

Curriculum Vitae

Personal Data:

Name	Surname	Date of Birth	Nationality	Sex	Marital Status
Raheleh	Farahzadi	1984	Iranian	Femal	Married

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Educational Background: (Last One First)

Certificate Degree	Field of Specialization	Name of Institution Attended	Date Received
Ph.D	Clinical Biochemistry	Tarbiat Modares University, Tehran, Iran	2016
MSC	Biochemistry	Institute of Biochemistry and Biophysics, University of Tehran, Tehran, Iran	2010

Academic Positions: (Last One First)

Title of Position	Field of Specialization	Date		Name of Institution
		From	To	
Assistance Professor	Clinical Biochemistry	Feb-2017	Now	Hematology and oncology Research Center, Tabriz University of Medical Sciences, Tabriz, Iran

Master and Doctorate Thesis Supervision:

No	Full Name of Student	Level	Title of Thesis
1	Halimeh Mobarak	DVM student	Investigation of growth, proliferation and senescence in rat adipose-derived MSCs in the presence of L-carnitine and its osteogenic and adipogenic potential differentiation
2	Davood Najafi	DVM student	Approach to treatment of chronic myeloid leukemia via investigation of MSCs effects on apoptosis and cell surface markers expression of CD33 and CD34
3	Maedeh Ghari	DVM student	Investigation of MSCs effect on Wnt/ β -catenin signaling pathway and cell surface markers expression of CD13 and CD14 in chronic myeloid leukemia
4	Nassim Rajabzadeh	MSC student (Biochemistry)	Investigation effect of secreted cytokines from rat bone marrow mesenchymal stem cells on neuroblastoma cell line (B65) through MAPK/ERK signaling pathway
5	Sheida Azarbad	MSC student (Biochemistry)	Effect of Mesenchymal Stem Cell on Differentiation of Rat Bone Marrow Mononuclear Cells toward Granulocytes Cell Line

6	Tina Daneshrad	DVM student	Effect of L-carnitin on cardiomyogenic differentiation of C-Kit ⁺ bone marrow progenitor cells via MAPK-ERK signaling pathway
7	Shahram pourrassol	MSC student (Genetic)	Evaluation of Caspase 9 and AHR gene expression following inhibition of mitochondrial activity in Acute myeloid leukemia stem cells
8	Niloo Mehran	MSC student (Genetic)	Study Effect of mitochondrial targeting on Telomerase activity and telomere length in acute myeloid leukemia stem cells
9	Sahar Davari	MSC student (Genetic)	Influences of Tigecycline on Apoptotic genes and P53 in Acute myeloid Leukemia stem cells
10	Akram Keramat	Ph.D student (Medicinal Chemistry)	Evaluation of induction process of Poly Caprolactone Polymer Potency on Cardio-Myogenic Differentiation of Rat Bone Marrow Stem Cells (an In Vitro study)
11	Ali Ehsani	Pharmacy student	Investigation of silver nanoparticles induction on cardiomyogenic differentiation of rat bone marrow derived-mesenchymal stem cells (an In Vitro study)
12	Asma Jodaei	Pharmacy student	Investigation of Telomer length and cell cycle changes on cardiomyogenesis of rat bone marrow derived-mesenchymal stem cells in the presence of silver nanoparticle
13	Ayoub Mamandi	Pharmacy student	Investigation of gene expression level of the hTERT gene and telomer length changes in acute lymphoblastic leukemia cell line (Molt-4) following co-culture with mesenchymal stem cells
14	Soran Zalavi	Pharmacy student	Investigation of apoptosis induction in acute lymphoblastic leukemia cell line (Molt-4) following co-culture with mesenchymal stem cells

Publications:

A: Books

Title	Type of Work		Publisher	Date of Publication
	Translation	Compilation		
A guid to Diagnostic & Clinical Tests in Clinical Biochemistry	*		A guid to Diagnostic & Clinical Tests in Clinical Biochemistry	09.08.2015
A General Illustrated View: Mesenchymal Sem Cells From Isolation to utility		*	Jahad Daneshgahi-Tehran	10.01.2019
Mesenchymal Stem Cells Proceedings of the National and International Conferences		*	Jahad Daneshgahi-Tehran	01.01.2020

Publications:

B: Papers

Title of Paper	Place of Publication	Date of Publicat
Effect of electromagnetic field on acetylcholinesterase activity: In vitro study	African Journal of Biochemistry Research	2012
Clinopathological study in an ovine model of experimental acute myocardial infarction	Iranian Journal of Veterinary Research	2013
Investigation of the effect of sodium selenate on scetylcholinesterase activity under extremely low frequency electromagnetic field	Journal of Biology and Life Science	2013
Induction of angiogenesis via topical delivery of basic-fibroblast growth factor from polyvinyl alcohol–dextran blend hydrogel in an ovine model of acute myocardial infarction	Journal of Tissue Engineering and Regenerative Medicine	2013
Circular dichroism spectroscopy examination on secondary structural changes of electrsi eel acetylcholinesterase in presence of Sodium selenate: in vitro study	Romanian Journal of Biochemistry	2014
Comparison of selected biochemical parameters between naturally infected and non-infected goats with Anaplasma ovis	Comparative Clinical Pathology.	2014
Interaction of mobile telephone radiation with biological systems in veterinary and medicine	Journal of Biomedical Engineering & Technology	2014
Application of l-carnitin as nutritional supplement in veterinary medicine	Romanian Journal of Biochemistry	2014
Biomarkers in medicine: An overview	British Journal of Medicine & Medical Research	2014
Survey on impact of trace elements (Cu, Se and Zn) on veterinary and human mesenchymal stem cells	Romanian Journal of Biochemistry	2015
A mini overview of isolation, characterization and application of amniotic fluid stem cells	International Journal of Stem cell	2015
Isolation, culturing, characterization and aging of adipose tissue-derived mesenchymal stem cells: A brief overview	Brazilian Archives of Biology and Technology	2015
L-carnitine contribute to enhancement of neurogenesis from mesenchymal stem cells through Wnt/β-Catenin and PKA pathway	Experimental Biology and Medicine	2016
L-carnitine effectively induces hTERT gene expression of human adipose tissue-derived mesenchymal stem cells obtained from the aged subjects	International Journal of Stem Cells	2016
Key immune cell cytokines affects the telomere activity of cord blood cells in vitro.	Advanced Pharmaceutical Bulletin	2016
Reduce aging of rat adipose-derived mesenchymal stem cells by ZnSO₄ under ELF-EMF exposure is associated with increased TERT gene expression	Veterinary Research Forum	2017
Enhancement of osteogenic differentiation of rat adipose tissue-derived mesenchymal stem cells by zinc sulphate under electromagnetic field via the PKA, ERK1/2 and Wnt/β-catenin signaling pathways	Plos One	2017
L-carnitine contribute to enhancement of neurogenesis from mesenchymal stem cells through Wnt/β-catenin and PKA pathway	Experimental Biology and Medicine	2107
L-carnitine significantly decreased aging of rat adipose tissue-derived mesenchymal stem cells	Veterinary Research Communications	2017

Zinc sulfate contributes to promote telomere length extension via increasing telomerase gene expression, telomerase activity and change in the TERT gene promoter CpG island methylation status of human adipose-derived mesenchymal stem cells	Plos One	2017
Curcumin affects adipose tissue-derived mesenchymal stem cell aging through TERT gene expression	Drug Research	2018
Zinc sulphate mediates the stimulation of cell proliferation of rat adipose tissue-derived mesenchymal stem cells under high intensity of EMF exposure	Biological Trace Element Research	2018
Anti-aging protective effect of L-carnitine as clinical agent in regenerative medicine through increasing telomerase activity and change in the hTERT promoter CpG island methylation status of adipose tissue-derived mesenchymal stem cells	Tissue and Cell	2018
Mummy material can promote differentiation of adipose derived stem cells into osteoblast through enhancement of bone specific transcription factors expression	Advanced Pharmaceutical Bulletin	2018
Immunophenotypic characterization, multi-lineage differentiation and aging of zebrafish heart and liver tissue-derived mesenchymal stem cells as a novel approach in stem cell-based therapy	Tissue and Cell	2019
Cytokines secreted from bone marrow derived mesenchymal stem cells promote apoptosis and change cell cycle distribution of K562 cell line as clinical agent in cell transplantation	Plos One	2019
Telomere shortening as a hallmark of stem cell senescence	Stem Cell Investigation	2019
Stem Cell-Based Regenerative Medicine	Stem Cell Investigation	2019
Mesenchymal stem cells in acute myeloid leukemia: a focus on mechanisms involved and therapeutic concepts	Blood Research	2019
An overview of the myocardial regeneration potential of cardiac c-Kit+ progenitor cells via PI3K and MAPK signaling pathways	Future Cardiology	2020
Targeting the proliferation inhibition of chronic myeloid leukemia cells by bone marrow derived-mesenchymal stem cells via erk pathway as a therapeutic strategy	Acta Medica Iranica	2020
L-carnitine Extends the Telomere Length of the Cardiac Differentiated CD117+- Expressing Stem Cells	Tissue and Cell	2020
A general view of CD33+ leukemic stem cells and CAR-T cells as interesting targets in acute myeloblastic leukemia therapy	Blood Research	2020

Interleukin-6, -8, and TGF- β Secreted from Mesenchymal Stem Cells Show Functional Role in Reduction of Telomerase Activity of Leukemia Cell Via Wnt5a/ β -Catenin and P53 Pathways	Advanced Pharmaceutical Bulletin	2020
Cardiac differentiation of bone-marrow-resident c-kit+ stem cells by L-carnitine increases through secretion of VEGF, IL6, IGF-1, and TGF- β as clinical agents in cardiac regeneration	Journal of Biosciences	2020
Mesenchymal Stem Cells Could Be Considered as a Candidate for Further Studies in Cell-Based Therapy of Alzheimer's Disease via Targeting the Signaling Pathways	ACS Chemical Neuroscience	2020

Research Activities:

Title of Project	Place of Work	Dates	
		From	To
Survey on Effect of ELF-EMFs on the rTERT Gene Expression in Rat Adipose Tissue-Derived Mesenchymal Stem Cells in Presences of Zinc Sulfate	Faculty of Veterinary Medicine, University of Tabriz	2012	2013
Investigation of the l-carnitine effect on neurogenic differentiation, nestin and some neuron growth factors expression in rat adipose tissue-derived mesenchymal stem cells	Faculty of Veterinary Medicine, University of Tabriz	2014	2015
Investigation of growth, proliferation and senescence in rat adipose-derived MSCs in the presence of Curcumin as antioxidant and its osteogenic and adipogenic potential differentiation	Faculty of Advanced Medical Sciences, Tabriz University of Medical Sciences	2014	2017
Isolation and characterization of amniotic fluid stem cells & its antitumor effect application on ovarian cancer cell line	Faculty of Advanced Medical Sciences, Tabriz University of Medical Sciences	2014	2016
Investigation of PKA/cAMP and MAPK/ERK signalling pathways on osteogenic differentiation rat bone marrow derived mesenchymal stem cells in presence of L-carnitine	Faculty of Veterinary Medicine, University of Tabriz	2016	2017
Investigation of signalling pathway involved in osteogenic differentiation of rat adipose tissue-derived mesenchymal stem cells in the presence of zinc sulfate and electromagnetic field	Faculty of Veterinary Medicine, University of Tabriz	2016	2017
Immunophenotypic characterization, multi-lineage differentiation and aging of zebrafish heart and liver tissue-derived mesenchymal stem cells as a novel approach in stem cell-based therapy	Faculty of Veterinary Medicine, University of Tabriz	2017	2018
Cytokines secreted from bone marrow derived mesenchymal stem cells promote apoptosis and change cell cycle distribution of K562 cell line as clinical agent in cell transplantation	Faculty of Veterinary Medicine, University of Tabriz	2017	2018
Effect of the telomerase and mitochondria inhibition on breast cancer stem cells and in combination therapy with NK cells	Faculty of Advanced Medical Sciences, Tabriz University of Medical Sciences	2018	Until now

Investigation of the effect of Vitamin D on EZH2 and STAT protein expression in MCF7 breast cancer cell line	Hematology and Oncology Research Center, Tabriz University of Medical Sciences	2018	Until now
Evaluation of bone marrow stem cell surveillance after death	Drug Applied Research Center, Tabriz University of Medical Sciences	2018	Until now
The effect of inhibiting telomerase activity on mitochondrial pathway of apoptosis in acute myeloid leukemia stem cells	Faculty of Medicine, Tabriz University of Medical Sciences	2018	Until now
Investigation of angiogenic factors and cardiomyogenic potential of C-Kit+ bone marrow cells in the presence of infarcted cardiomyocyte in rat animal model	Cardiovascular Research Center, Tabriz University of Medical Sciences	2018	2020
Investigation of signaling pathways involved in bone-marrow stem cells effects on telomere length, telomerase activity and hTERT gene expression in chronic myeloid leukemia cell line (K562)	Hematology and Oncology Research Center, Tabriz University of Medical Sciences	2018	2020
Investigating telomere length changes and expression of cancer biomarkers CD33 and CD34 in acute myeloid leukemia (KG-1) following co-culture with bone marrow-derived mesenchymal stem cells	Hematology and Oncology Research Center, Tabriz University of Medical Sciences	2019	2020
Investigation of promoter methylation status of TDT following the co-culture of bone marrow-derived mesenchymal stem cells with acute lymphoblastic leukemia cell line (Molt-4)	Hematology and Oncology Research Center, Tabriz University of Medical Sciences	2019	Until now
Investigation of the Differentiation potency of C-kit+ hematopoietic stem cell towards natural killer (NK) cell line	National Institute for Medical Research Development	2019	Until now
<u>Research Interests: Regenerative Medicine, Tissue Engineering, Cell Therapy, Angiogenesis, Stem cells Therapy, Cell Signaling, Drug Delivery Systems</u>			

Papers Presented at National and International Scientific Assemblies:

Title of Paper	Title and Place of Assembly	Date
Study on the Effect of sodium selenate on acetylcholinesterase activity under extremely low frequency electromagnetic field (ELF-EMF)	Islamic Azad University, Jahrom Branch, Jahrom, Iran	2011
Extremely Low Frequency of Electromagnetic Fields (ELF-EMF) Decreased Acetylcholinesterase	First International and 11th Iran Biochemical Chemistry Conference-Ardabil	2012
Effects of Sodium Selenate on the Structure and Activity of Acetylcholinesteras	First International and 11th Iran Biochemical Chemistry Conference-Ardabil	2012
Investigating protein expression in the anterior and posterior of myocardium using bFGF loaded gel in an ovine model infarct	15 th International Medical Sciences Congress (TIMSC)-Tabriz	2012
Application of L-carnitine as nutritional supplement in veterinary and medicine	9 th Congress of Iran Veterinary Students-Urmia	2013
Effect of l-carnitine on osteogenic differentiation of rat adipose tissue-derived mesenchymal stem cells	1th National Congress of Iran Biology and Natural Sciences-Tehran	2013
Effect of curcumin on osteocalcin protein expression in osteogenic differentiated mesenchymal stem cells from rat bone marrow	The first national and modern technologies Congress	2013
Effect of zinc ion on osteocalcin protein expression in osteogenic differentiated adipose tissue-derived mesenchymal stem cells	International conference on new findings of Agriculture, Natural Resources and Environment-Tehran	2013
INVESTIGATION OF CURCUMINEFFECT ON HTERTGENE EXPRESION IN HUMAN ADIPOSE-DERIVED MESENCHYMAL STEM CELLS BY QUANTITATIVE REAL-TIME PCR (Q-PCR)	4 th National Congress on Medicinal Plants 12-13 May 2015 Tehran- Iran	2015
EFFECT OF CURCUMIN ON OSTEOGENIC DIFFERENTIATION of RAT ADIPOSE TISSUE-DERIVEDMESENCHYMAL STEM CELLS	4 th National Congress on Medicinal Plants 12-13 May 2015 Tehran- Iran	2015
Survey on Effect of L-carnitine over Human Adipose Tissue-derived Mesenchymal Stem Cells Proliferation	International Congress on Stem Cells and Regenerative Medicine-Mashad	2015
Investigation of L-Carnitine Effect on the hTERT Gene Expression in Human Adipose Tissue-Derived Mesenchymal Stem Cells by Q-PCR	International Congress on Stem Cells and Regenerative Medicine-Mashad	2015
Optimized successful vertification of human amniotic fluid derived mesenchmal stem cell	International Congress on Stem Cells and Regenerative Medicine-Mashad	2015
ZINC ION DECREASED OSTEOGENIC DIFFERENTIATION OF RAT ADIPOSEDERIVED MESENCHYMAL STEM CELLS UNDER EXTREMELY LOW FREQUENCY ELECTROMAGNETIC FIELD (ELF-EMF)	4th.iranian Congress of Trace Elements-Hamedan	2015

INVESTIGATION OF ZINC SULPHATE EFFECT ON OSTEOBLASTIC MARKERS EXPRESION IN RAT	4th.iranian Congress of Trace Elements-Hamedan	2015
Effect of zinc sulfate over telomer length of mesenchymal stem cell	4th.iranian Congress of	2015
Investigation of zinc sulfate on proliferation of human adipose derived mesenchymal stem cell	4th.iranian Congress of Trace Elements-Hamedan	2015
Characterization and Comparing Amniotic Fluid Stem Cells before and after Vitrification	Royan International Twin Congress- Tehran	2015
Investigation of growth, proliferation and senescence in rat adipose derived MSCs in the presence of L-Carnitine and its osteogenic and adipogenic potential	9 th Convention of Iranian Veterinary Clinicians-sep 25-27	2015
Effect of curcumin on adipogenic and osteogenic expression of rat adipose-derived mesenchymal stem cells by Real time PCR	9 th Convention of Iranian Veterinary Clinicians-sep 25-27	2015
Effect of curcumin on proliferation of mesenchymal stem cells derived from rat adipose tissue-derived mesenchymal stem cells	9 th Convention of Iranian Veterinary Clinicians-sep 25-27	2015
Prevalence of Bovine Ephemoral Disease in Ardabil and East Azarbayegan	9 th Convention of Iranian Veterinary Clinicians-sep 25-27	2015
Effect of l-carnitine on nestin gene expression in neurogenic differentiated mesenchymal stem cells from rat adipose tissue-derived mesenchymal stem cells	The second national congress of modern technologies- Tehran	2015
Effect of zinc sulphate on adipogenic differentiation of rat bone marrow-derived mesenchymal stem cells	The second national congress of modern technologies-	2015
Investigation effect of l-carnitin on ngf and bdnf gene expression in neural differentiated mesenchymal stem cell by real time pcr	The first national and modern technologies Congress- Tehran	2015
investigation the effect of l-carnitine on telomerase length of human adipose tissue derived mesenchymal stem cell	The first national and modern technologies Congress-Tehran	2015
survey on effect of electromagnetic field on proliferation of mesenchymal stem cells derived from rat adipose tissue-derived mesenchymal stem cells	3th national congress of modern technologies-Tehran	2106
Investigation effective signaling pathway on osteogenesis of mesenchymal stem cells in presence of zinc sulphate and electromagnetic field	3th national congress of modern technologies-Tehran	2016
Cytokines secreted from mesenchymal stem cells as a novel therapy in neuroblastoma	2th International congress of Stem Cells and Regenerative medicine	2017
L-carnitine contribute to change the promoter methylation status of hTERT in aged human adipose tissue-derived mesenchymalstem cells	2th International congress of Stem Cells and Regenerative medicine	2017
Zebrafish liver tissue-derived mesenchymal stem cells expressed the CD44 and CD90 epitopes as mesenchymal cell surface markers	3th International congress of Stem Cells and Regenerative medicine	2018
Telomerase activity of myeloid leukemic cells was suppressed by rat mesenchymal stem cells	3th International congress of Stem Cells and Regenerative medicine	2018
Rat bone marrow derived mesenchymal stem cells can potentially decrease the hTERT gene expression of chronic myeloid leukemia cell line	International congress of Biology	2018

Immunophenotypical characterization of zebrafish heart-derived mesenchymal stem cells	International congress of Biology	2018
INFLUENCE OF CYTOKINES SECRETED BY BONE MARROW MESENCHYMAL STEM CELLS ON CELL PROLIFERATION OF K562 CELL LINE	14th International Congress of Royan	2018
STIMULATORY EFFECT OF BONE MARROW MESENCHYMAL STEM CELL CO-CULTURE ON APOPTOSIS AND CELL CYCLE ARREST OF K562 Cell LINE	14th International Congress of Royan	2018

Awards, Honorary Degrees, Medals and Positions:

Title of Award, Medal, Position	Issuing Authority	Country	Year
Firt top grade in Ph.D entrance exam	Tarbiat Modares University	IRAN	2011

Research Interests

1. Regenerative medicine
2. Tissue engineering
3. Stem cell Therapy in neurodegenerative disease
4. Stem cell Therapy in cardiac therapy
5. Cellular signaling
6. Multi lineage differentiation of stem cells