

# Samaneh Hosseini

Assistant Professor

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## **Present Address:**

Department of Cell Engineering, Cell Science Research Center, Royan Institute for Stem Cell Biology and Technology, 1665659911, ACECR, Tehran, Iran

## **Language:**

Persian, English, French

## **Academic Background:**

**2007-2013:** PhD in Nanobiotechnology,

Tarbiat Modares University, Tehran, Iran

**Dissertation:** The effect of Osteocalcin mimetic peptide on biomineralization process; hydroxyapatite nanocrystal formation and osteogenesis, **GPA: 18.22**

**2003- 2006:** Master's Degree in Biophysics,

Tarbiat Modares University, Tehran, Iran,

**Thesis:** Comparative structural study of calmodulin and apocalmodulin purified from bovine brain, **GPA: 18.51**

**1999- 2003:** Bachelor's Degree in Biology,

Azad University, Mashhad, Iran, **GPA: 18.17**

## **Work Experience:**

**2018-present:** Assistant professor, Royan Institute for Stem Cell Biology and Technology, Tehran, Iran

**2017-2018:** Research Associate; Royan Institute for Stem Cell Biology and Technology, Tehran, Iran

**2014-2017:** Post-doc Fellow; Royan Institute for Stem Cell Biology and Technology, Tehran, Iran

## **Awards and Honors**

**2020:** My publication "3D Printing in Dentistry" one of the Springer Nature 2020 highlights

**2013:** Second rank student in PhD, Tarbiat Modares University, Iran

**2011:** Visiting Scientist, Department of Anatomy and cell biology, McGill University, Canada

**2006:** Distinguished graduated MSc student, Tarbiat Modares University, Iran

**2003:** Second rank student in BSc, Azad University, Iran

**Teaching experience:**

Department of Tissue engineering, Royan Institute, Tehran, 2024-2025 (*Application of nanotechnology in tissue engineering, graduate level*)

Faculty of Sciences and Advanced Technologies in Biology, University of Science and Culture, Tehran, Iran, 2024-2025 (*Nanotechnology in biomedicine, graduate Level*)

Faculty of Sciences and Advanced Technologies in Biology, University of Science and Culture, Tehran, Iran, 2023-2024 (*Nanotechnology in biomedicine, graduate Level*)

Department of Tissue engineering, Royan Institute, Tehran, 2022-2023 (*Application of nanotechnology in tissue engineering, graduate level*)

Faculty of Sciences and Advanced Technologies in Biology, University of Science and Culture, Tehran, Iran, 2022-2023 (*Nanotechnology in biomedicine, graduate Level*)

Faculty of Sciences and Advanced Technologies in Biology, University of Science and Culture, Tehran, Iran, 2022-2023 (*Nanobiotechnology, undergraduate Level*)

Faculty of Sciences and Advanced Technologies in Biology, University of Science and Culture, Tehran, Iran, 2020-2021 (*Biophysics, undergraduate Level*)

Faculty of Sciences and Advanced Technologies in Biology, University of Science and Culture, Tehran, Iran, 2020-2021 (*Nanobiotechnology, undergraduate Level*)

Faculty of Sciences and Advanced Technologies in Biology, University of Science and Culture, Tehran, Iran, 2019-2020 (*Nanobiotechnology, undergraduate Level*)

Department of Biotechnology, Shahid Beheshti University of Medical Sciences, Tehran, 2019-2020 (*Nanobiotechnology, graduate level*)

Department of Tissue engineering, Royan Institute, Tehran, 2018-2019 (*Application of nanotechnology in tissue engineering, graduate level*)

Department of Biotechnology, Shahid Beheshti University of Medical Sciences, Tehran, 2017-2018 (*Nanobiotechnology, graduate level*)

Faculty of Biological science, Alzahra University, Tehran, 2016-2017 (*Biophysics, undergraduate Level*)

Faculty of Biological science, Alzahra University, Tehran, 2016-2017 (*Bioinformatics, undergraduate Level*)

-Faculty of Basic Science, Biological Department, Islamic Azad University, Tehran, 2007-2009 (*Biophysics, undergraduate Level*)

-Faculty of Basic Science, Biological Department, Islamic Azad University, Tehran, 2007-2009 (*Radiation Biology, undergraduate Level*)

-Theoretical and practical workshop on "Animal cell culture", Tarbiat Modares University, Tehran, *winter* 2014.

-Theoretical and practical workshop on "Peptide synthesis", Tarbiat Modares University, Tehran, *winter* 2014.

- Theoretical and practical workshop on "Isolation, and purification of mesenchymal stem cell from various references; Bone Marrow, Dental Pulp and Adipose Tissue", Royan Institute, Tehran, *summer* 2016.
- Endnote in "Research tools" course, Royan Institute, Tehran, *autumn* 2016.
- Endnote in "Research tools" course, Royan Institute, Tehran, Iran, *spring* 2016.
- Bone and cartilage tissue engineering, Royan Institute, Tehran, Iran, *spring* 2016

### **Conference organization and Services:**

- 15<sup>th</sup> Royan International Congress on Stem Cell Biology & Technology, Razi Conference Hall *Summer 2019*, Scientific Chairperson.
- 1<sup>st</sup> National and 3<sup>rd</sup> Royan Scientific Presentation Contest, Royan Institute, *Winter 2017*, Executive Director.
- 2<sup>nd</sup> Annual Royan Scientific Presentation Contest, Royan Institute, *Winter 2016*, Executive Director.
- Isolation, and Purification of Mesenchymal Stem Cell from Various References; Bone Marrow, Dental Pulp and Adipose Tissue workshop, *Summer 2015*, Executive member.
- Isolation, and Purification of Mesenchymal Stem Cell from Various References; Bone Marrow, Dental Pulp and Adipose Tissue workshop, *Summer 2016*, Executive member.
- Isolation, and Purification of Mesenchymal Stem Cell from Various References; Bone Marrow, Dental Pulp and Adipose Tissue workshop, *Summer 2017*, Executive member.
- Isolation, and Purification of Mesenchymal Stem Cell from Various References; Bone Marrow, Dental Pulp and Adipose Tissue workshop, *Summer 2018*, Executive member.
- Isolation, and Purification of Mesenchymal Stem Cell from Various References; Bone Marrow, Dental Pulp and Adipose Tissue workshop, *Summer 2019*, Executive member.
- Bone and Cartilage Tissue Engineering workshop, *Summer 2022*, Scientific Chairperson
- Mesenchymal Stem Cell Isolation, Culture and Differentiation to Skeletal Lineages from Bone Marrow, Adipose Tissue and Dental Pulp, *Summer 2023*, Executive Chairperson
- Bone and Cartilage Tissue Engineering workshop, *Summer 2023*, Scientific Chairperson
- Isolation, Cultivation, Passage and Differentiation of Mesenchymal Stem Cell Isolated from Bone Marrow, Adipose and Dental Pulp Tissue workshop, *Summer 2024*, Executive Chairperson.

### **Supervisory Experience:**

**Hoda Nasiri**, PhD, Advisor, 2015-2022

**Maryam Hosseinzadeh**, Master's, Advisor, 2017-2019

**Niloofer Kalantari**, Master's, Supervisor, 2017-2020

**Sara Farahi**, PhD, Co-supervisor, 2018-2021

**Amin Ebrahimi**, PhD, Co-supervisor, 2018-2024

**Abazar Esmaeili**, PhD, Advisor, 2018-2023

**Farnoosh Ebrahimi**, Master's, Advisor, 2020-2021

**Yalda Alibeigian**, Master's, Supervisor, 2021-2023

Maryam Hatami, Master's, Supervisor, 2021-2023

Farzaneh Mirzaeian, PhD, Co-supervisor, 2021-present

Fatemeh Leisi, Master's, Advisor, 2021-2024

Mahshad Mohseni, PhD, Advisor, 2023-2025

Pegah Shams, Master's, Supervisor, 2023-2025

Sadaf Najafloo, Master's, Supervisor, 2023-2025

Amir Ali Joudaki, Master's, Supervisor, 2023-2025

Sadaf Lashgari, Master's, Supervisor, 2023-2025

Saeedeh Hematian, PhD, Advisor, 2023-present

Saghi Ghafarzadeh, Master's, Supervisor, 2023-present

Samira Ramezani, Master's, Supervisor, 2023-present

Masoumeh Kafi, Master's, Supervisor, 2025-present

### Workshop:

- Certificate on Good Clinical Practice (Clinical Trial Center of Tehran University)
- Certificate on Functional Nanoporous Biomaterials: Modeling, Design and Application
- Certificate on Solid phase peptide synthesis
- Certificate on Iran-Korea nanotechnology workshop

### Patent:

- Design and synthesis of amidic nanostructured osteocalcin derived peptide for the improvement of hydroxyapatite formation and osteogenesis

### Books:

- **Cartilage: From Biology to Biofabrication**, Edited by **Hosseini S**, Baghaban Eslaminejad MR, Springer Nature. 2023
- **Hard Tissue Engineering; Principles and Applications**, Authored by Faghihi S, **Hosseini S** and Mirzaeian F, ACECR Publication, Amirkabir University of Technology Branch, 2024

### Book Chapters:

- Valouzi A, Taghiyar L, Baei P, Babaeizad A, **Hosseini S**, Sheykhhasan M, " **Applications of fiber-based natural biomaterials in bone tissue engineering**" in the book " Harnessing Fiber-Based Natural Biomaterials" Edited by Mohit Kumar, Manoj Kumar Singh, Sanjay Mavinkere Rangappa, Suchart Siengchin, Ajay Sharma, 2026, Elsevier.
- Baei P, Bagheri Azizabad Z, Araban S, Babaeizad A, Sheykhhasan M, **Hosseini S** " **Applications of fiber-based natural biomaterials in cartilage tissue engineering**" in the book " Harnessing Fiber-Based Natural Biomaterials" Edited by Mohit Kumar, Manoj Kumar Singh, Sanjay Mavinkere Rangappa, Suchart Siengchin, Ajay Sharma, 2026, Elsevier.

- Soleymani-Goloujeh M, **Hosseini S**, Baghaban Eslaminejad MR, "**Advanced nanotechnology Approaches as Emerging Tools in Cellular-based Technologies**" in the book "Advances in Experimental Medicine and Biology" Edited by Kursad Turksen, pp 127-144, 2023, Springer Cham.
- Nasiri N, Natghi R, Zarei F, **Hosseini S**, Baghaban Eslaminejad MR, "**Mesenchymal Stem Cell Therapy for Osteoarthritis: Practice and Possible Promises**" in the book "Advances in Experimental Medicine and Biology" Edited by Kursad Turksen, pp 1-19, 2022, Springer Cham.
- Khademi-Shirvan M, Ghorbaninejad M, **Hosseini S**, Baghaban Eslaminejad MR, "**The Importance of Stem Cell Senescence in Regenerative Medicine**" in the book "Cell Biology and Translational Medicine," Edited by Kursad Turksen, Volume 9 pp 87-102, 2020, Springer Cham.
- Adibfar A, **Hosseini S**, Eslaminejad MR, "**Smart Polymeric Systems: A Biomedical Viewpoint**" in the book "Cell Biology and Translational Medicine," Edited by Kursad Turksen, Volume 10 pp 133-148, 2020, Springer Cham.
- Ebrahimi A, Baei P, **Hosseini S**, Eslaminejad MR, "**Decellularized Extracellular Matrix as a Potent Natural Biomaterial for Regenerative Medicine**" in the book "Advances in Experimental Medicine and Biology" Edited by Kursad Turksen, pp 1-17, 2020, Springer Cham.
- **Hosseini S**, Halvaei M, Ebrahimi A, Shamekhi MA, Baghaban Eslaminejad MR "**3D-printing in Dentistry**" in the book "Application of Biomedical Engineering in Dentistry " Edited by Lobat Tayebi, 2019, Springer (Humana Press).
- **Hosseini S**, Taghiyar L, Safari F, Baghaban Eslaminejad MR, "**Regenerative Medicine Application of Mesenchymal Stem Cells**" in the book "Advances in Experimental Medicine and Biology – Cell Biology and Translational Medicine" Edited by Kursad Turksen, 2018, Springer International Publishing AG, part of Springer Nature.
- **Hosseini S**, Shamekhi MA, Jahangir Sh, Bagheri F, Baghaban Eslaminejad MR, "**The Robust Potential of Mesenchymal Stem Cell-Loaded Constructs for Hard Tissue Regeneration after Cancer Removal**" in the book "Advances in Experimental Medicine and Biology" Edited by Phuc Van Pham, 2018, Springer (Humana Press).
- **Hosseini S**, Bagheri F, Shamekhi MA, Baghaban Eslaminejad MR, "**Polymeric Scaffolds for MSC-based Cartilage Tissue Engineering**" in the book "Encyclopedia of polymer application". 2018, Taylor & Francis.

- **Hosseini S**, Jahangir Sh, Baghaban Eslaminejad MR, "**Tooth Tissue Engineering**" in the book "Biomaterials for Oral and Dental Tissue Engineering, Materials and Strategies" Edited by Lobat Tayebi and Keyvan Moharamzadeh, 2017, Elsevier.
- **Hosseini S**, Baghaban Eslaminejad MR, "**Mesenchymal Stem cells: An Optimistic Cell Source in Tissue Engineering for Bone Regeneration**" in the book "Cartilage and Bone Regeneration (Stem Cells in Clinical Application)" Edited by Phuc Van Pham, 2017, Springer (Humana Press).

### Papers:

- Leisi Mehrabani F, **Hosseini S**, Baghaban Eslaminejad MR. A Stratified Cell Sheet Platform Orchestrating Dual Osteogenic and Chondrogenic Differentiation for Osteochondral Tissue Engineering (Under review)
- Ghorbaninejad M, Kamrani S, Ghorbaninejad Z, **Hosseini S**, Epigenetic Crosstalk in Bone and Cartilage Disorders: Emerging Role of Extracellular Vesicles, **Biomedicine & Pharmacotherapy**, 2025, 193, 118706.
- Ebrahimi Sadrabadi A, Arab S, Kamali A, Karimi S, Baghaban Eslaminejad MR, **Hosseini S**, Biphasic Bone-Mimicking Constructs Containing Silk Fibroin Peptide Enhanced Bone Regeneration in Segmental Defects in Rats, **Biomaterials Advances**, 2025, 214650.
- Ebrahimi F, Jalali H, Kalantari N, Ghanian MH, **Hosseini S**, Dual-Functional Decellularized Bone Scaffolds Embedded with PLGA–Linezolid Microparticles for Enhanced Bone Regeneration and Infection Control, **BioMedical Engineering OnLine**, 2025, 24 (1), 140.
- Jelodari S, Baei P, Halvaei M, Hosseinpour N, Sheykh Hassan M, **Hosseini S**, Bioinspired 3D-Printing Strategies for Skeletal Tissue Regeneration; From Natural Architectures to Clinical Applications, **Journal of Biomaterials Applications**, 2025.
- Ebrahimi Sadrabadi A, Baei P, Baghaban Eslaminejad MR, **Hosseini S**. Toward functional bone bioprinting: Addressing the overlooked challenges of mechanical compliance, **International Journal of Bioprinting**, 2025, 025420425.
- Sedaghat A, Shokrolahi F, Yeganeh H, Shokrolahi P, **Hosseini S**, Injectable Gellan Gum Hydrogel with PLGA-LDH Microspheres for Controlled Alendronate Release and Bone Regeneration, **International Journal of Biological Macromolecules**, 2025.
- Leisi Mehrabani F, Alibeigian Y, Baghaban Eslaminejad MR, **Hosseini S**, Mechanical Harvesting of Cell Sheets: An Efficient Approach for Bone and Cartilage Tissue Engineering, **Stem Cell Research & Therapy**, 2025

- Esmaeili A, **Hosseini S**, Baghaban Eslaminejad MR, The Biocorona and its Considerable Potential in Extracellular Vesicle Engineering for Clinical Applications, **Biomedicine and Pharmacotherapy**, 2025
- Alibeigian Y, Kalantari N, Ebrahimi Sadrabadi A, Kamali A, Raminfard S, Baghaban Eslaminejad MR, **Hosseini S**, Incorporation of Calcium Phosphate Cement into Decellularized Extracellular Matrix (CPC/dECM) Enhances its Mechanical and Bone Regenerative Properties, **Colloid and Surface B: Biointerface**, 2024.
- Esmaeili A, **Hosseini S**, Baghaban Eslaminejad MR, Co-culture engineering: a promising strategy for production of engineered extracellular vesicle for osteoarthritis treatment, **Cell Communication and Signaling**, 2024, 22 (1), 29
- Rabani Doost A, Shokrolahi F, Shokrollahi P, Barzin J, **Hosseini S**, Engineering antibacterial shrinkage-free trinary PLGA-b ased GBR membrane for bone regeneration, **Polymers for Advanced Technologies**, 2024, 35 (1), e6263
- Hosseinzadeh M, Kamali A, **Hosseini S**, Baghaban Eslaminejad MR. Extracellular Vesicles Derived from Chondrocyte/MSC Co-Culture Alleviate Osteoarthritis in Rat, **Cell and Tissue Research**, 2023, 394 (1), 145-162
- Ghorbaninejad M, Khademi-Shirvan M, **Hosseini S**, Meyfour A, ShahHosseini M, Eslaminejad MB, Effective Role of Curcumin on Expression Regulation of EZH2 Histone Methyltransferase as a Dynamic Epigenetic Factor in Osteogenic Differentiation of Human Mesenchymal Stem Cells, **Biochimica et Biophysica Acta (BBA) - Gene Regulatory Mechanisms**, 2023, 1866: 194903
- Esmaeili A, **Hosseini S**, Kamali A, Hosseinzadeh M, Shekari F, Baghaban Eslaminejad MR, Co-aggregation of MSC/Chondrocyte in a Dynamic 3D Culture Elevates the Therapeutic Effect of Secreted Extracellular Vesicles on Osteoarthritis in a Rat Model, **Scientific reports**, 2022. 12: 1-15.
- Mohseni M, Shokrollahi P, Shokrolahi F, **Hosseini S**, Taghiyar L, Kamali A. Dexamethasone Loaded injectable, Self-healing Hydrogel Microspheres Based on UPy-Functionalized Gelatin/ZnHAp Physical Network Promotes Bone Regeneration, **International Journal of Pharmaceutics**, 2022, 626: 122196.
- Nasiri N, **Hosseini S**, Reihani-Sabet F, Baghaban Eslaminejad M. Targeted Mesenchymal Stem Cell Therapy Equipped with Cell-tissue Nanomatchmaker Stops Osteoarthritis Progression, **Scientific reports**, 2022. 12: 1-13.
- Esmaeili A, Alini M, Baghaban Eslaminejad MR, **Hosseini S**. Engineering Strategies for Customizing Extracellular Vesicle Uptake in a Therapeutic Context, **Stem Cell Research and Therapy**, 2022, 13: 129.
- Jelodari S, Ebrahimi Sadrabadi A, Zarei F, Jahangir S, Azami M, Sheykh Hassan M, Hosseini S. New Insights into Cartilage Tissue Engineering: Improvement of Tissue-

Scaffold Integration to Enhance Cartilage Regeneration, **BioMed Research International**, 2022, 2022: 1-13.

- Farahi S, Hosseini S, Hashemi S, Ghanbarian H, Salehi M, **Hosseini S**. The Use of Trichostatin A during Pluripotent Stem Cell Generation Does Not Affect MHC Expression Level, **Stem Cells International**, 2022, 2022: 1-12.
- Hosseinzadeh M, Kamali A, **Hosseini S**, Baghaban Eslaminejad MR. Higher Chondrogenic Potential of Extracellular Vesicles Derived from Mesenchymal Stem Cells Compared to Chondrocytes-EVs in Vitro, **BioMed Research International**, 2021, 2021: 1-12.
- Esmaeili A, **Hosseini S**, Baghaban Eslaminejad MR. Engineered-extracellular vesicles as an optimistic tool for microRNA delivery for osteoarthritis treatment, **Cellular and Molecular Life Sciences**, 2020, 78 (1): 79-91.
- Ghorbaninejad M, Khademi-Shirvan M, Hosseini S, Eslaminejad MB, Epidrugs: novel epigenetic regulators that open a new window for targeting osteoblast differentiation, **Stem Cell Research and Therapy**, 2020, 11 (1): 1-14.
- Nasiri N, **Hosseini S**, Alini M, Khademhosseini A, Baghaban Eslaminejad MR. Targeted cell delivery for articular cartilage regeneration and osteoarthritis treatment, **Drug Discovery Today**, 2019, 24 (11), 2212-2224.
- **Hosseini S**, Naderi-Manesh H, Vali H, Baghaban Eslaminejad MR, Sayahpour FA, Faghihi S. Contribution of osteocalcin mimetic peptide enhances osteogenic activity and extracellular matrix mineralization of human osteoblast-like cells, **Colloid and Surface B**. 2018, 173: 662-671.
- Kamali A, Oryan A, **Hosseini S**, Ghanian MH, Alizadeh M, Baghaban Eslaminejad MR, Baharvand H. Cannabidiol-loaded microspheres incorporated into osteoconductive scaffold enhance mesenchymal stem cell recruitment and regeneration of critical-sized bone defects, **Material Science and Engineering C**. 2019; 101: 64-75.
- Jahangir Sh, **Hosseini S**, Sayahpour FA, Mostafaei F, Baghaban Eslaminejad MR. 3D-porous  $\beta$ -tricalcium phosphate–alginate–gelatin scaffold with DMOG delivery promotes angiogenesis and bone formation in rat calvarial defects, **Journal Materials Science; Materials in Medicine**, 2018, 30(1): 1.
- Oryan A, Baghaban Eslaminejad MR, Kamali A, **Hosseini S**, Sayahpour FA, Baharvand H, Synergistic effect of strontium, bioactive glass and nano-hydroxyapatite promotes bone regeneration of critical-sized radial bone defects, **Journal of Biomedical Materials Research Part B**, 2019, 107(1):50-64.
- Khalilifar MA, Mohamadreza Baghban Eslaminejad MR, Ghasemzadeh M, **Hosseini S**, Baharvand H, In vitro and in vivo comparison of different types of rabbit mesenchymal stem cells for cartilage repair, **Cell Journal**, 2019, 21 (2).

- Taghiyar L, **Hosseini S**, Safari F, Bagheri F, Fani N, Stoddart M. J., Alini M, Baghaban Eslaminejad MR. New insight into functional limb regeneration: A to Z approaches, **Journal of Tissue Engineering and Regenerative Medicine**, 2018, 12(9): 1925-1943.
- Taghiyar L, Hesaraki M, Azam Sayahpour F, Satarian L, **Hosseini S**, Aghdami N, Baghaban Eslaminejad MR, Msh homeobox 1 (Msx1)- and Msx2-overexpressing bone marrow-derived mesenchymal stem cells resemble blastema cells and enhance regeneration in mice, **Journal of Biological Chemistry**, 2017, 292(25):10520-10533.
- Taghiyar L, **Hosseini S**, Hesaraki M, Azam Sayahpour F, Aghdami N, Baghaban Eslaminejad MR, Isolation, characterization and osteogenic potential of mouse digit tip blastema cells in comparison with bone marrow-derived mesenchymal stem cells in vitro, **Cell Journal**, 2018, 19 (4): 585-598.
- Kheirabadi M, Maleki J, Soufian S, **Hosseini S**. Design of new potent HTLV-1 protease inhibitors: in silico study. **Molecular Biology Research Communications**, 2016; 5(1): 19-30
- **Hosseini S**, Naderi-Manesh H, Vali H, Faghihi S. Improved surface bioactivity of stainless steel substrates using osteocalcin mimetic peptide. **Material chemistry and physics**, 2014, 143: 1364-1371.
- **Hosseini S**, Naderi-Manesh H, Mountassif D, Cerruti M, Vali H, Faghihi S. C-terminal amidation of an osteocalcin-derived peptide promotes hydroxyapatite crystallization. **Journal of biological chemistry**, 2013, 288: 7885-7893.
- **Hosseini S**, Naderi-Manesh H, Faghihi S. The effect of acidic and amidic osteocalcin derived peptides on the formation of hydroxyapatite nanocrystals. **Biotechnology Tarbiat Modares University**, 2013, 4(1): 65-74.

### Conferences:

- **Hosseini S**, The Potential Significance of Engineered Extracellular Vesicles in Osteoarthritis Treatment. **20<sup>th</sup> Royan International Congress on Stem Cell Biology & Technology**, September 2024, Tehran, Iran.
- Judaki A A, Taghiyar L, **Hosseini S**, Taleahmad S. Novel Approaches for Identification of Prognostic Biomarker for Osteosarcoma Based on Data-mining and scRNA-seq. **20<sup>th</sup> Royan International Congress on Stem Cell Biology & Technology**, September 2024, Tehran, Iran.
- Alibeigian Y, **Hosseini S**, Gezelbash F. Degenerative changes in biomechanics, gene expression, and composition of intervertebral disc: 8-week animal study, **4<sup>th</sup> International Workshop Spine Loading and Deformation**, July 2023, Berlin, Germany.

- Leisi Mehrabani F, **Hosseini S**, Baghaban Eslaminejad MR. Developing an Osteochondral Construct Using Mesenchymal Stem Cell Sheet Technology, **19<sup>th</sup> Royan International Congress on Stem Cell Biology & Technology**, August 2023, Tehran, Iran.
- Ebrahimi sadrabadi A, **Hosseini S**, Baghaban Eslaminejad MR. Developing Trabecular and Cortical Bone Microstructure Through Decellularized Extracellular Matrix Composite Hydrogels. **18<sup>th</sup> Royan International Congress on Stem Cell Biology & Technology**, September 2022, Tehran, Iran.
- Hosseinzadeh M, **Hosseini S**, Baghaban Eslaminejad MR. Improvement of chondrogenic potential of exosomes for treatment of osteoarthritis. **Nature conferences; Innovative tissue therapies from bench to bedside**, November 2021, Virtual.
- Kalantari N, **Hosseini S**, Baghaban Eslaminejad MR. Development of 3d- scaffold using bioink derived from decellularized bone with calcium phosphate cement for bone tissue regeneration. **6<sup>th</sup> World Congress of the Tissue Engineering and Regenerative Medicine International Society (TERMIS)**, November 2021, Maastricht, The Netherlands.
- Hosseinzadeh M, **Hosseini S**, Baghaban Eslaminejad MR. The effect of extracellular vesicles derived from chondrocytes and mesenchymal stem cells on chondrogenesis: an in vitro study. **15<sup>th</sup> Royan International Congress on Stem Cell Biology & Technology**, August 2019, Tehran, Iran.
- Khademi Shirvan M, Ghorbaninejad M, **Hosseini S**, Shahhoseini M, Baghaban Eslaminejad MR, Curcumin promotes matrix mineralization and osteogenic activity of human bone marrow-derived MSC, **European Human Genetics Conference**, June 2018, Milan, Italy
- Ghorbaninejad M, **Hosseini S**, Baghaban Eslaminejad MR, Shahhoseini M. Curcumin promote osteogenic differentiation of human bone marrow-derived MSCs through Ezh2-mediated histone modification, **3<sup>rd</sup> International and 15<sup>th</sup> Iranian Genetics Congress**, May 2018, Tehran, Iran.
- Khademi Shirvan M, **Hosseini S**, Baghaban Eslaminejad MR, Shahhoseini M. Curcumin stimulate osteoblast differentiation through regulating p300 Histone acetyltransferase. **3<sup>rd</sup> International and 15<sup>th</sup> Iranian Genetics Congress**, May 2018, Tehran, Iran.
- **Hosseini S**, Baghaban Eslaminejad M, Faghihi S. Novel bone scaffold containing biomimetic peptide for bone tissue engineering, **10<sup>th</sup> World Biomaterial Congress**, May 2016, Montreal, Canada.
- Jahangir Sh, Sayahpour FA, Mostafaei F, **Hosseini S**, Baghaban Eslaminejad MR, Spongy scaffold containing dimethyloxallylglycin accelerates angiogenesis and osteogenesis in Rat calvarial defect, **European Chapter Meeting of the Tissue Engineering and Regenerative Medicine International Society**, June 2017, Davos, Switzerland.

- Kamali A, Oryan A, Baghaban Eslaminejad MR, **Hossieni S**, Moshiri A. Osteoinductive porous scaffolds pre-seeded with mesenchymal stem cells enhance healing of critical-sized radial bone defects in rats. **Stem Cells and Regenerative Medicine Congress**, April 2017, Mashhad, Iran
- **Hosseini S**, Naderi-Manesh H, Faghihi S. “The effect of biomimetic apatite nanocrystal on osteogenic activity of osteoblast like cells”, **5th International Conference on the Nano-Structures**, March 2014, Kish Island, Iran.
- **Hosseini S**, Naderi-Manesh H, Mountassif D, Cerruti M, Vali H, Faghihi S. “The effect of osteocalcin derived peptides on the apatite nanocrystal formation”, **3rd International Conference on Nanotechnology: Fundamentals and Applications**, August 2012, Montreal, Canada.
- **Hosseini S**, Naderi Gh, Naderi-Manesh H, Hassani L, Hadizade shirazi N, Ranjbar B. “Comparative structural study of Calmodulin and ApoCalmodulin purified from bovine brain”, **14th National and 2nd International Conference of Biology**, August 2006, Tehran, Iran.
- **Hosseini S**, Khalife k, Hassani L, Hadizade Shirazi N, Ranjbar B. “Kinetics and thermodynamics study of hemoglobin refolding in the presence of  $\alpha$ -dioxime derivatives”, **7th Iranian Biophysical Chemistry Conference**, July 2006, Tabriz, Iran
- **Hosseini S**, Hassani L, Khalife K, Ranjbar B. “Comparative structural study of hemoglobin and Apo-hemoglobin upon  $\alpha$ -dioxime derivatives”, **13th Iranian Biology Conference and 1st International Conference of Biology**, August 2005, Rasht, Iran