



Curriculum vitae

Nikoo Hossein-khannazer, Ph.D

Assistant Professor

School of Advanced Technologies in Medicine,
Shahid Beheshti University of Medical Sciences, Tehran, Iran

Education

Contact info

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Google Scholar

<https://scholar.google.com/citations?user=sauPNLoAAAAJ&hl=en>

ORCID

<https://orcid.org/0000-0002-8950-2554>

Ph.D *Medical Immunology*

Department of Immunology, School of Medicine, Shahid Beheshti University of Medical Sciences, Tehran, Iran
(2014-2019)

M.Sc. *Cellular and Molecular Biology*

Department of Biology, Tehran University, Tehran, Iran
(2009-2012)

B.Sc. *Cellular and Molecular Biology*

Department of biology, Medical Branch, Tehran, Iran
(2004-2008)

Honors

- Excellent graduated student, 1st rank in the PhD graduated students (2019)
- 1st rank among Ph.D students in the SBMU Immunology Board exam (2016)
- Member of Organization for Development of Exceptional Talents (2019)

Research Interests

- Regenerative Medicine
- Stem Cell Biology
- Stem/Progenitor Cell-Based Therapies; Clinical studies
- "Differentiation Therapy" approach in Cancers, Using Advanced targeted-based Approaches.
- Therapeutic Delivery
- Immunotherapy

Work Experience

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- Founder and Director of Regenerative Medicine Laboratory Research Institute for Gastroenterology and Liver Diseases, Shahid Beheshti University of Medical Sciences, Tehran, Iran. (2019-present)
 - Regulatory affairs manager in Medical Laboratory. (2020-2022)
 - Assistant professor in Department of Tissue Engineering and Applied Cell Sciences, School of Advanced Technologies in Medicine, Shahid Beheshti University of Medical Sciences, Tehran, Iran. (present)

Membership

-
- Member of Organization for Development of Exceptional Talents

1. Safety of autologous nucleus pulposus cell transplantation with fibrin glue following endoscopic discectomy in chronic low back pain: a preliminary phase I trial. Bahareh Sadri, Narges,..., **Nikoo Hossein-Khannazer**, ..., Mohsen Emadedin, Massoud Vosough (2025, BMC Musculoskeletal Disorders).
2. Targeting glypican 3 by immunotoxins: the promise of immunotherapy in hepatocellular carcinoma. Elham Rismani, **Nikoo Hossein-Khannazer**, Moustapha Hassan, Elahe Shams, Mustapha Najimi, Massoud Vosough. (2025, Expert Opinion on Therapeutic Targets).
3. Translational approach using advanced therapy medicinal products for Huntington's disease. Maryam Alsadat Mousavi,..., **Nikoo Hossein-Khannazer**, Anastasia Shpichka, Seyed Massoud Nabavi, Peter Timashev, Massoud Vosough. (2025, Current Reviews in Clinical and Experimental Pharmacology).
4. Synthesis, characterization and evaluation of linoleic acid-loaded nano-carriers: a novel drug delivery system for efficient treatment of hepatocellular carcinoma. Mahsa Ghasemzad, ..., Zohreh Miri-Lavasani, Elham Rismani, **Nikoo Hossein-Khannazer**, Abbas Piryaee, Massoud Vosough. (2025, Anti-Cancer Drugs)
5. GPC-3 in hepatocellular carcinoma; A novel biomarker and molecular target. amed Azhdari Tehrani, Masood Rismani, **Nikoo Hossein-Khannazer***, Massoud Vosough. (2025, Experimental Cell Research)
6. Immunomodulatory performance of GMP-compliant, clinical-grade mesenchymal stromal cells from four different sources. Mandana Kazem Arki, Kasma Moeinabadi-Bidgoli, **Nikoo Hossein-Khannazer***, Massoud Vosough.(2024, Heliyon).
7. Adipose Tissue-Derived Mesenchymal Stromal Cells Modulate Inflammatory Response and Improve Allograft Islet Transplant in Mice Model of Type 1 Diabetes. Bahare Niknam, Jamal Mohammadi Ayenehdeh, **Nikoo Hossein-Khannazer**, Massoud Vosough, Nader Tajik. (2024, Endocrine Research).
8. Machine learning and experimental analyses identified miRNA expression models associated with metastatic osteosarcoma. Samira Abedi, ..., **Nikoo Hossein-Khannazer**..., Ali Zarrabi, Massoud Vosough. (2024, Biochimica et Biophysica Acta (BBA)-Molecular Basis of Disease).
9. Immune regulation and therapeutic application of T regulatory cells in liver diseases. Ananya Ajith, ..., **Nikoo Hossein-Khannazer**, ..., Mustapha Najimi. (2024, Frontiers in Immunology).
10. Translational Approach Using Advanced Therapy Medicinal Products for Huntington's Disease. Maryam Alsadat Mousavi, ..., **Nikoo Hossein-Khannazer**, Anastasia

Shpichka, Seyed Massoud Nabavi, Peter Timashev, Massoud Vosough. (2024, Current Reviews in Clinical and Experimental Pharmacology).

11. Nano-Based Drug Delivery Systems in Hepatocellular Carcinoma. Maryam Sadat Abtahi, ..., **Nikoo Hossein-Khannazer***, Massoud Vosough. (2024, Journal of Drug Targeting).
12. 3D Printing of alginate/chitosan-based scaffold empowered by tyrosol-loaded niosome for wound healing applications: in vitro and in vivo performances. Farzaneh Mahmoudi Beram, ..., **Nikoo Hossein-Khannazer***, Mohammad Tavakkoli Yarak. (2024, ACS Applied Bio Materials).
13. Mesenchymal Stromal Cell-based Novel Treatment Modalities in Rheumatoid Arthritis. Mahtab Ahmadipour, Ahmadreza Jamshidi, ..., **Nikoo Hossein-Khannazer**, Moustapha Hassan, Massoud Vosough.(2024, Handbook of Stem Cell Applications).
14. Prevalence of hepatobiliary manifestations in inflammatory bowel disease: a GRADE assessed systematic review and meta-analysis on more than 1.7 million patients. Alireza Beheshti Maal, ..., **Nikoo Hossein-Khannazer**, Mohammad Ali Mansournia, Massoud Vosough.(2024, Journal of Crohn's and Colitis).
15. Review on kidney-liver crosstalk: pathophysiology of their disorders. Niloofar Khoshdel Rad, ..., **Nikoo Hossein-Khannazer**, Moustapha Hassan, Massoud Vosough. (2024, Cell Journal (Yakhteh)).
16. Doxorubicin-loaded Niosomes functionalized with gelatine and alginate as pH-responsive drug delivery system: A 3D printing approach. Mohammad Zaer, ... Ahmad Reza Farmani, **Nikoo Hossein-Khannazer***(2023, International Journal of Biological Macromolecules).
17. Amniotic Membrane and Its Derivatives: Novel Therapeutic Modalities in Liver Disorders. Mandana Kazem Arki, Kasra Moeinabadi-Bidgoli, **Nikoo Hossein-Khannazer***, Roberto Gramignoli, Mustapha Najimi, Massoud Vosough(2023, Cells).
18. Developed Bone Biomaterials Incorporated with MicroRNAs to Promote Bone Regeneration: A Systematic Review, Bioinformatics, and Meta-Analysis Study. Roshanak Shams, ... Vaghari, **Nikoo Hossein-Khannazer**, Tarun Agarwal, Massoud Vosough, José M Padrón(2023, ACS Biomaterials Science & Engineering).
19. Umbilical Cord Blood-Derived Monocytes as A Reliable Source of Functional Macrophages for Biomedical Research. Shukoofeh Torabi, Morteza Zarrabi, **Nikoo Hossein-Khannazer**, ..., Roberto Gramignoli, Moustapha Hassan, Massoud Vosough. (2023, Cell Journal (Yakhteh)).

20. Co-delivery of doxorubicin and paclitaxel via noisome nanocarriers attenuates cancerous phenotypes in gastric cancer cells, Niloufar Rezaei, ..., **Nikoo Hossein-Khannazer***, Ebrahim Mostafavi, Massoud Vosough(2023, European Journal of Pharmaceutics and Biopharmaceutics).
21. Disulfiram-Loaded Niosomes Reduces Cancerous Phenotypes in Oral Squamous Cell Carcinoma Cells, Melika Zangeneh Motlagh, ..., **Nikoo Hossein-Khannazer***, Massoud Vosough(2023, Cell Journal (Yakhteh)).
22. Genetic modification and preconditioning strategies to enhance functionality of mesenchymal stromal cells: a clinical perspective, Kasra Moeinabadi-Bidgoli, ..., **Nikoo Hossein-Khannazer***, Massoud Vosough(2023, Expert Opinion on Biological Therapy).
23. Cell and cell-derivative-based therapy for liver diseases; current approaches and future promises, Ensieh Zahmatkesh, ... **Nikoo Hossein-Khannazer**, ..., Reza Malekzadeh, Moustapha Hassan, Massoud Vosough(2023, Expert Review of Gastroenterology & Hepatology).
24. Exosomes for angiogenesis induction in ischemic disorders, Kasra Moeinabadi-Bidgoli, Malihe Rezaee, **Nikoo Hossein-Khannazer**, ..., Hassan Niknejad, Massoud Vosough (2023, Journal of Cellular and Molecular Medicine).
25. Engineered UIO-66 metal-organic framework for delivery of curcumin against breast cancer cells: An in vitro evaluation. Saba Bazzazan, ...**Nikoo Hossein-khannazer***, Ebrahim Mostafavi(2023, Journal of Drug Delivery Science and Technology).
26. Non-Clear Cell Renal Cell Carcinoma: Molecular Pathogenesis, Innovative Modeling, and Targeted Therapeutic Approaches. Niloofar Khoshdel Rad, ..., **Nikoo Hossein-Khannazer**, Massoud Vosough(2022, International Journal of Translational Medicine).
27. Stem Cell-based and Advanced Therapeutic Modalities for Parkinson's Disease: A Risk-effectiveness Patient-centered Analysis, Sarvenaz Salahi, ...**Nikoo Hossein-Khannazer***, Massoud Vosough(2022, Current Neuropharmacology).
28. Evaluating the effect of LPS from periodontal pathogenic bacteria on the expression of senescence-related genes in human dental pulp stem cells, Mandana Sattari, ...**Nikoo Khannazer**, , Amir Abbas Momtazi-Borojeni.(2022, Journal of Cellular and Molecular Medicine).
29. Effects of Lipopolysaccharide from Porphyromonas gingivalis and Escherichia coli on Gene Expression Levels of Toll-like Receptors and Inflammatory Cytokines in Human

Dental Pulp Stem Cells, Hanieh Mojtahedi, **Nikoo Hossein-Khannazer**,...Mandana Sattari.(**2022**, Iranian Journal of Immunology).

30. Potential mechanisms of some selected heavy metals in the induction of inflammation and autoimmunity, Abubakar U Anka, ..., **Nikoo Hossein-Khannazer**, Gholamreza Azizi.(**2022**, European Journal of Inflammation).
31. Novel Gene-Correction-Based Therapeutic Modalities for Monogenic Liver Disorders , Mahsa Ghasemzad, Mahdiah Hashemi, Zohre Miri Lavasani, **Nikoo Hossein-Khannazer**, ..., Massoud Vosough .(**2022**, Bioengineering).
32. Conjugated linoleic acid treatment attenuates cancerous features in hepatocellular carcinoma cells. Zohre Miri-Lavasani,...**Nikoo Hossein-Khannazer**, Moustapha Hassan, Mustapha Najimi, Massoud Vosough.(**2022**, Stem Cells International).
33. Low-Level Laser Therapy in the Treatment of Autoimmune Thyroiditis. **Nikoo Hossein-Khannazer**, Mandana Kazem Arki, Aliasghar Keramatinia, Mostafa Rezaei-Tavirani. (**2022**, Journal of Lasers in Medical Sciences).
34. Regulatory non-coding RNAs in familial hypercholesterolemia, theranostic applications. Hani Keshavarz Alikhani, ... **Nikoo Hossein-Khannazer**,...Moustapha Hassan, Massoud Vosough. (**2022**, Frontiers in Cell and Developmental Biology).
35. Novel insights in CAR-NK cells beyond CAR-T cell technology; promising advantages, Hamidreza Ebrahimiyan, Amirhossein Tamimi, Bahareh Shokoohian, Neda Minaei, Arash Memarnejadian, **Nikoo Hossein-Khannazer***, Moustapha Hassan, Massoud Vosough*.(**2022**, International Immunopharmacology).
36. Mesenchymal stromal cell therapy improves refractory perianal fistula in crohn's disease: case series clinical interventional study, Massoud Vosough, Sepideh Nikfam, ..., **Nikoo Hossein-Khannazer**, ..., Mehdi Mohamadnejad(**2022**, Cell journal).
37. Stem cell-based and advanced therapeutic modalities for Parkinson's disease: A risk-effectiveness patient-centered analysis., Sarvenaz Salahi, Maryam Alsadat Mousavi, Gholamreza Azizi, **Nikoo Hossein Khannazer***, Massoud Vosough(**2022**, Current Neuropharmacology).
38. PSC associated inflammatory bowel disease: A distinct entity, Alireza Beheshti-Maal, Atena Tamimi, Shahrokh Iravani, Arash Memarnejadian, Majid Sorouri, Hamid Asadzadeh Aghdaei, Mohammad Reza Zali, **Nikoo Hossein Khannazer***, Massoud Vosough.(**2022**, Expert Review of Gastroenterology & Hepatology).
39. The Optimized Formulation of Tamoxifen-Loaded Niosomes Efficiently Induced Apoptosis and Cell Cycle Arrest in Breast Cancer Cells, Iman Akbarzadeh, ..., **Nikoo Hossein-Khannazer***, Peter Timashev, Pooyan Makvandi, Massoud Vosough.(**2022**, AAPS PharmSciTech.).

40. Oral squamous cell carcinoma, novel methods for early diagnosis and treatment, Melika Zangeneh Motlagh, Atena Tamimi, Reihaneh Golroo, **Nikoo Hossein-Khannazer**, ..., Massoud Vosough. (2022, Modern Medical Laboratory Journal)
41. Low-Level Laser Therapy for Rheumatoid Arthritis: A Review of Experimental Approaches **Nikoo Hossein-khannazer**, ..., Mostafa Rezaei Tavirani. (2022, Journal of Lasers in Medical Sciences)
42. Super Magnetic Niosomal Nanocarrier as a New Approach for Treatment of Breast Cancer: A Case Study on SK-BR-3 and MDA-MB-231 Cell Lines, Elham Jamshidifar, Faten Eshrati Yeganeh, Mona Shayan, ..., **Nikoo Hossein-Khannazer***. (2021, International journal of molecular sciences).
43. "Novel cell-based therapies in inflammatory bowel diseases: the established concept, promising results", **N Hossein-Khannazer**, S Torabi, R Hosseinzadeh, S Shahrokh, ...(2021, Human Cell)
44. Cross-talk between immune system and microbiota in COVID-19. Shaghayegh Baradaran Ghavami, ..., **Nikoo Hossein-Khannazer**, Peter Timashev, Massoud Vosough. (2021, Expert review of gastroenterology & hepatology).
45. The nano-based theranostics for respiratory complications of COVID-19, Mahsa Ghasemzad, Seyed Mohammad Reza Hashemian, Arash Memarnejadian, Iman Akbarzadeh, **Nikoo Hossein-Khannazer***, Massoud Vosough.(2021, Drug Development and Industrial Pharmacy).
46. An update to "novel therapeutic approaches for treatment of COVID-19". **Nikoo Hossein-Khannazer**, Bahare Shokoohian, Anastasia Shpichka, Hamid Asadzadeh Aghdaei, Peter Timashev, Massoud Vosough. (2021, Journal of Molecular Medicine)
47. Features and roles of T helper 22 cells in immunological diseases and malignancies. **Nikoo Hossein-Khannazer**, Zeineb Zian, Joaira Bakkach, Ali N Kamali, Ramin Hosseinzadeh, Abubakar Umar Anka, Reza Yazdani, Gholamreza Azizi.(2021, Scandinavian Journal of Immunology).
48. Smart Materials in Regenerative Medicine, Niloufar Rezaei, Iman Akbarzadeh, Sara Kazemi, Leila Montazeri, Ibrahim Zarkesh, **Nikoo Hossein-Khannazer***, Moustapha Hassan, Massoud Vosough. (2021, Modern Medical Laboratory Journal).
49. The Role of Low-Level Laser Therapy in the Treatment of Multiple Sclerosis: A Review Study, **Nikoo Khannazer**, Mandana Kazem Arki, Aliasghar Keramatinia, Mostafa Rezaei-Tavirani. (2021, Journal of Lasers in Medical Sciences).
50. Application of Stem Cell-Derived Extracellular Vesicles as an Innovative Theranostics in Microbial Diseases, Hani Keshavarz Alikhani, Bahare Shokoohian, Sama Rezasoltani,

Nikoo Hossein-Khannazer, Abbas Yadegar, Moustapha Hassan, Massoud Vosough. (2021, Frontiers in Microbiology).

51. Evaluation of lymphocyte subtypes in COVID-19 patients. Mitra Rezaei, Majid Marjani, Payam Tabarsi, Afshin Moniri, Zahra Abtahian, Mehdi Kazempour Dizaji, Neda Dalil Roofchayee, Neda K Dezfuli, Davood Mansouri, **Nikoo Hossein-Khannazer**, Mohamad Varahram, Esmaeil Mortaz, Ali Akbar Velayati.(2021, Cold Spring Harbor Laboratory Press).
52. Smart Materials in Regenerative Medicine. Niloufar Rezaei, Iman Akbarzadeh, Sara Kazemi, Leila Montazeri, Ibrahim Zarkesh, **Nikoo Hossein-Khannazer***, Moustapha Hassan, Massoud Vosough.(2021, Modern Medical Laboratory Journal).
53. Anti-Inflammatory Effect of KW-2449 on Autoimmune Encephalomyelitis: An Experimental Study on Mice. Hasan Namdar Ahmadabad, Allireza Abbaspour, Yaser Panahi, Saeed Tahmasebi, **Nikoo Hossein-Khannazer**, ..., Gholamreza Azizi. (2021, Endocrine, metabolic & immune disorders drug targets)
54. The Potential Role of Pro-Inflammatory and Anti-Inflammatory Cytokines in Epilepsy Pathogenesis. Ali N Kamali, Zeineb Zian, José M Bautista, Haleh Hamedifar, **Nikoo Hossein-Khannazer**, Ramin Hosseinzadeh, Reza Yazdani, Gholamreza Azizi (2021, Endocrine, Metabolic & Immune Disorders Drug Targets)
55. Autoimmunity in common variable immunodeficiency: a systematic review and meta-analysis. Fatema Sadaat Rizvi, Hamed Zainaldain, Hosein Rafiemanesh, Mahnaz Jamee, **Nikoo Hossein-Khannazer**, Gholamreza Azizi(2020, Expert Review of Clinical Immunology)
56. Novel Therapeutic approaches for Treatment of COVID-19. **Nikoo Hossein-khannazer**, Bahare Shokoohian, Anastasia Shpichka, Hamid Asadzadeh Aghdaei, Peter Timashev, Massoud Vosough (2020, Journal of molecular medicine)
57. IBD patients could be silent carriers and less prone to Severe adverse events of Novel Coronavirus: True or False? Shaghayegh Baradaran Ghavami, Shabnam Shahrokh, **Nikoo Hossein-khannazer**, Hamid Asadzadeh Aghdaei, Massoud Vosough (2020, Cell journal)
58. Pivotal cytokines and their transcription factors are the targets of guluronic acid for inhibiting the immunopathogenesis process of multiple sclerosis. **Nikoo Hossein-khannazer**, Samira Shabani, Mohadeseh Farokhfard, Gholamreza Azizi, Farhad Asarzadegan, Behnam Safarpour Lima, Abbas Mirshafeiey (2020, Drug Development Research).
59. Investigating the route of administration and efficacy of adipose tissue-derived mesenchymal stem cells and conditioned medium in type 1 diabetic mice, Seyed Mahmoud

Hashemi, Zuhair Mohammad Hassan, **Nikoo Hossein-Khannazer**, Ali Akbar Pourfathollah, Sara Soudi (2020, Inflammo pharmacology journal).

60. The effects of cadmium exposure in the induction of inflammation, **Nikoo Hossein-Khannazer**, Gholamreza Azizi, Solat Eslami, ... Emad Dehghanifard, Mohammad Noorisepehr (2020, Immunopharmacology and Immunotoxicolog)
61. Study of the immunomodulatory effects of osteogenic differentiated human dental pulp stem cells. **Nikoo Hossein-khannazer**, Seyed Mahmoud Hashemi, Saeed Namaki, Hossein Ghanbarian, Mandana Sattari, Arash Khojasteh. 2019, Life sciences.
62. Study of the effects of dental pulp stem cell conditioned media (DPSC-CM) on proliferation of peripheral blood mononuclear cells (PBMCs). **Nikoo hossein-khannazer**, mandana sattari, arash khojasteh, saeed namaki, Seyed Mahmoud Hashemi. 2019, Immunoregulation Journal.
63. The Effects of D-aspartate in Neurosteroids, Neurosteroid Receptors, and Inflammatory Mediators in Experimental Autoimmune Encephalomyelitis. M Goudarzvand, Y Panahi, R Yazdani, H Miladi, S Tahmasebi, A Sherafat, S Afraei, K Abouhamzeh, M Jamee, KJMR Al-Hussieni, H Mohammadi, A Mohebbi, **N Hossein-Khannazer**, M Zaki-Dizaji, MM Fiore Di, A D'Aniello, G Azizi. 2019, Endocrine, metabolic & immune disorders drug targets
64. Rituximab as a Treatment for Limbic Encephalitis Associated with Leucine-Rich Glioma inactivated 1: a case report and literature review. Behnam safarpour, Mahtab Ramezani, Ehsan Karimialavijeh, Sepideh Paybast, Nahid Beladimoghadam, **Nikoo Hossein khan nazer**. 2018, Journal of International Translational Medicine.
65. Epidemiology and pathophysiology of malignancy in common variable immunodeficiency? A Tak Manesh, G Azizi, A Heydari, F Kiaee, M Shaghaghi, **N Hossein-Khannazer**, R Yazdani, H Abolhassani, A Aghamohammadi. 2017, Allergologia et immunopathologia.
66. Monogenic Auto-inflammatory Syndromes: A Review of the Literature. Gholamreza Azizi, Shahin Khadem Azarian, Sepideh Nazeri, Ali Mosayebian, Saleh Ghiasy, Ghazal Sadri, Ali Mohebi, **Nikoo Hossein Khan Nazer**, Sanaz Afraei, Abbas Mirshafiey. 2016, Iranian Journal of Allergy, Asthma and Immunology.
67. Silibinin, up-regulates chemokine receptor expression in MDA-MB-231 breast cancer cell line. **Nikoo Khannazer**, Seyed Hassan Paylakhi, Abbas Mirshafiey, Gholamreza Azizi, Nasrin Motamed. 2015, Bangladesh Journal of Medical Science.
68. The potential role of chemokines in Alzheimer's disease pathogenesis. Gholamreza Azizi, **Nikoo Khannazer**, Abbas Mirshafiey. 2014, American Journal of Alzheimer's Disease & Other Dementias.

- 69.** The Role of Autoantibodies in Diagnosis of Multiple Sclerosis. Mahsa Kiani Aslani, Kabir Magaji Hamid, **Nikoo Hosseinkhan Nazer**, Abbas Mirshafiey. **2014**, Int Trends Immun.
- 70.** Diagnosis of Helicobacter pylori Infection in Children and Adult by Serological Test and Stool Antigen Test. G Azizi, M Nasiri, R Sadria, MH Javanbakht, M Kalvandi, N **Khannazer**, B Asghari.**2013**, Alborz University Medical Journal.

Research Experience

- Effects of Linoleic Acid loaded niosomes on differentiation of cancerous cells into hepatocytes in tumoroid model of HCC (3D approach) (2024).
- Mesenchymal stromal cell therapy in Primary sclerosing cholangitis (PSC) disease; Phase I clinical trial (2024).
- Anti-fibrotic effects of amniotic membrane extract (AME) on inflammation induced liver fibrosis model; an *in-vitro* approach (2024).
- Evaluation of the Anticancer Effect of DSF-loaded Niosomes on Cancerous Phenotype in 3D Co-culture of Liver Cancer Model (2023).
- Investigation of Timol-loaded niosomes nanoparticles on cancerous phenotype in HCC 3D culture (2023).
- Evaluation of amniotic membrane extract effects on inducing M2 phenotype in macrophages for inhibiting fibrosis (2022).
- Evaluation of reduction in cancerous phenotype in Oral Squamous Cell Carcinoma cell line treated with Disulfiram-loaded niosome (2021).
- Investigation the regulatory T cells, activated T cells and memory B cells in COVID-19 inpatient at Masih Daneshvari Hospital (2020-present).
- Investigation of pro and anti-inflammatory mediators in serum of COVID-19 inpatient at Masih Daneshvari Hospital (2020-present).
- In-Vitro fabrication and evaluation and optimization of paclitaxel and doxorubicin loaded niosome (2019-2020).
- Effect of Niosomal co-delivery of paclitaxel and doxorubicin on apoptosis induction in gastric cancer cells: An *in-vitro* investigation (2020).
- In-vitro investigation on Supermagnetic niosomal nanocarrier as a new approach for treatment of breast cancer (2020).
- Evaluation of the anti-cancer effects of Conjugated linoleic acid loaded-niosome in Hepatocellular carcinoma cell line (2019-present).
- Evaluation of the anti-fibrotic effect of amniotic membrane extract on cord blood monocytes (2020-present).
- Investigating the effect of tamoxifen loaded niosomes on breast cancer cell lines (2019-2020).
- Investigating the immunomodulatory effects of mesenchymal stromal cells from different sources (MB-MSC, WJ-MSC, AD-MSC and DS-MSC) (2019).
- Stem cell therapy for inflammatory bowel disease (2019).
- Comparison the immunosuppression effects of DPSCs with AD-MSCs and WJ-MSCs (2018).
- Study of immunomodulatory effects of osteogenic differentiated dental pulp stem cells (2017).
- In-vitro investigation of anti-inflammatory properties of M2000 and G2013 in multiple sclerosis patients (2017).

Thesis Advisor

- Investigation of osteogenic differentiated DPSC inflammatory response.
- In-vitro Study of the effects of M2000 drug on expression of IL-17, IFN- γ , IL-22 inflammatory cytokines and T-bet, Rorc and AHR transcription factors in PBMC of multiple sclerosis patients.
- Investigating the effects of G2013 immunomodulatory effects on expression of IL-17, IFN- γ , IL-22 inflammatory cytokines and T-bet, Rorc and AHR transcription factors in PBMC of multiple sclerosis patients.
- Comparison the effects of *P. gingivalis* and *E. coli* LPS on the expression of DSPP, DMP-1, DMP-2, Nestin and Alkaline phosphatase odontogenic related genes in dental pulp stem cells.
- Comparison the effects of *P. gingivalis* and *E. coli* LPS on the expression of TP53, P21Cip1, SIRT1 and P16INK4A aging related genes in dental pulp stem cells.
- Comparison the effects of *P. gingivalis* and *E. coli* LPS on the expression of TLR2, TLR4, IL-6 and IL-8 genes in dental pulp stem cells.
- Investigating the PAR3, CXCL14 and EGF gene expression in periodontitis patients.
- Comparison the expression of IL-37, IL-33 and ST2 genes in the gingival tissue of periodontitis patients with healthy controls.

Teaching Experience

- Immunopathology
Teaching assistant
Department of Immunology, School of Medicine, Shahid Beheshti University of Medical Sciences (2015-2019)
- Neuroimmunoendocrinology
Teaching assistant
Department of Immunology, School of Medicine, Shahid Beheshti University of Medical Sciences (2015-2019).
- Laboratory animals:
Teaching assistant
Department of Immunology, School of Medicine, Shahid Beheshti University of Medical Sciences (2019).

Ph.D Students:

- Immunotherapy:

Teaching assistant

Department of Immunology, School of Medicine, Shahid Beheshti University of Medical Sciences (2017-2019).

- Psychoneuroimmunology:
Teaching assistant
Department of Immunology, School of Medicine, Shahid Beheshti University of Medical Sciences (2018).
- Cellular and molecular immunology:
Teaching assistant
Department of Tissue Engineering and Applied Cell Sciences, School of Advanced Technologies in Medicine, Shahid Beheshti University of Medical Sciences (2019-present).
- Immunobiology of mesenchymal stromal cells:
Teaching assistant
Department of Tissue Engineering and Applied Cell Sciences, School of Advanced Technologies in Medicine, Shahid Beheshti University of Medical Sciences (2019-present).

Fellowships:

- Cellular and molecular immunology:
Teaching assistant
Mofid Hospital, Shahid Beheshti University of Medical Sciences (2018).

Publication Book

- Khalili Ahmad, **Hossein-khannazer Nikoo**, Takmanesh Aria. **2018**. “Cytokines”. (Collection and compilation).
- “From cells to tumor”.**2020**. (2 chapters).
- Mesenchymal Stromal Cell-based Novel Treatment Modalities in Rheumatoid Arthritis. Mahtab Ahmadipour, ..., **Nikoo Hossein-Khannazer**, Moustapha Hassan, Massoud Vosough. Handbook of Stem Cell Applications (chapter book), **2023**.

Presentations

Oral presentation:

- Principles of immunology in regenerative medicine, Royan International summer school, Tehran, Iran, **2023**.
- Co-delivery of Paclitaxel and Doxorubicin via niosome Nanocarriers attenuates cancerous Phenotypes gastric cancer cells, 19th Congress on Stem Cell Biology and Technology, Tehran, Iran, **2023**
- Immunomodulatory properties of osteogenic differentiated dental pulp stem cells, 15th International Congress of Immunology and Allergy, Ahvaz, Iran. **2021**
- Effects of the dental pulp stem cells (DPSCs) on proliferation of peripheral blood mononuclear cells (PBMCs), 14th International Congress of Immunology and Allergy, Tehran, Iran. **2021**
- RANKL Expression and Gingivitis, 14th International Congress of Immunology and Allergy, Tehran, Iran. 2018. (Mini-oral presentation).

Poster presentation:

- Khannazer N, Andalib nazanin, Motamed N. 2011. "Study of the silibinin effect on the growth of MDAMDA-MB-231 breast cancer cell line and expression of CXCR4 and CCR7 genes", 4th International Congress of Biochemistry & Molecular Biology, Mashhad, Iran.
- Khannazer N, Motamed N. 2011. "Study of the silibinin effect on the growth of MDA-MB231 breast cancer cell line and expression of CXCR4, CCR5 and CCR7 genes", The Annual Conference of the German Genetics Society, Wurzburg, Germany.
- Hadipour-Jahromi M, Mozaffari-Kermani R, Safavi M, Shirin-kalam M, Nazer N, Shirzadian F. 2007. "Chondroprotective effect of effects of pomegranate juice on iodoacetate-induced osteoarthritis on tibiofemoral joint of mice", Forsch komplementarmed;14.

Publishing Experience

- Guest reviewer, Iranian Journal of Immunology (2020).
- Reviewer, cell journal (2020-present).

Professional Activities

- **Scientific committee member**, 2021. 15th International Congress of Immunology and Allergy, Ahvaz, Iran.
- **Poster section reviewer**, 2021. 15th International Congress of Immunology and Allergy, Ahvaz, Iran.
- **Poster section reviewer**, 2018. 14th International Congress of Immunology and Allergy, Tehran, Iran.
- **Scientific/executive committee member**, 2018. 14th International Congress of Immunology and Allergy, Tehran, Iran.

Certification and Courses

- Stem cells, tissue engineering and regenerative medicine in cardiovascular disorders symposium, Yazd, Iran, 2019 (speaker).
- Advanced course of immunotherapy, Tehran, Iran, 2018.
- Academic article writing workshop, Tehran, Iran, 2017.
- Flow cytometry workshop, Tehran, Iran, 2018.
- Cell therapy in autoimmune disease symposium, Tehran, Iran, 2016.
- Food allergy workshop, Tehran, Iran, 2016.
- Research methodology workshop, Tehran, Iran, 2016.
- Immune reactions to food from bench to bed international seminar, Tehran, Iran, 2016.
- Winter school for vaccine and immunization, Tehran, Iran, 2015.
- Complementary medicine, Tehran, Iran, 2008.
- PCR workshop, Tehran, Iran, 2007.

Communication and Management Activities

Life coach and team building courses

- Basic transactional analysis course. Tehran, Iran, 2017.
- Advanced transactional analysis course. Tehran, Iran, 2017.
- Applied transactional course. Tehran, Iran, 2017.
- Effective communication course. Tehran, Iran, 2017.