

Curriculum Vitae



Dr. Mahboubeh Bohlouli

Assistant Professor of Cell Therapy, MBA

Faculty of Advanced Technologies in Medicine

Shahid Beheshti University of medical science

➤ *Personal Information*

Date of birth: 11 July 1989

Marital status: Married

Nationality: Iranian

➤ *Contact details*

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➤ *Academic Education:*

2016-2020 PhD in Applied Cell Sciences

Applied Cell Sciences, School of Advanced Technologies in Medicine of Shahid Beheshti University, Tehran, Iran. Under Supervision of professor. Arash Khojasteh, Dissertation title:

Evaluation of the effect of - mononuclear cells (AT-NMCs) in combination allogeneic scaffold on maxillofacial bone regeneration: a randomized, controlled clinical trial and phase 1. GPA: 5.

2019-2020 **The free higher education course of healthcare's Master of Business Administration (MBA)**

Jihad Daneshgahi University, Ministry of Science, Research and Technology, Tehran, Iran. GPA: 5

2012-2014 MSc in Hematology and Blood Banking

School of medical, Tarbiat Modares University of medical science, Tehran, Iran, Dissertation title: Evaluation of the effects of acidic pH on proliferation, invasion and drug-induced apoptosis in lymphoblastic leukemia cells. GPA: 5.

2008-2012 BSc in Medical Laboratory

School of Allied Medical Sciences, Islamic Azad University, Borujerd, Iran. GPA: 5.

➤ ***Research Interests:***

- 1) Cell therapy with various approaches, such as more than minimal manipulation and minimal manipulation
- 2) Design and establish a clean room
- 3) Design and fabrication cell separation devices
- 4) Stem cell research (iPSC, ESC, CART Cell)
- 5) Scaffold and hydrogel fabrication
- 6) Bio 3D Printer
- 7) Cell studies in microfluidic system and bioreactor devise
- 8) The use of natural and Synthetic scaffolds for clinical
- 9) Cell signaling
- 10) Transplantation/Implantation Immunology
- 11) Entrepreneurship Development in Regenerative Medicine.

➤ ***Professional Associations:***

- 1) Executive Secretary of the first Regenerative medicine idea bazar, School of Advanced Technologies in Medicine of Shahid Beheshti University, Tehran, Iran. 2020.

- 2) Director, Students' Research Committee, Medical Nano-Technology and Tissue Engineering Research Center, 2016-now
- 3) Director, Students' Research Committee, School of Advanced Technologies in Medicine of Shahid Beheshti University, Tehran, Iran. 2017-now
- 4) Director, Students' Technology and Entrepreneurship Committee, School of Advanced Technologies in Medicine of Shahid Beheshti University, Tehran, Iran. 2018-now
- 5) Director, USERN office, School of Advanced Technologies in Medicine of Shahid Beheshti University, Tehran, Iran. 2019-now
- 6) The Executive Team of the Third Ideasbazar of Food and Beverages, Amirkabir University of Technology, 2020.
- 7) Executive Secretary of Theoretical and practical workshop on statistical analysis with SPSS software, Students' Research Committee, Medical Nano-Technology and Tissue Engineering Research Center. 2018.
- 8) Executive Secretary of Theoretical and practical workshop on systematic review and meta-analysis, Students' Research Committee, School of Advanced Technologies in Medicine of Shahid Beheshti University, Tehran, Iran. 2018
- 9) Executive Secretary of First Aid and Volunteer Skills Training Workshop. USERN office, School of Advanced Technologies in Medicine of Shahid Beheshti University, Tehran, Iran. 2019
- 10) Executive Secretary of How to write a scientific proposal Workshop. USERN office, School of Advanced Technologies in Medicine of Shahid Beheshti University, Tehran, Iran. 2020

➤ ***Awards and Honors:***

- 1) Member of the Ministry of Health's Talent Office
- 2) Winner of 1st grade of Comprehensive exam of Ph.D. in Applied Cell Sciences, School of Advanced Technologies in Medicine of Shahid Beheshti University, Tehran, Iran. 2018
- 3) Winner of 2nd grade of entrance exam of Ph.D. in Applied Cell Sciences, 2016
- 4) The top student of undergraduate laboratory science course, School of Allied Medical Sciences, Islamic Azad University, Borujerd, Iran. 2012.

➤ ***Teaching Experiences:***

- 1) Hematology and Hematology Laboratory1 (RBC and anemia types). Islamic Azad University.Borujerd.2013
- 2) Hematology and Hematology Laboratory 2 (WBS and platelet disorders) .Islamic Azad University.Borujerd.2014
- 3) Immunohematology. .Islamic Azad University.Borujerd.2013&2014
- 4) Hematology Laboratory. School of Advanced Technologies In Medicine of Shahid Beheshti University.2016
- 5) Cell Culture Laboratory. School of Advanced Technologies, Shahid Beheshti University of Medical Sciences 2016
- 6) Cell culture and molecular test laboratory, school of dentistry, Shahid Beheshti University of Medical Sciences 2017
- 7) Keynote speaker of an introduction to stem cell: from basic to practice. . USERN office, School of Advanced Technologies in Medicine of Shahid Beheshti University, Tehran, Iran. 2020.

➤ ***Work Experience***

- 1) Founding Member of Cell Bank, dentistry research center, Shahid Beheshti University of Medical Sciences 2018
- 2) Laboratory Supervisor. School of Advanced Technologies in Medicine of Shahid Beheshti University.2015-2016
- 3) Cell therapy laboratory. Bone marrow transplantation and cell therapy. Taleqani Hospital of Shahid Beheshti University. Tehran. 2014-2015
- 4) Division of Hematology, Clinical Laboratory of hospitals. Doroud. lorestan. 2012

➤ ***Publication:***

Journal Papers:

1. The Adverse Events of Various Cell Therapy Approaches for Bone Diseases in the Controlled Clinical Trials: A Systematic Review and Meta-Analysis Study. **Mahboubeh**

- Bouhlouli**, Neda Izadi and Arash Khojasteh*. Journal of Current stem cell research and therapy. 2020. In Press. **(IF=2.1)**
2. Computational modeling of media flow through perfusion-based bioreactors for bone tissue engineering. Hanieh Nokhbatolfoghahaei, **Mahboubeh Bohlouli**, Kazem Adavi, Zahrasadat Paknejad, Maryam Rezai Rad, Mohammad Mehdi Khani, Nasim Salehi-Nik, Arash Khojasteh. Proceedings of the Institution of Mechanical Engineers, Part H. 2020. **(IF=1.6)**.
 3. Bioreactor cultivation condition for engineered bone tissue: Effect of various bioreactor designs on extra cellular matrix synthesis. Hanieh Nokhbatolfoghahaei, **Mahboubeh Bohlouli**, Zahrasadat Paknejad, Maryam R. Rad, Leila M. Amirabad, Nasim Salehi-Nik, Mohammad M Khani, Shayan Shahriari, Nasser Nadjmi, Adel Ebrahimpour, Arash Khojasteh. Journal of Biomedical Materials Research Part A. 2020. **(IF=3.7)**.
 4. Applications of bacterial cellulose as a natural polymer in tissue engineering, **Mahboubeh Bohlouli**, Masoumeh Pourhadi, Farshid Karami, Arash Khojasteh, Zahra Talebi, Javad Ranjbari. ASAIO Journal. 2020. In Press. **(IF= 2.5)**.
 5. Surface modification of graphene and its derivatives for drug delivery systems. Ahra Akbari Jonoush, Masoumeh Farahani, **Mahboubeh Bohlouli**, Zahra Niknam, Ali Golchin, Shadie Hatamie, Mostafa Rezaei – Tavirani, Meisam Omid, Hakimeh Zali. Journal of Mini reviews in organic chemistry. 2020. **(IF=1.8)**.
 6. Effect of vitamin K2 as a stimulant of bone regeneration in osteoporosis therapy, **Mahboubeh Bohlouli**, Hanieh Nokhbatolfoghahaei, Amir Alireza Rasouli-Ghahroudi, Arash Khojasteh. Journal of Regeneration, Reconstruction & Restoration. 2020.
 7. The Effect of Vitamin K2 on Osteogenic Differentiation of Dental Pulp Stem Cells: An In Vitro Study. Amir Alireza Rasouli-Ghahroudi, Solmaz Akbari, Mohammad Najafi-Alishah, **Mahboubeh Bohlouli***. Regeneration, Reconstruction & Restoration 2017.
 8. Impact of Tissue Harvesting Sites on the Cellular Behaviors of Adipose-Derived Stem Cells: Implication for Bone Tissue Engineering. Maryam Rezai Rad, **Mahboubeh Bohlouli**, Mahshid Akhavan Rahnama, Azadeh Anbarlou, Pantea Nazeman, Arash Khojasteh. Stem Cells International. 2017. **(IF=3.8)**.

9. Investigating Effects of Acidic pH on Proliferation, Invasion and Drug-Induced Apoptosis in Lymphoblastic Leukemia. **Mahbobeh Bohloli** & Amir Atashi & Masoud Soleimani. *Cancer Microenvironment*. 2016. (IF=2.5).
10. Differential characteristics of CD133+ and CD133 – Jurkat cells. Azadeh Anbarlou & Amir Atashi & Masoud Soleimani & **Mahbobeh Bohloli**. *In Vitro Cellular and Developmental Biology – Animal*. 2015. (IF=1.5).
11. Distribution of leukocytes in woman with vaginal delivery compared to elective caesarean. Saba Fakhredin, **Bohloli Mahbobeh**, Kaviani Saeed, Zonoubi Zahra, Sayyadipoor Fatemeh, Hajifathali Abbas. *PAYAVARD SALAMAT Journal*. 2015.
12. The evaluation of the efficiency of confidential self-exclusion system in blood donors in Kurdistan province from 2011-2013. Kaveh Tari, Arezou Rahimi, **Mahbobeh Bohloli**, Fatemeh Kianinodeh, Farzam Memari, Amir Atashi, Ali Akbar Pourfathollah. *Zanko Journal of Medical Sciences*. 2015.
13. Long-term evaluation of the effect of platelet-rich fibrin on cartilage tissue regeneration: an animal model study. Ali Goljanian Tabrizi, Hamzeh Hashemi, Zhaleh Mohsenifar, **Mahboubeh Bohlouli***. *Regeneration, Reconstruction & Restoration*. 2021.
14. Fabrication of decellularized engineered extracellular matrix through bioreactor-based environment for Bone Tissue Engineering. Hanieh Nokhbatolfoghahaei, Zahrasadat Paknejad, **Mahboubeh Bohlouli**, Maryam Rezai Rad, Pouyan Aminishakib, Samira Derakhshan, Leila Mohammadi Amirabad, Nasser Nadjmi, Arash Khojasteh. *ACS Omega*. 2020. Under review. (IF=3.0).
15. Safety and Feasibility of Buccal Fat Pad- Tissue Stromal Vascular Fraction in Patients with Maxillofacial Bone Defects: a Phase I Clinical Trial. **Mahboubeh Bohlouli**, Farshid Bastami, Nasser Nadjme, Hanieh Nokhbatolfoghahei, Arash Khojasteh. *Tissue Engineering and Regenerative Medicine*. 2020. Under review. (IF=2.3).
16. The effect of adenotonsillectomy on serum cortisol in pediatric obstructive sleep apnea. Seyed Sataredin Mohamadian, Masoud Kazemi, Mahboubeh Bohlouli*. 2020. Submitted.

➤ **Patents:**

Design and fabrication of a Minceolip device for separation of cells from adipose tissue by mechanical method for application in regenerative medicine (139850140003006638). Arash Khojasteh, Mahboubeh Bohlouli and Zahrasadat Paknejad. Intellectual Property Center, Tehran, Iran. 2018.

➤ **Book:**

- 1) Review of the basics of cell culture. Islamic Azad University Press. 2015
- 2) Animal Models in Dental Research. Hanieh Nokhbatolfoghahaei, Zahrasadat Paknejad, **Mahboubeh Bohlouli**, Maryam Rezai Rad, Arash Khojasteh. Chapter in Applications of Biomedical Engineering in Dentistry. Lobat Tayebi. 2019.
- 3) Translation and editorial of bone research protocols book. Third Edition, 2019 text book into Farsi.

➤ **Conference papers:**

- 1) Buccal Fat Pad Stem Cells Differentiation Regulated by Perfusion Conditions. **M. Bohlouli**, N. Salehinik, Z. Paknejad, M. Rezai Rad, A. Khojasteh. 13th Annual Congress of IADR Iranian Division 10-12 January 2018
- 2) The Effects of Acidic pH on Proliferation, Invasion and Drug Induced Apoptosis in Lymphoblastic Leukemic Cells. **Mahbobeh Bohloli**, Amir Atashi, Fakhredin Saba, Majid Mosahebi, Masoud Soleimani. EACR-Sponsored 2nd Anticancer Agents Congress. Turkey. 2014
- 3) Endothelialized Small Intestinal Sub-Mucosa Using For Bioartificial Vascular Graft in Canine Animal Model. **Mahbobe Bohloli**, Ali Ghiaseddin, Shahram Rabbani, Seyed hossein Ahmadi tafti, Reza Ghiassi, Masoud Soleimani, Ebrahim Vasheghani-Farahani. International Congress on Stem Cell and Cellular Therapies. Turkey. 2015
- 4) Expansion of Cord Blood HSCs on DBM Scaffolds in Dynamic Culture. **Mahbobeh Bohloli**, Amir Asri, Mohammad Abdollahi, Masoud Soleimani, Ali Ghiaseddin. Amir Atashi. International Congress on Stem Cell and Cellular Therapies. Turkey. 2015

- 5) Microfluidic Device for Enhancing Cellular Uptake of HER-2 Antibody Conjugated With Superparamagnetic Iron Oxide Nanoparticles into Breast Cancer Cell Line. **Mahbobeh Bohloli**, Ali Ghiaseddin, Masoud Soleimani, hossein pouri, Mohsen sadaghi. First national congress on microfluidics and its application in medicine and engineering. Tehran. 2016

➤ ***Workshops and courses:***

- 1) Training course of Good Hygiene practices and good manufacturing practices (GHP&GMP), Iranian institute for HSE promotion. 2020
- 2) Course of Intellectual property with emphasis on health patents, Shahid Beheshti University of Medical Sciences, Tehran, Iran. 2018.
- 3) Course of beginner SOLIDWORKS. Mechanical engineering department. Iran University of science and technology, Tehran, Iran. 2019
- 4) Theoretical and practical workshop on statistical analysis with SPSS software, Students' Research Committee, Medical Nano-Technology and Tissue Engineering Research Center. 2018.
- 5) Theoretical and practical workshop on systematic review and meta-analysis, Students' Research Committee, School of Advanced Technologies in Medicine of Shahid Beheshti University, Tehran, Iran. 2018.
- 6) Technical workshop on COMSOL software, chemical and petroleum engineering department, Sharif University of technology, Tehran, Iran, 2017.
- 7) Workshop of Good Clinical Practice in Clinical Trial. Iranian Registry of Clinical Trials. Iran University of Medical Sciences, Tehran, Iran. 2018.
- 8) Workshop of primer design and PCR principles. Iran biotechnology society and gene transfer pioneers research group, Tehran, Iran. 2012.
- 9) Workshop of cell culture. Iran biotechnology society and gene transfer pioneers research group, Tehran, Iran. 2012.
- 10) Workshop of active and passive microfluidic systems for particle/cell sorting. Shahid Beheshti University, Tehran, Iran. 2016
- 11) Workshop of microfluidic organ-on-chip for drug screening and disease modeling. Shahid Beheshti University, Tehran, Iran. 2016

➤ ***Technical Professions:***

- Cell culture in GMP grade condition
- Design and fabrication of bone and vascular bioreactors
- Immunostaining
- Histological Analysis
- Working With Scanning Electron Microscopy (SEM) and Micro-CT
- General Dental Practice
- Design and fabrication of microfluidic system
- Cell seeding on a variety of scaffolding
- MTT assay in 2D cell culture & microfluidic system
- Flow cytometry
- In Vitro and In Vivo Transfection
- Gene Expression Analysis
- Western Blotting
- Systematic review and meta-analysis study
- Statistical analysis softwares (SPSS, graphpad prism, STATA and Excel)
- Writing Grant Proposal
- IACUC Protocol Development/ Writing
- Design Experiment and simulation by Comsol Multiphysics software
- 3D design by solid works software
- Presentation / Communication