

Morteza Mehrjoo

Curriculum Vitae

Contact & Personal Information

Morteza Mehrjoo

Researcher in Biomaterial

M.Sc. in Biomedical Engineering

National Cell Bank of Iran, Pasteur Institute of Iran, Tehran, IRAN

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Objective and Research Interests

- Biomaterial
- Nano Biomaterial
- Drug delivery
- Scaffold for biomaterial

Education

- **Materials Engineering- Industrial Metallurgy**
 - **Institution:** Department of Material Engineering, Ferdowsi University of Mashhad, Mashhad, Iran
 - **Dissertation Title:** Fabrication and characterization of Fe/TiC metal matrix composite by powder metallurgy route
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- **Medical Engineering- Biomaterial**
 - **Institution:** Department of Materials Engineering, Iran University of Science and Technology, Tehran, Iran
 - **Dissertation Title:** Synthesis and evaluation of physical properties and biocompatibility of magnesium hydroxyapatite nanopowders

Technical Skills

- Materials characterization methods (Microscopic analysis, XRD, XRF, ICP, FTIR and etc.)
- Cell Culture (Cell isolate from tissue, Freezing and de-freezing cells and proliferation in vitro)
- Biomaterial Test (MTT assay, Neutral Red assay, XTT assay and etc.)
- Synthesis of different scaffolds for tissue engineering
- Educe Collagen (calf skin)

Languages

- **Farsi:** Native
- **English:** Fluent

Knowledge of Computer Programs

- **Engineering Software:** XRD analysis (Xpert, MAUD); SPSS analysis.
- **General Software:** Origin; Microsoft Office; Photoshop; Endnote; Mendeley desktop.

Work and Teaching Experiences

- Supervisor of Stem cell research lab, Department of national Cell bank, Pasteur institute of Iran, Jan. 2012
- Technical supervisor of Noavaran Teb Andish Company, Tehran, Iran, Aug. 2015
- Workshop lecturer on tissue engineering scaffolds Pasteur Institute of Iran, IRAN (2016)

Publications

Journal papers (ISI)

[Morteza Mehrjoo - Google Scholar](#)

Conference papers

1. E. Mohamed, M. Taheri, **M. Mehrjoo**, S.tafazoli, M.Hashemkhani, J.Javadpour, M.A.Shokrgozar, H. Rezaie, N. Barati, and, "Formation of Titania-Hydroxyapatite Nano-Bioceramic Coatings via MAO to Improve Bioactivity of Ti-Based Implants," presented at the UFGNSM, 2-3 November, 2011, University of Tehran, Tehran, Iran.
2. F. Fayyazbakhsh, **M. Mehrjoo**, M. A. Shokrgozar, A. Keshtkar and M. Solati-Hashjin, "Mechanobiological Study of Layered Double Hydroxide/HA Composite Scaffolds for Bone Tissue Engineering Applications," presented at the The First Iranian Annual Congress on Progress in Tissue Engineering and Regenerative Medicine, Tehran University of Medical Sciences, 2013. (In persian)
3. S. Abbasi, F. Glestani Fard, H. Rezaie, N. Barati, and **M. Mehrjoo**, "Formation of Titania-Hydroxyapatite Nano-Bioceramic Coatings via MAO to Improve Bioactivity of Ti-Based Implants," presented at the UFGNSM, 2-3 November, 2011, University of Tehran, Tehran, Iran.
4. S. Ajali, T. S. Jafarzadeh, S. Mollazadeh, **M. Mehrjoo** and M. A. shokrgozar, "The effect of thermocycling treatment on the microhardness of apatite glass -ceramic " presented at the Dental Ceramics and All-Ceramic Restorations Congress, medical science university of isfahan, 2013.(In persian)

Book and Book Chapter

1. N. Kazemikhoo, **M. Mehrjoo**, A. Majd Bbadi, H. Kazemi, "Low Level Laser Therapy in Wound Healing", (2014), Mirmah pub. (*in persian*)
2. S. Mollazadeh, A. Youssefi, B. E. Yekta, J. Javadpour, T. Jafarzadeh, **M. Mehrjoo** and M. Shokrgozar, "Comparative Evaluation of Crystallization Behavior, Micro Structure Properties and Biocompatibility of Fluorapatite-Mullite Glass-Ceramics," Advances in Bioceramics and Biotechnologies II: Ceramic Transactions, Volume 247, 113-123 (2014)

Research Projects

- Preparation and characterization of hydroxyapatite- polyvinyl alcohol- polyurethane scaffold for bone tissue engineering. 2009-10. (Research assistant of Dr. Mohammad Ali shokrgozar, Department of national cell bank, Pasteur institute of Iran, Tehran, Iran)
- Study of biological behavior, anionic clays-gelatin nanocomposite with alendronate delivery ability 2010-11 (Research assistant of Dr. Mohammad Ali shokrgozar, Department of national cell bank, Pasteur institute of Iran, Tehran, Iran)
- Design, fabrication and evaluation of biomimetic substrates from cell shapes for cartilage tissue regeneration in rabbit model. 2016 (Research assistant of Dr. Shahin Bonakdar, Department of national cell bank, Pasteur institute of Iran, Tehran, Iran)
- Preparation and Characterization of Skin Tissue Engineering Scaffold Based on Human Adipose Tissue and Evaluation of its Role on Differentiation of Mesenchymal Stem Cells to Keratinocytes. 2014 (Research assistant of Dr. Shahin Bonakdar, Department of national cell bank, Pasteur institute of Iran, Tehran, Iran)
- Evaluation of physical parameters (topography and elasticity) of cell culture surfaces on toxic effect of nanoparticles and drugs. 2017 (Research assistant of Dr. Shahin Bonakdar, Department of national cell bank, Pasteur institute of Iran, Tehran, Iran)

- Comparison of therapeutic effect of new different antibiotics on mycoplasma infection of human and animal cell lines deposited in National Cell Bank of Iran. 2017 (Research assistant of Dr. Shahin Bonakdar, Department of national cell bank, Pasteur institute of Iran, Tehran, Iran)
- Preparation of nanoparticles based on hyaluronic acid loaded with curcumin for targeting HIV infected cells. 2016 (Research assistant of Dr. Shahin Bonakdar, Department of national cell bank, Pasteur institute of Iran, Tehran, Iran)
- Fabrication of chondrocyte derived substrates by photolithography method and evaluation of chondrogenic differentiation of mesenchymal stem cells cultured on. 2016 (Research assistant of Dr. Shahin Bonakdar, Department of national cell bank, Pasteur institute of Iran, Tehran, Iran)
- Production and physical- chemical and biocompatibility characterization of Hyaluronic acid gel. 2018 (Research assistant of Dr. Shahin Bonakdar, Department of national cell bank, Pasteur institute of Iran, Tehran, Iran)
- Evaluation of skin regeneration in a rabbit model using cell imprinting. 2020 (Research assistant of Dr. Shahin Bonakdar, Department of national cell bank, Pasteur institute of Iran, Tehran, Iran)
- Surface modification of nano substrate obtained from cell imprinting with demineralized bone matrix and evaluation of stem cell differentiation. 2017 (Research assistant of Dr. Shahin Bonakdar, Department of national cell bank, Pasteur institute of Iran, Tehran, Iran)
- Study on the regeneration of tendon in a rabbit model using tenogenic cell imprinted substrate. 2021 (Research assistant of Dr. Shahin Bonakdar, Department of national cell bank, Pasteur institute of Iran, Tehran, Iran)
- Evaluation of stemness state of stem cell using cell imprinting method. 2020 (Research assistant of Dr. Shahin Bonakdar, Department of national cell bank, Pasteur institute of Iran, Tehran, Iran)
- Evaluation of tenogenic differentiation of adipose derived stem cells cultured on engineered substrates and exposed to BMP12. 2021 (Research assistant of Dr. Shahin Bonakdar, Department of national cell bank, Pasteur institute of Iran, Tehran, Iran)
- Evaluation of the keratinogenic differentiation of the mesenchymal stem cells cultured on keratinocyte imprinted substrate and exposed to different concentration of keratinocyte growth factor and vitamin D. 2021 (Research assistant of Dr. Shahin Bonakdar, Department of national cell bank, Pasteur institute of Iran, Tehran, Iran)

Other Scientific Activities

- **Referee/Reviewer:** Journal of Materials Science and Engineering C
- **Teaching assistant:** cell culture technique, Tests for biological evaluations

Hobbies

- Novels, Movies, Soccer, Picnic and spending time with friends and family.