differentiation of Chorion-derived Mesenchymal Stem Cells in Vitro and Transplantation into Rat Alzheimer Model
2012- 2014	Colleague	Tehran University of Medical Sciences	Synthesis and Characterization of Biodegradable Electroactive Polyurethane/ Cardiomyocytes for Construction of cardiac Patches.
2013-2014	Colleague	Tehran University of Medical Sciences	Fabrication of Tissue Engineered Cell Constructs Using Endometrial Stem Cells on Electrospun PLGA for regeneration of Spinal Cord Injury in Rats
2012- 2014	Director	Iran National Science Foundation	Synthesis of Human Bone Marrow Mesenchymal stem Cells and Human Cord Blood Mesenchymal Stem Cells based Constructs on Electrospun Gelatin Membrane for Regeneration of Spinal Cord Injury in Rats
2009-2012	Colleague	Royan Institute for Stem Cell Biology and Technology	Murine Mesenchymal Stem Cell isolation and expansion based on CD44 surface antigen
2005- 2006	Colleague	Royan Institute for Stem Cell Biology and Technology	The effect of Staurosporine on differentiation of CD133 ⁺ hematopoietic stem cells into neural cells
2003- 2005	Colleague	Tehran University of Medical Sciences	A Survey on Fauna, Distribution, and Infection Rate to Borelia and Determination of Susseptibility to Acaricide in Meshkinshah, Ardabil Province
2012- 2015	Colleague	Iran National Science Foundation	Differentiation of Mesenchymal Stem Cells derived from Wharton Jelly into Motor Neuron- like Cells on Freeze- dried and Electrospun PCL/ Collagen Scaffolds
2004- 2005	Colleague	Tehran University of Medical Sciences	○A survey on Detection of CCHF virus in Ticks Argazidae Using RT- PCR and Elisa in Carnivores of Ardabil Province, Iran
2013	Colleague	Institute Pasteure of Iran	Molecular and Seroepidemiology Survey of West Nile Virus in Azarbayjan-e-Sharghi & Azarbayjan-e- Gharbi Province.

Workshops

Date	Position	Venue	Workshop Topic
2016, 2017, 2021,2022	Lecturer	Cellular and Molecular Research Center, Iran University of Medical Sciences	Principles of Cell Culture
2014	Lecturer	School of Advance Technologies in Medicine, Tehran University of Medical Sciences	An Introduction to Bioreactors in Tissue Engineering
2014	Lecturer	School of Advance Technologies in Medicine, Tehran University of Medical Sciences	Immunostaining
2010 and 2011	Lecturer	Royan Institute for Stem Cell Biology and Technology	Application of Mesenchymal Stem Cells Bone and Chondral Tissue Engineering
2010	Lecturer	Royan Institute for Stem Cell Biology and Technology	International Workshop of Mesenchymal Stem Cells: Isolation, purification, propagation and differentiation
2012	Lecturer	Tehran University of Medical Sciences	Two Dimensional versus Three Dimensional Cell Culture Methods
2012 and 2013	Lecturer	Tehran University of Medical Sciences	Immunostaining

2012	Lecturer	Royan Institute for Stem Cell Biology and Technology	International Workshop of Mesenchymal Stem Cells: Isolation, purification, and differentiation
2012	Lecturer	Royan Institute for Stem Cell Biology and Technology	International Workshop of Mesenchymal Stem Cells: Isolation, purification, and differentiation
2013	Lecturer	Iran University of Medical Sciences	Acellularization of Amniotic Membrane for Application in Tissue Engineering
2013	Lecturer	Tehran University of Medical Sciences	An Introduction to Bioreactor Systems in Tissue Engineering

Work Experiences

Organization	Place	Date	Position
Iran University of Medical Sciences	Tehran- Iran	2015- now	Academic Member (Currently Associate Professor)
Iran University of Medical Sciences	Tehran- Iran	2013- 2015	Postdoc Fellow
Royan Institute for Stem Cell Biology and Technology	Tehran- Iran	2010-2011	Research Assistant
Azad University	Sari- Iran	2005- 2007	Teacher

Membership

Date	Position
2016, 2017	Member of the Scientific Board at the Congress of Basic and Clinical Neuroscience BCN Congress
2015	Member of Executive Board at International Congress of Neurorestoratology, Tehran, Iran
2009	Member of ISSCR Association

Executive Experiences

Date	Position
2017- Now	Handling Editor of the Section of “Cellular and Molecular Neuroscience” in the Journal of “ Basic and Clinical Neuroscience”, Iran University of Medical Sciences
2021- 2022	Head of the Department of “Education in Research”, Deputy of Research and Technology, Iran University of Medical Sciences
2015- 2022	“Manager of Research and member of Research Committee” at Cellular and Molecular Research Center, Iran University of Medical Sciences
2016- 2020	Director of “Cell Culture Laboratory” at Cellular and Molecular Research Center, Iran University of Medical Sciences
2016, 2017	Member of the Scientific Board at the Congress of Basic and Clinical Neuroscience BCN Congress
2015	Member of Executive Board at International Congress of Neurorestoratology, Tehran, Iran
2009	Executive Manager in National Symposium of “Application of Mesenchymal Stem Cells in Orthopedics”

Lab and Software Experiences

1. Animal/ Human Cell Culture Technics; Two and Three Dimensional Culture Systems
2. Stem Cell isolation and Expansion from various sources; including Cord blood, Chorin, Amniotic membrane, Dental pulp and Wharton jelly as well as Adipose tissue.
3. Stem Cell differentiation into Osteoblasts, Chondroblasts, adipoblasts, and neural cells.
4. Working with dynamic culture systems
5. Generation of induced pleuripotent stem cells (iPSCs)
6. Fluorescence Activated Cell Sorting System(FACS) and cell analysis by WINMDI and Flowjo softwares
7. Magnetic Activated Cell Sorting System: MACS
8. Immunostaining: Immunocytochemistry & Immunohistochemistry
9. Real time PCR and data analysis
10. Western blot
11. Quantitative Colorimetric assays (e.g. MTT, Osteogenesis assay)
12. Primer Design
13. Spss
14. Graph pad prism
15. Endnote