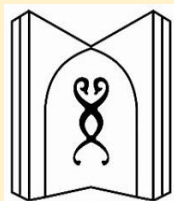


(TUOMS)



Tabriz University of Medical Sciences

School of Medicine
Curriculum Vitae

Personal Data:

First name: Hajar

Last name: Shafaei

Nationality: Iranian

Date of birth: 20/01/1970

Place of birth: Khoy

Marital status: married

Specialty: Anatomical sciences and tissue engineering

Academic rank: Associate Professor

Department/Research Center: Department of anatomy, Department of tissue engineering,
Department of applied cell sciences

Address (Office): Department of anatomy, Faculty of Medicine, Medical Sciences University of
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Telephone (Office):041-33342086

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E-mail: shafaei49@gmail.com, shafaeih@tbzmed.ac.ir

h-index (Scopus):5

ORCID ID: [0000-0002-9206-054X](https://orcid.org/0000-0002-9206-054X)

Scopus ID: 57188703024

ResearcherID: F-8253-2017



Fields of interest

Tissue engineering, Cell therapy, Neuroanatomy

Skills: (language, software...)

Persian, Turkish and English languages

Endnote, Statistical analysis (graph pad prism and SPSS), winmdi , primer design soft wares

Isolation of cells, culture of different cells and in vitro differentiation of mesenchymal stem cells

Educational Background:

Date	Degree	Institution	Country
1994	Bachelor of Midwifery	Medical Sciences University of Mazandaran	Iran
2004	MSc in Histology	Medical Sciences University of Tabriz	Iran
2010	PhD in Anatomical sciences	Medical Sciences University of Isfahan	Iran

Sabbaticals:

Start and End Date (month/year)	Details
11 - 5 - 2010 to 13 - 11 - 2010	complementary period of PhD in VUmc University in Amsterdam for evaluation of the chondrogenic effect of Low Intensity Ultrasound on ASCs, BMSCs and chondrons

Thesis

Degree	Title
MSc	Evaluation of the effects of cirullus colocynthis on histopathology of liver and intestine
PhD	Chondrogenesis induction of adipose tissue derived stem cell by using low intensity ultrasound (LIUS) and TGF β and definition of molecular phenotype of differentiated chondrocytes

Educational experience

Teaching

Date (month/year)	Course Name, Venue (Institution, Address)
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2011-2023	Anatomy
2011-2023	Histology
2011-2023	Embryology
2011-2023	Tissue engineering

Workshop(s)

Date (month/year)	Course Name, Venue (Institution, Address) as a lecturer
	Cell culture in Medical Sciences University of Tabriz
	Applied anatomy on brain sections samples for neurosurgery residents in Medical Sciences University of Tabriz

Lecture(s)

Date (month/year)	Details as a teacher
2011	General anatomy
2012	Reproductive system anatomy
2013	Cell culture
2014	Neuroanatomy
2015	Head and neck anatomy
2016	Trunk anatomy
2017	Neuroanatomy, Head and neck anatomy
2018-2023	Neuroanatomy, cardiovascular system, respiratory system, sense organs anatomy, tissue engineering, embryology, stem cells

Research Activities:**Research areas, Interests**

Tissue engineering (stem cells, chondrogenesis and osteogenesis)
 cell therapy (cartilage and bone repair)
 Biologic therapy

Books:

<i>N</i>	<i>Title</i>	<i>authors</i>	<i>Publisher</i>	<i>Authorship/ Translation/</i>
1	<i>Basic histology (13th edition) translation to Persian</i>	<i>Junqueira</i>	<i>Sobhan</i>	<i>Translation</i>
2	<i>General anatomy</i>	<i>Vahedi, Abed elahi, Ebrahimi, Shafaei, Mohammadi</i>	<i>Baray fada</i>	<i>Authorship</i>

Selected articles:

<i>N</i>	<i>Title</i>	<i>authors</i>	<i>Journal</i>	<i>Year</i>	<i>Indexed in (Scopus, Medline, WOS,)</i>
1	<i>Effect of Mineral Trioxide Aggregate, Calcium- Enriched Mixture Cement and Mineral Trioxide Aggregate with Disodium Hydrogen Phosphate on BMP-2 Production</i>	<i>Majid Abdolrahimi 6. Negin Ghasemi, Saeed Rahimi, Mehrdad Lotfi, Jafar Solaimanirad, Shahriar Shahi, Hajar Shafaei, Amin Salem Milani, Sahar Shakuie, Vahid Zand</i>	<i>Iranian Endodontic Journal</i>	<i>2014</i>	<i>PUB MED</i>
2	<u>Effects of human placental serum on</u>	<i>H Shafaei, A Esmaeili, M Mardani, S Razavi, B</i>	<i>Bone Marrow Transplantation</i>	<i>2011</i>	<i>ISI- PUBMED</i>

	<u>proliferation and morphology of human adipose tissue-derived stem cells</u>	Hashemibeni,			
3	<u>Citrullus colocynthis as a medicinal or poisonous plant: A revised fact</u>	Hajar Shafaei, Abolghasem Esmaeili, Jafar Soleimani Rad, Abbas Delazar	Journal of Medicinal Plants Research	2012	ISI
4	<u>Comparison of characteristics of human amniotic membrane and human adipose tissue derived mesenchymal stem cells</u>	KD Asl, H Shafaei, JS Rad, HO Nozad	World Journal Of Plastic Surgery	2017	PUB MED
5	<u>The effect of pulp and seed extract of Citrullus Colocynthis, as an antidaibetic medicinal herb, on hepatocytes glycogen stores in diabetic rabbits</u>	H Shafaei, JS Rad, A Delazar, M Behjati	Advanced Biomedical Research	2014	PUB MED
6	<u>Advantages of sheep infrapatellar fat pad adipose tissue derived stem cells in tissue engineering</u>	P Vahedi, J Soleimanirad, L Roshangar, H Shafaei, S Jarolmasjed, ..	Advanced Pharmaceutical Bulletin	2016	PUB MED
7	<u>Optimizing a novel method for low intensity ultrasound in chondrogenesis induction</u>	H Shafaei, E Esfandiari, A Esmaeili, S Razavi, B Hashemibeni,	Advanced Biomedical Research	2013	PUB MED
8	<u>The potentiating effects of Citrullus colocynthis extract on immune system</u>	H Shafaei, J Solaeymanirad, R Mahdavi, Rar Ostad, H Rezazadeh	Medical Journal Of Tabriz University Of	2007	ISC

			<i>Medical Sciences</i>		
9	<u>Study of chondrogenic potential of stem cells in co-culture with chondrons</u>	<i>P Nikpou, DM Nejad, H Shafaei, L Roshangar, N Samadi, AM Navali</i>	<i>Iranian Journal Of Basic Medical Sciences</i>	2016	ISI
10	<u>In vivo articular cartilage regeneration through infrapatellar adipose tissue derived stem cell in nanofiber polycaprolactone scaffold</u>	<i>P Vahedi, S Jarolmasjed, H Shafaei, L Roshangar, JS Rad, E Ahmadian</i>	<i>Tissue And Cell</i>	2019	PUB MED
11	<u>An investigation on the regenerative effects of intra articular injection of co-cultured adipose derived stem cells with chondron for treatment of induced osteoarthritis</u>	<i>S Jacer, H Shafaei, JS Rad</i>	<i>Advanced Pharmaceutical Bulletin</i>	2018	PUB MED
12	<u>High quality of infant chondrocytes in comparison with adult chondrocytes for cartilage tissue engineering</u>	<i>F Mortazavi, H Shafaei, JS Rad, L Rushangar, A Montaceri, M Jamshidi</i>	<i>World Journal Of Plastic Surgery</i>	2017	PUB MED
13	<u>Indirect coculture of stem cells with fetal chondrons using PCL electrospun nanofiber scaffolds</u>	<i>P Nikpou, J Soleimani Rad, D Mohammad Nejad, N Samadi,</i>	<i>Artificial Cells, Nanomedicine, And Biotechnology</i>	2017	PUB MED
14	<u>Effect of low-intensity pulsed ultrasound on regenerative potential of transplanted ASCs-PCL construct in articular</u>	<i>P Vahedi, L Roshangar, S Jarolmasjed, H Shafaei, N Samadi</i>	<i>Indian Journal Of Animal Sciences</i>	2016	<u>ISI, Scopus, Embase</u>

	<u>cartilage defects in sheep</u>				
15	<u>Transplantation of autologous adipose derived mesenchymal stem cells for improvement of quality of life in osteoarthritis patients</u>	<i>H Shafaei, H Bagernezhad, H Soliemanlou, M Poureisa</i>	<i>International Journal Of Musculoskeletal Pain Prevention</i>	2016	
16	<u>Ultrasound effect on gene expression of sex determining region y-box 9 (sox9) and transforming growth factor β isoforms in adipose stem cells</u>	<i>Hajar Shafaei, Hassan Baghernezhad</i>	<i>Zahedan Journal Of Research In Medical Sciences</i>	2016	
17	<u>Formation of repaired hyaline cartilage using PDGF-treated chondrocyte/PCL construct in rabbit knee articular cartilage defect</u>	<i>Jafar Soleimani Rad Azadeh Montaseri, Leila Roshangar, Hajar Shafaei, Amir Mohammad Navali. Mehdi Shakibaei, Seid Hossein Jarolmasjed</i>	<i>Jsr</i>	2012	
18	<u>Adipose-derived stem cells: An appropriate selection for osteogenic differentiation</u>	<i>H Shafaei, H Kalarestaghi</i>	<i>Journal Of Cellular Physiology</i>	2020	<i>ISI, Pub med</i>
19	<u>Evaluation of bone regeneration in mandible large defect using undifferentiated adipose stem cells loaded on gelatin carrier: An animal model case study</u>	<i>Ali Hossein Mesgarzadeh, Islam Nasiri, Seyedhosein Jarolmasjed, Mehran Naghibi, Hajar Shafaei</i>	<i>Journal of Dental Research, Dental Clinics, Dental Prospects</i>	2021	<i>Pub med</i>
20	<u>Importance of Floating Chondrons in Cartilage Tissue Engineering</u>	<i>H Shafaei, H Bagernezhad, H Bagernajad</i>	<i>World Journal Of Plastic Surgery</i>	2017	<i>ISI, Pub med</i>

21	<u>The challenges of mentorship system at Tabriz University of Medical Sciences and providing solutions from the perspective of mentors, students and collaborators</u>	Reza Ghaffari, Susan Hassanzadeh, Fariba Salek Ranjbarzadeh, Parisa Golanbar, Hoorie Sarbazvatan, Nazila Motarebsun, Flora Baghban Rezvan, Saleh Heydarian, Hajar Shafaei	Res Dev	2020	Goog le scholar
22	<u>Aloe Vera/Collagen Mixture Induces Integrin $\alpha 1\beta 1$ and PECAM-1 Genes Expression in Human Adipose-Derived Stem Cells</u>	F Sigaroodi, H Shafaei, M Karimipour, MA Dolatkhah, A Delazar	Advanced Pharmaceutical Bulletin	2019	Pub med
23	<u>Evaluation of morphology and immunophenotype of mesenchymal stem cells after switching of bovine serum of media to human serum</u>	H Shafaei, E Esfandiari, H Baghernezhad	Razi Journal Of Medical Sciences	2017	
24	<u>Effects of Low Intensity Ultrasound on the Chondrogenic Differentiation of Adult Stem Cells From Adipose Tissue</u>	H Shafaei, A Esmaeili, M Mardani, S Razavi, B Hashenibeni, EM NASR, ...	Zahedan Journal Of Research In Medical Sciences	2016	
25	<u>Effectiveness of Natural Membrane as a Scaffold on Chondrocyte Phenotype</u>	Zeinab Salehi Najafabadi, Hajar Shafaei*, Jafar Soleimani rad,	Research Journal Of Medical Sciences	2015	
26	<u>Articular Cartilage Repair using PDGF-Stimulated Chondrocyte/PCL</u>	A Montaseri, L Roshangar, J Rad, H Shafaei, H Jarolmasjed, A Navali	Artificial Organs	2013	<u>ISI,</u> <u>Scopus,</u> <u>PubMed,</u> <u>Embase</u>

	<u>Constructs in Rabbit</u>				
27	<u>Collagen I Gel Increases the Osteogenic Potential of Platelet-Rich Plasma in Adipose-Derived Stem Cells</u>	H Kalarestaghy, H Shafaei, R Farahzadi, P Vahedi, M Amin	Crescent Journal of Medical And Biological Sciences	2020	<u>ISI (ESCI), Embase</u>
28	<u>Mummy Material Enhances Chondrocyte Proliferation and The Expression of Extracellular Matrix Components in Monolayer and 3D Culture Conditions</u>	A Montaseri, S Parsay, MH Famian, F Rezaei, H Shafaei, MR Aliparasti,	Crescent Journal of Medical And Biological Sciences		<u>ISI (ESCI), Embase</u>
29	<u>Differential Biological Behavior of Fibroblasts and Endothelial Cells under Aloe Vera Gel Culturing</u>	Saba Shafaie, Sina Andalib, Hajar Shafaei, Azadeh Montaseri, Mahdi Tavakolizadeh	International Journal of Molecular and Cellular Medicine	2020	<u>ISI (ESCI), Scopus, PubMed</u>
30	<u>Efficacy of mesenchymal stromal cells and cellular products in improvement of symptoms for COVID-19 and similar lung diseases</u>	Behnaz Banimohamad-Shotorbani, Hekmat Farajpour, Farshid Sefat, Shiva Ahdi Khosroshahi, Hajar Shafaei, Saeed Heidari Keshel	Biotechnology and Bioengineering	2021	<u>ISI, Scopus, PubMed</u>
31	<u>Understanding breast cancer heterogeneity through non-genetic heterogeneity</u>	Neda Barzgar Barough, Fakhrosadat Sajjadian, Nazila Jalilzadeh, Hajar Shafaei, Kobra Velaei	Breast Cancer	2021	<u>ISI, Scopus, PubMed</u>
32	<u>Application of neurotrophic factor-secreting cells (Astrocyte-like cells) in the in-vitro Alzheimer's disease-like</u>	Fatemeh Jafari Jahed, Reza Rahbarghazi, Hajar Shafaei, Aysa Rezaabakhsh, Mohammad Karimipour	Brain Research Bulletin	2021	<u>ISI, Scopus, PubMed, Embase</u>

	<i>pathology on the human neuroblastoma cells</i>				
33	<i>Treatment of cartilage defects by Low-intensity pulsed ultrasound in a sheep model</i>	<i>Parviz Vahedi, Hassan Hosainzadegan, Bala Brazvan, Leila Roshangar, Hajar Shafaei, Ramin Salimnejad</i>	<i>ell and Tissue Banking</i>	2020	<i>ISI, Scopus, PubMed</i>
34	<i>Effect of preheating on the cytotoxicity of bulk-fill composite resins</i>	<i>Mohammad Esmaeel Ebrahimi Chaharom, Mahmoud Bahari, Leila Safyari, Hossein Safarvand, Hajar Shafaei, Elmira Jafari Navimipour, Parnian Alizadeh Oskoei, Amir Ahmad Ajami, Mahdi Abed Kahnamouei</i>	<i>Journal of Dental Research, Dental Clinics, Dental Prospects</i>	2020	<i>Pub Med</i>
35	The challenges of mentorship system at Tabriz University of Medical Sciences and providing solutions from the perspective of mentors, students and collaborators	<i>Reza Ghaffari, Susan Hassanzadeh, Fariba Salek Ranjbarzadeh, Parisa Golanbar, Hoorie Sarbazvatan, Nazila Motarebsun, Flora Baghban Rezvan, Saleh Heydarian, Hajar Shafaei</i>	<i>Research and Development in Medical Education Research and Development in Medical Education</i>		
36	Characterization of CAR T Cells Manufactured using Genetically Engineered Artificial Antigen Presenting Cells	<i>Mohsen Basiri, Ali Sayadmanesh, Mohamad Azadbakht, Hossein Baharvand, Ali Abedelahi, Hajar Shafaei, darriush Shanehbandi, Behzad Baradaran</i>	<i>Yakhteh</i>		
	Application of mesenchymal stem cell sheet for regeneration of	<i>Behnaz Banimohamad-Shotorbani, Sonia Fathi Karkan, Reza Rahbarghazi, Ahmad Mehdipour, Seyedhosein Jarolmasjed,</i>	<i>Stem Cell Research & Therapy</i>	2023	ISI, Scopus, PubMed,

	craniomaxillofacial bone defects	Sepideh Saghati, Hajar Shafaei			Embase, DOAJ
	The Role of Aloe vera in Inhibiting the P53 Protein Expression and Enhancing the HT29 Colon Cancer Cells Proliferation	M Hesari, H Shafaei, S Khamnei, NK Kalasour	Zahedan Journal of Research in Medical Sciences	2023	ISC

Research projects:

N	Title	Details
1	<i>Comparison of proliferation rate, morphology and histologic structure of cartilage from infant and adult chondrocytes</i>	
2	<i>Evaluation of repair rate of induced osteoarthritis by cocultured cells mesenchymal stem cell with chondron</i>	
3	<i>Evaluation of the effect of the blended aloe vera/collagen gel on cell viability and $\beta 1$ and $\alpha 1$- integrin gene expression of Adipose-derived Stem Cells</i>	
4	<i>The effect of cirullus colocynthis on blood glucose and histopathology of diabetic rabbits</i>	
5	<i>Effect of Low Intensity Pulsed Ultrasound on chondrogenic differentiation of human adipose mesenchymal stem Cells, human bone marrow stem cell, chondrocyte and coculture of them (Vumc-Amsterdam)</i>	
6	<i>Transplantation of engineered cartilage from adipose tissue drive stem cells in polycaprolactone (PCL) on sheep knee and evaluation of ultrasound exposure on quality of repaired hyaline cartilage.</i>	
7	<i>Chondrogenesis induction of adipose tissue derived stem cell by using low intensity ultrasound (LIUS) and TGFβ and definition of molecular phenotype of differentiated chondrocytes</i>	

8	<i>Comparison of Characteristics of Human Amniotic Membrane and Human Adipose Tissue Derived Mesenchymal Stem Cell</i>	
9	<i>Evaluation of application of adipose stem cells with injectable gel in repair of cranial bone defect of rat</i>	
10	<i>Impact of conditioned medium fibroblast cells on conversion molecular and morphological properties of luminal A and B subtypes in breast cancer</i>	
11	<i>Comparative evaluation of osteogenesis in large canine mandibular defect using adipose derived stem cells</i>	
12	<i>Evaluation of the effect of aloe vera plant gel on proliferation, viability and apoptosis of colorectal cancer cell line</i>	
13	<i>The evaluation of The effect of neurotrophic factors-secreting cells on synaptogenesis and Tau protein phosphorylation in an in vitro model of Alzheimer's disease</i>	
14	<i>Evaluation of the effect of cell sheet-nanofiber combination on bone regeneration of rat cranial defect</i>	
15	Evaluation of the effects of adipose stem cells on interleukin 1β induced inflammation of spinal cord of the rat	
16	<i>Comparison between the effect of adipose mesenchymal stem cells and their derived exosomes on interleukin-1 beta-induced inflammation in rat testicular tissue</i>	
17	<i>Comparison of the anti-inflammatory effects of mesenchymal stem cells and their exosomes on interleukin 1 induced inflammation of cardiac tissue in rats</i>	
18	<i>The effects of combined ND:YAG laser therapy, aloe vera extract and adipose-derived stem cells on bone regeneration in rat calvarial defects</i>	
19	<i>immunohistochemical evaluation of osteogenesis in large canine mandibular defect using adipose derived stem cells</i>	
20	<i>comparative evaluation of osteogenesis in large canine mandibular defect using adipose derived stem cells</i>	
21	<i>The evaluation of the effect of melatonin-pretreated astrocyte-derived exosomes on neurogenesis and neural tissue</i>	

	regeneration in the medial prefrontal cortex stroke	
22	Production of CD19-CAR-T cell and evaluation of the co-stimulatory domain response to IL-10	

Positions held: (past- current)

<i>Start and End Date</i>	<i>Job Title, Responsibilities and achievements</i>
5 - 1 – 2015 to 15 - 5 - 2019	Head of advisor teachers in vice-chancellor for education of Medical Sciences University of Tabriz
26 - 4 – 2016 to 2021	Vice-Chancellor for education of applied cell sciences department
10-6- 2020 to now	Vice-Chancellor for post graduates of anatomical sciences department

Association Memberships (past and current)

<i>Start and End Date</i>	<i>Job Title, Responsibilities and achievements</i>
13 - 12 – 2015 to now	Member of cartilage and bone scientific team of stem cell council in vice presidency for science and technology

Awards and Recognitions

<i>Start and End Date</i>	<i>Details</i>
2017-1018	Perfect head of advisor teachers in Educational Festival of Shahid Motahari in Medical Sciences University of Tabriz