

Curriculum vitae
Effat Alizadeh



Name: Effat Alizadeh

Date of Birth: August 5th 1983

Present Position: Assistant professor, Department of Medical Biotechnology
Department Vice chancellor

Degree: PhD in Medical Biotechnology

Post doc in Cell and gene therapy of Macular Degeneration
(Karolinska Institutet, Stockholm, Sweden)

Contact Information:

Telephone: 041-33341933, Mobile: (+98)9144059856

E-mail: alizadehe@tbzmed.ac.ir

e.alizadeh.2010@gmail.com

Education:

Post doc. in Cell and gene therapy of Macular Degeneration (2018-2019)

From: Division of eye and vision, Department of Clinical Neuroscience, St. Erik Eye Hospital, Karolinska Institutet, Stockholm, Sweden

► **Ph.D. in Medical Biotechnology(2010-2015)**

From: Department of Medical Biotechnology, Faculty of Advanced Medical Sciences, Tabriz University of Medical Sciences, Tabriz

► **M.Sc. in Cell and Molecular Biology (2007-2009)**

From: Department of Microbiology, Faculty of Biological Sciences, Shahid Beheshti University, Tehran

► **B.Sc. in Cell and Molecular Biology (2002-2006)**

From: Department of Microbiology, Faculty of Biological Sciences, Alzahra University, Tehran

Patents:

Patent No: 87748- A61B 10/02

Effat Alizadeh & Nosratollah Zarghami.

Hepatic Commitment in Adipose Tissue derived Mesenchymal Stem Cells by Let-7b Inhibitor-antagomiR. **2015**

Patent No: 139450140003014106

Behzad Abedi, Effat Alizadeh, Sabalan Daneshvar

An imaging System for capturing photos from mobile camera

Book:

Cell sheet technology in tissue engineering

Curriculum vitae
Effat Alizadeh

By: **Dr. Effat Alizadeh**

EBook:

Training package on cell culture techniques

By: **Dr. Effat Alizadeh** – Mozghan Abasi

Teaching Experiences:

- The Application of Stem cells in Biotechnology: PhD course, Faculty of Advanced Medical Sciences, Tabriz University of Medical Sciences
- The Principles and Applications of Engineering Processes in Biotechnology: PhD course, Faculty of Advanced Medical Sciences, Tabriz University of Medical Sciences
- Genetic Engineering: PhD and MSc courses
- Bioinformatics: PhD and MSc courses, Faculty of Advanced Medical Sciences, Tabriz University of Medical Sciences
- The Basics of Biotechnology: B.Sc. Course, Tarbiat Moalem Azerbaijan University
- Microbiology II: B.Sc. Course, Tarbiat Moalem Azerbaijan University
- Cell and Molecular Biology: B.Sc. Course, Tarbiat Moalem Azerbaijan University
- Biology: B.Sc. Course, Elmi Karbordi University
- Food Microbiology: B.Sc. Course, Elmi Karbordi University
- Cellular Biology: B,Sc. Course, Elmi Karbordi University
- Microbiology and lab: B,Sc. Course, Elmi Karbordi University

Honors & Awards:

- Top researcher of Faculty of Advanced Medical Sciences 2017
- Scholarship from Faculty of Advanced Medical Sciences 2012-2014
- Top student of comprehensive exam and PhD course 2012
- Top student of Faculty in Shahid Beheshti University in MSc course 2008
- Third place of Provincial Volleyball Tournament 2005
- Total rank of 21^{est} in MSc entrance national exam in 2004
- Ranked 14th in the PhD entrance exam held nationwide, Nov. 2010
- Total rank of 500 in undergraduate national exam in 2001

Membership History:

- The Faculty Representative in University Advisory Committee (Tabriz University of Medical Sciences) 2012-2013
- Collaboration with Influenza Unit Pasteur Institute of Iran 2006-2009
- Head of Executive Committee in 4th International Congress of Virology 2007
- The Faculty Representative in University Advisory Committee (Tabriz University of Medical Sciences) 2012-2013
- Member of Umbilical Cord Stem Cell Research Center (UCSRC)
- Member of Iranian Biotechnology Society

National and International Conferences:

- **Effat Alizadeh**, Nosratollah Zarghami*, Roya Herizchi, Samaneh Ghasem-Ali, Maryam Asadi, Roghayeh Baghaban, and Bita Taghizadeh. The Study of Expression of Let-7 MicroRNAs during In-vitro Hepatogenic Differentiation of Adipose Tissue Derived Mesenchymal

Stem Cells. The International congress on Stem Cell Research and Regenerative Medicine, Mashhad Iran, 2015

- **Effat Alizadeh**, Nosratollah Zarghami*, Roya Herizchi, Samaneh Ghasem-Ali, Maryam Asadi, Roghayeh Baghaban, and Bita Taghizadeh. Autologous Cell Therapy for Liver Disease by Mesenchymal Stem Cell-derived Hepatocyte like Cells. **The International congress on Stem Cell Research and Regenerative Medicine, Mashhad Iran, 2015**
- **Effat Alizadeh**, Nosratollah Zarghami*, Abolfazl Akbarzadeh, , Abolfazl Barzegar, and Mohamadreza Baghaban Eslaminejad. Up-regulation of Liver Enriched Transcription Factors (HNF4a and HNF6) and Liver Specific MicroRNA (MiR-122) by Inhibition of Let-7b in Mesenchymal Stem Cells. **Nordic Congress in Clinical Chemistry, Gothenburg, Sweden, 2014**
- **Effat Alizadeh**, Nosratollah Zarghami*, Abolfazl Akbarzadeh, , Abolfazl Barzegar, Mohamadreza Baghaban Eslaminejad and Shahryar Hahemzadeh. Epigenetic alteration of miR-122 and let-7b expression in adipose tissue-derived mesenchymal stem cells by Trichostatin A. **The 14th International Royan Twin Congress, Tehran, Iran, 2013**
- **Effat Alizadeh**, Masoumeh Tavassoti Kheiri, Seyed Masoud Hosseini*. Seroprevalence of H9N2 Antibody in Poultry Farm and Slaughter-house workers of Iran **13th International World Association of Veterinary Laboratory Diagnostics Symposium, Melbourne Australia, 2007**
- **Effat Alizadeh**, Nosratollah Zarghami*, Mohammadreza Baghaban Eslaminejad, Abolfazl Barzegar, Shahrbanoo Jahangir, and Shahryar Hahemzadeh. Trichostatin A Induced Mir-122 Expression in Adipose Tissue-Derived Mesenchymal Stem Cells. 2013. **1st International Life Science Conference and 12th Iran Biophysical Chemistry Conference, Tabriz, Iran 2013**
- Mohammad Rahimi-Rad, **Effat Alizadeh**, Behrouz Ilkhanizadeh. Recurrent Laryngeal Papillomatosis with Bronchopulmonary Spread in a 70 Year Old Man. **European Respiratory Annual Congress, Stockholm, Sweden, 2007**
- Mohammad Rahimi-Rad, **Effat Alizadeh**. Primary Endobronchial Actinomycosis in a Patient with Diabetes Mellitus. **15th World Congress for Bronchoesophagology, Tokyo, Japan, 2008**

- **Effat Alizadeh**, Nosratollah Zarghami*, Mohammadreza Baghaban Eslaminejad, Abolfazl Akbarzadeh, Shahrbano Jahangir, Abolfazl Barzegar, Shahryar Hahemzadeh, Abolghasem Mohammadi .The effect of Dimethyl Sulfoxide on hepatogenic differentiation of Mesenchymal Stem Cells. 2014. International Journal of Pediatric. **The 2nd annual congress Stem Cell Research and Application, Mashhad Iran, 2014**
- **Effat Alizadeh**, Masoud Hosseini, Roozbeh Bashar, Vahideh Mazaheri, Masoumeh Tavassoti Kheiri. Avian influenza and occupational risk.**11th Biology Congress, Tehran, Iran, 2007**
- Masoud Hosseini, **Effat Alizadeh**, Masoumeh Tavassoti Kheiri. No evidence of avian influenza H7N7 among exposed groups. **14th International Virology Congress, Tehran, 2006**

Other Published papers:

http://isid.research.ac.ir/Effat_Alizadeh

- 1) Effat Alizadeh, Parviz Mammadzada, Helder André. The different facades of retinal and choroidal endothelial cells in response to hypoxia. International journal of molecular sciences
- 2) Mahsa Rahimi, Ali Sharifi-Zarchi, Javad Firouzi, Mahnaz Azimi, Nosratollah Zarghami, Effat Alizadeh*, Marzieh Ebrahimi. An integrated analysis to predict micro-RNAs targeting both stemness and metastasis in breast cancer stem cells. Journal of cellular and molecular medicine.
- 3) M Rahimi, KD Safa, E Alizadeh, R Salehi. Dendritic chitosan as a magnetic and biocompatible nanocarrier for the simultaneous delivery of doxorubicin and methotrexate to MCF-7 cell line. New Journal of Chemistry. 2017. 41 (8), 3177-3189
- 4) N Roshanravan, R Mahdavi, E Alizadeh, A Ghavami, YR Saadat. The effects of sodium butyrate and inulin supplementation on angiotensin signaling pathway via promotion of Akkermansia muciniphila abundance in type 2 diabetes; A randomized. 2017. Journal of cardiovascular and thoracic research 9 (4), 183
- 5)
- 6) **Effat Alizadeh**, Abolfazl Akbarzadeh, Mohamadreza Baghaban Eslaminejad, Abolfazl Barzegar, Shahryar Hashemzadeh, Kazem

- Nejati-Koshki, and Nosratollah Zarghami*. Up-regulation of Liver enriched Transcription Factors (HNF4a and HNF6) and Liver Specific MicroRNA (miR-122) by Inhibition of Let-7b in Mesenchymal Stem Cells. 2015. **Chemical biology & drug design**.
- 7) **Effat Alizadeh**, Nosratollah Zarghami*, Mohamadreza Baghaban Eslaminejad, Abolfazl Akbarzadeh, Abolfazl Barzegar, and Seyed Abolghasem Mohammadi. The effect of dimethyl sulfoxide on hepatic differentiation of mesenchymal stem cells. 2014. **Artificial cells, nanomedicine, and biotechnology**
- 8) **Effat Alizadeh**, Mohamadreza Baghaban Eslaminejad Abolfazl Akbarzadeh, Zohre Sadeghi, Roya Herizchi, and Nosratollah Zarghami*.Up regulation of miR-122 via Trichostatin A treatments in Hepatocyte Like Cells derived from Mesenchymal Stem Cells . 2015. **Chemical biology & drug design**.
- 9) Behnaz Banimohammad, **Effat Alizadeh***, Roya Salehi, Abolfazl Barzegar. Adhesion of Mesenchymal Stem Cells to Biomimetic Polymers: A Review. *Material Science and Engineering, C*, **2016**
- 10) **Effat Alizadeh**, Masoud Hosseini, Roozbeh Bashar, Vahideh Mazaheri, Masoumeh Tavassoti Kheiri. Avian Influenza among poultry workers in Iran, **Iranian Journal of Microbiology**, **2009**, **1(3): 3-6**
- 11) Fatemeh Bazmi zeynabad, Roya Salehi, **Effat Alizadeh**, Hossein Samadi Kafil, Azad Mohammad Hassanzadeh and Mehrdad Mahkam: The pH-controlled Multiple-drug delivery by A Novel Antibacterial Nanocomposite for combination therapy. **RSC-Advances 2015**
- 12) Saghar Hosseinzadeh, Amir Atashi, Masoud Soleimani, **Effat Alizadeh**, Nosratollah Zarghami. MiR-221 Inhibited Adipose Stem Cells bioengineered in a nano-Hydroxy Apatite Scaffold. **In vitro cellular & Developmental Biology**, **2016**
- 13) Shagayegh Rahimi-Rad, Ali Alizadeh, **Effat Alizadeh*** and Seyed Masoud Hosseini. The Avian Influenza H9N2 at avian-human interface: concern of future pandemics. **Journal of Research in Medical Sciences**, **2016**
- 14) Fatemeh Gorjikhah, Farid Azizi Jalalian, Roya Salehi, Yunes Panahi, Arash Hasanzadeh, **Effat Alizadeh**, Abolfazl Akbarzadeh, Soodabeh Davaran. Preparation and characterization of PLGA- β -CD

polymeric nanoparticles containing methotrexate and evaluation of their effects on T47D cell line. **Artificial cells, nanomedicine, and biotechnology, 2016**

- 15) Fatemeh Asghari, Roya Salehi, Marziyeh Agazadeh, **Effat Alizadeh**, Khosro Adibkia, Mohammad Samiei, Abolfazl Akbarzadeh, Negar Abbasi Aval, Soodabeh Davaran. The Odontogenic Differentiation of Human Dental Pulp Stem Cells on Hydroxyapatite-coated Biodegradable Nanofibrous Scaffolds. **International Journal of Polymeric Materials and Polymeric Biomaterials. 2016**
- 16) Mohammad Samiei, Marziyeh Agazadeh, **Effat Alizadeh**, Naser Aslaminabadi, Shahriar Shahi , Farhad Ashrafi and Roya Salehi. Osteogenic/Odontogenic Bioengineering with co-Administration of Simvastatin and Hydroxyapatite on poly Caprolactone based Nanofibrous Scaffold. *Advanced Pharmaceutical Bulletin*. **Advanced Pharmaceutical Bulletin. 2016**
- 17) Mohammad Hossein Rahimi-Rad, **Effat Alizadeh**, Reza Samarei. Aquatic leech as a rare cause of respiratory distress. **Pneumologia. 2011-Apr-Jun 2011**
- 18) Mohammad Hossein Rahimi Rad, **Effat Alizadeh**, Behrouz Ilkhanizadeh. "Recurrent laryngeal papillomatosis with Bronchopulmonary Spread in a 70 –year – old man ", **Tuberk ve Toraks, 2007**
- 19) Elaheh Anvar, Seyed Masoud Hosseini, * Masoumeh Tavasoti Kheiri, Vahideh Mazaheri, **Effat Alizadeh**, Mansoureh Tabatabaiean, and Ali Torabi. Serological Survey of Avian Influenza (H9N2) Among Different Occupational Groups in Tehran and Qazvin Provinces in IR Iran. **Jundishapur Journal of Microbiology. 2013**
- 20) Zohre Sadeghi, Kazem Nejati-koshki, Abolfazl Akbarzadeh, Aliakbar Movasaghpour, **Effat Alizadeh**, and Zarghami Nosratollah. Trichostatin A Induced Apoptosis is Mediated by Krüppel-like Factor 4 in Ovarian and Lung Cancer. **Asian Pacific Journal of Cancer Prevention, 2014**
- 21) Samaneh Ghasemali, Kazem Nejati-Koshki, Abolfazl Akbarzadeh, Elham Tafsiri, Nosratollah Zarghami, Mohamad Rahmati-Yamchi, **Effat Alizadeh**, Amin Barkhordari, Majid Tozihi, Shirafkan Kordi. Inhibitory

Effects of β -Cyclodextrin-Helenalin Complexes on H-TERT Gene Expression in the T47D Breast Cancer Cell Line-Results of Real Time Quantitative PCR. **Asian Pacific Journal of Cancer Prevention, 2013**

- 22) Maryam Majidinia, **Effat Alizadeh**, Bahman Yousefi, Maryam Akbarzadeh, Nosratollah Zarghami. Down regulation of Notch signaling pathway as an effective chemosensitizer for cancer. **Drug Research, 2016**
- 23) Maryam Majidinia, **Effat Alizadeh**, Bahman Yousefi, Maryam Akbarzadeh, Aynaz Mihanfar, Mohammad Rahmati-Yamchi, Nosratollah Zarghami. Co-inhibition of Notch and NF-kB Signaling Pathway Decreases Proliferation through Down Regulating I κ B- α and Hes-1 Expression in Human Ovarian Cancer OVCAR-3. **Drug Research, 2016**
- 24) Khatereh Saei Arezoumand, **Effat Alizadeh**, Yones Pilehvar, Mohammad Esmaeillou, and Nosratollah Zarghami. An Overview on Different Strategies for The Stemness Maintenance of MSCs. **Artificial cells, nanomedicine, and biotechnology, 2016**
- 25) Soodabeh Davaran, Aliyeh Ghamkhari, **Effat Alizadeh**, Bakhshali Massoumi, Mehdi Jaymand. Novel dual stimuli-responsive ABC triblock copolymer: RAFT synthesis, “schizophrenic” micellization, and its performance as an anticancer drug delivery nanosystem. **Journal of Colloid and Interface Science. 2017**
- 26) Mahsa Jalali, Abolfazl Akbarzadeh, **Effat Alizadeh**, Farzaneh Lotfipour, Soodabeh Davaran. **Biotechnology, Bioscience Research Asia. 2016**
- 27) Elham Zakerzadeh, **Effat Alizadeh**, Hossein Samadi Kafil, Azad Mohammad Hassanzadeh, Roya Salehi and Mehrdad Mahkam. Novel Antibacterial Polymeric Nanocomposite for Smart Co-Delivery of Anticancer Drugs. **Artificial cells, Nanomedicine and Biotechnology, 2017**
- 28) Mohsen Mohammadi, Leili Danaee, and **Effat Alizadeh***. Reduction of Radiation Risks to Interventional Cardiologists and Patients during Angiography and Coronary Angioplasty. **Journal of Tehran University Heart Center. 2017**

Curriculum vitae
Effat Alizadeh

Research interests:

Stem cell biology, isolation, and differentiation

RNA interference biology and technology

Tissue engineering & Cell sheet engineering

Epigenetics and microRNAs

Skills:

Cell Culture, MTT assay, Isolation of Stem cells from all tissues, Differentiation of stem cells, Flow cytometry analysis of CD markers, Cell cycle analysis using flowcytometry and modfit software, Real time PCR, RT-PCR, Electrophoresis, Designing microRNA mimics and inhibitors, transfection of oligonucleotides using lipofectamine, Northern blotting, ELISA, Heamagglutination inhibition tests, Fixation and staining of the cells for fluorescent imaging, Ability to work with RNAs and isolation of them. Statistical Analysis

Other:

- ▶ Advising under-graduate students
- ▶ Faculty exam committee member
- ▶ Teaching in workshops