Curriculum Vitae and Summary of Scientific Activities

Meghdad Abdollahpour-Alitappeh

Ph.D. in Pharmaceutical Biotechnology

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Nationality: Iranian Born: July 11, 1983

Current Position

 Assistant Professor of Pharmaceutical Biotechnology (2018-present); Department of Physiology and Pharmacology, Pasteur Institute of Iran, Tehran, Iran

Education

- Ph.D. in Pharmaceutical Biotechnology (2017); Pasteur Institute of Iran, Tehran, Iran Thesis: Development of Trastuzumab-monomethyl auristatin E conjugate and assessment of its cytotoxic activity in vitro against HER2-positive human breast cancer.
- M.Sc. in Medical Microbiology (2010); Razi Vaccine & Serum Research Institute, Karaj, Iran
 Thesis: Genetic characterization of Leptospira vaccine strains constructed by Razi Institute using variable-number tandem repeat.
- B.Sc.. in Laboratory Sciences (2006); Islamic Azad University, Babol, Iran

Research Experience

- Department of Physiology and Pharmacology, Pasteur Institute of Iran, Tehran, Iran (2023-Present)
- Cellular and Molecular Biology Research Center, Larestan University of Medical Sciences, Larestan, Iran (2018-2023)
- Research Institute for Gastroentrology and Liver Diseases, Shahid Beheshti University of Medical Sciences, Tehran, Iran (2017-2018)
- Pasteur Institute of Iran (2010-2017)
- Razi Vaccine and Serum Research Institute, Karaj, Iran (2007-2010)

Research Interests

- Antibody-Drug Conjugates (ADCs)
- Immune-Stimulating Antibody Conjugates (ISACs)
- Peptide-Drug Conjugates (PDCs)
- Monoclonal Antibody (mAb)
- Targeted therapy
- Immunotherapy

Editorial Board Membership

Frontiers in Oncology (IF: 6.244). August 2021

Topic Editor

The research topic: "Adoptive T-Cell Therapy, iPSCs Technology, and the CRISPR/Cas9 Genome Editing System: A New Frontier in Cancer Treatment". https://www.frontiersin.org/research-topics/25118/

• Frontiers in Immunology (IF: 7.561). August 2020

Advisor and Research Topic Coordinator and Developer of the research topic entitled "Advances in Cellbased Treatments of Autoimmune Diseases: from expanded Treas until CAR Treas"

Peer Review

Journal Peer-Reviewer

Invited reviewer for over 300 manuscripts across more than 40 international journals. Selected high-impact journal review experience includes:

- The BMJ
- o Advanced Science
- Journal for ImmunoTherapy of Cancer
- Molecular Therapy
- BBA Reviews on Cancer
- British Journal of Pharmacology
- o Therapeutic Advances in Medical Oncology

• Grant Review Panels

- International: Narodowe Centrum Nauki (NCN; National Science Centre, Poland); Dutch Cancer Society (KWF)
- National: Pasteur Institute of Iran (5+ proposals); Larestan University of Medical Sciences (5+ proposals); Gerash University of Medical Sciences (5+ proposals); Jahrom University of Medical Sciences

Book & Translation Review

- Cell Culture Technology (Springer), Persian translation
- o Pollard's Cell Biology (Elsevier), Persian translation

Peer-reviewed Publications

- Yousef Mirzaei, Ali Hussein Mer, Bahia Fattah Maran, Leila Omidvar, Fatemeh Misamogooe, Zahra Amirkhani, Nafiseh Javaheri Haghighi, Nader Bagheri, Zahra Keshtkaran, Behzad Rezaei, Farshad Bargrizaneh, Saeed Jahandideh, Nesa Barpour, Hosein Shahsavarani, Ahmadreza Bazyari, Meghdad Abdollahpour-Alitappeh*. Clinical and preclinical advances in PSMA-Directed Antibody-Drug conjugates (ADCs): Current status and hope for the future. Bioorganic Chemistry. 2024. DOI: 10.1016/j.bioorg.2024.107803.
- Mohammad Javad Khosravanian, Yousef Mirzaei, Ali Hussein Mer, Maryam Keyhani-Khankahdani, Fatemeh Sarina Abdinia, Fatemeh Misamogooe, Zahra Amirkhani, Nader Bagheri, Anna Meyfour, Saeed Jahandideh, Nesa Barpour, Yousef Nikmanesh, Hosein Shahsavarani, Meghdad Abdollahpour-Alitappeh*.

Nectin-4-directed antibody-drug conjugates (ADCs): Spotlight on preclinical and clinical evidence. **Life Sciences**. 2024. DOI: 10.1016/j.lfs.2024.122910.

- Behzad Rezaei, Alireza Shahedi, Zahra Keshtkaran, Ahmadreza Eidi, Hamed Delam, Khalil Safari, Rafat Shadmehr, Meghdad Abdollahpour-Alitappeh. Changes in incidence and mortality trend due to COVID-19 in southern Iran, from 2020 to 2021: based on Cochran–Armitage trend test. Journal of Public Health (Germany). 2024. DOI: 10.1007/s10389-023-01902-8.
- Nasrin Pazoki, Mitra Salehi, Seyed Abdolhamid Angaji, <u>Meghdad Abdollahpour-Alitappeh</u>. Elucidating the impact of Y chromosome microdeletions and altered gene expression on male fertility in assisted reproduction. <u>Human Molecular Genetics</u>. 2024. DOI: <u>10.1093/hmg/ddae086</u>.
- Ali Hussein Mer, Yousef Mirzaei, Fatemeh Misamogooe, Nader Bagheri, Ahmadreza Bazyari, Zahra Keshtkaran, Anna Meyfour, Alireza Shahedi, Zahra Amirkhani, Ameneh Jafari, Nesa Barpour, Saeed Jahandideh, Behzad Rezaei, Yousef Nikmanesh, Meghdad Abdollahpour-Alitappeh*. Progress of antibody—drug conjugates (ADCs) targeting c-Met in cancer therapy; insights from clinical and preclinical studies. Drug Delivery and Translational Research. 2024. DOI: 10.1007/s13346-024-01564-3.
- Nesa Barpour, Marjan Ghorbani, Behzad Baradaran, Zahra Jodari-Mohammadpour, Kazem Nejati-Koshki,
 <u>Meghdad Abdollahpour-Alitappeh</u>, Rozhin Dabbaghi, Tohid Gharibi. *Development of an injectable chitosan-based hydrogel containing nano-hydroxy-apatite and alendronate for MSC-based therapy*.
 International Journal of Biological Macromolecules. 2024. DOI: 10.1016/j.ijbiomac.2024.129737.
- Marziyeh Soltani, Yousef Mirzaei, Ali Hussein Mer, Mina Mohammad-Rezaei, Zahra Shafaghat, Soheila Fattahi, Fatemeh Azadegan-Dehkordi, <u>Meghdad Abdollahpour-Alitappeh</u>, Nader Bagheri. *The Role of Innate and Adaptive Immune System in the Pathogenesis of Schizophrenia*. Iranian Journal of Allergy, Asthma and Immunology. 2024. DOI: <u>10.18502/ijaai.v23i1.14951</u>.
- Nasrin Pazoki, Mitra Salehi, Seyed Abdolhamid Angaji, <u>Meghdad Abdollahpour-Alitappeh</u>. Association of Y chromosome AZF region microdeletions with recurrent miscarriage in Iranian couples: A case—control study. Molecular Genetics & Genomic Medicine. 2024. DOI: <u>10.1002/mgg3.2392</u>.
- Ameneh Jafari, Masoumeh Farahani, Meghdad Abdollahpour-Alitappeh, Asma Manzari-Tavakoli, Mohsen Yazdani, Mostafa Rezaei-Tavirani. Unveiling diagnostic and therapeutic strategies for cervical cancer: biomarker discovery through proteomics approaches and exploring the role of cervical cancer stem cells. Frontiers in Oncology. 2024. DOI: 10.3389/fonc.2023.1277772.
- Sanaz Mojarab, Pegah Karimi, Delavar Shahbazzadeh, Majid Moghbeli, Kamran Pooshang Bagheri, Arezoo Beig Parikhani, Rada Dehghan, Ehsan Zafari, Amir Moravej, Mohammad Hassan Pouriayevali, Seyedeh Franak Mirtalebi, Mahdi Pakjoo, Shaghayegh Yazdani, Meghdad Abdollahpour-Alitappeh, Mehdi Mahdavi. Inactivated herpes simplex virus-1 vaccine formulated in aqueous and alcoholic extracts of propolis boosts cellular and IgG responses. Iranian Journal of Basic Medical Sciences. 2024. DOI: 10.22038/IJBMS.2024.75158.16289.
- Iman Karimzadeh, <u>Meghdad Abdollahpour-Alitappeh</u>, Shokouh Ghaffari, Motahareh Mahi-Birjand, Amin Barkhordari, Effat Alemzadeh. *Aminoglycosides: Single-or Multiple-daily Dosing? An Updated Qualitative*

Systematic Review of Randomized Trials on Toxicity and Efficacy. **Current Molecular Medicine**. 2023. DOI: 10.2174/1566524023666230801160452.

- Yousof Saeedi Honar, Saleh Javaher, Marziye Soleimani, Amir Zarebkohan, Behrouz Farhadihosseinabadi, Masoud Tohidfar & <u>Meghdad Abdollahpour-Alitappeh*</u>. Advanced stage, high-grade primary tumor ovarian cancer: a multi-omics dissection and biomarker prediction process. Scientific Reports. 2023. DOI: 10.1038/s41598-023-44246-9.
- Hajarossadat Ghaderi, Atefeh Alipour b, Arya Mohammadi Zadeh Holagh, Fatemeh Kazemi lomedasht, <u>Meghdad Abdollahpour-Alitappeh</u>, Hooman Kaghazian, Hosein Shahsavarani. *Recombinant antibody fragment therapeutics: Current status and future prospects of scFv, nanobody, and mimotopes*. **Journal of** <u>Drug Delivery Science and Technology</u>. 2023. DOI: 10.1016/j.jddst.2023.105009.
- Zohreh Najminejad, Fatemeh Dehghani, Yousef Mirzaei, Ali Hussein Mer, Seyyed Amirreza Saghi, Mohadeseh Haji Abdolvahab, Nader Bagheri, Anna Meyfour, Ameneh Jafari, Saeed Jahandideh, Tohid Gharibi, Zahra Amirkhani, Hamed Delam, Noushin Mashatan, Hosein Shahsavarani, Meghdad Abdollahpour-Alitappeh*. Clinical Perspective: Antibody-Drug Conjugates (ADCs) for the Treatment of HER2-Positive Breast Cancer. Molecular Therapy. 2023. DOI: 10.1016/j.ymthe.2023.03.019.
- Hamed Delam, Zahra Keshtkaran, Ahmadreza Eidi, Reza Zare, Alireza Shahedi, Soheil Hassanipour, Ehsan Amini-Salehi, Meghdad Abdollahpour-Alitappeh. Survival Rate of Kidney Cancer in the Asian Countries: A Systematic Review and Meta-Analysis study. BMC Nephrology. 2023. DOI: 10.21203/rs.3.rs-2706310/v1.
- Mahshad Entezam, Mohammad-Javad Sanaei, Yousef Mirzaei, Ali Hussein Mer, <u>Meghdad Abdollahpour-Alitappeh</u>, Fatemeh Azadegan-Dehkordi, Nader Bagheri. *Current progress and challenges of immunotherapy in gastric cancer: A focus on CAR-T cells therapeutic approach*. Life Sciences. 2023. DOI: 10.1016/j.lfs.2023.121459.
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 DOI: 10.1016/j.trim.2021.101516.
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- Eshraghi Y, Vahdani Y, Karimi P, Abdollahpour-Alitappeh M, Abdoli A, Taghizadeh M, Mahdavi M. Immunomodulatory Effects of α-Tocopherol on the H1N1 Influenza Vaccine: Improving the Potency and Efficacy of the Influenza Vaccine in Aged Mice. Viral immunology. 2022, 35(3), pp. 244–253. DOI: 10.1089/vim.2021.0154.

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- Gharibi T, Hosseini A, Marofi F, Oraei M, Jahandideh S, <u>Abdollahpour-Alitappeh M</u>, Hashemi V, Motallebnezhad M, Babaloo Z, Baradaran B. *Corrigendum to" IL-21 and IL-21-producing T cells are involved in multiple sclerosis severity and progression" [Immunol. Lett. 216 (2019) 12-20].* Immunology letters. 2021, 232, pp. 67. DOI: 10.1016/j.imlet.2020.12.013.
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X47 (H3N2) viruses in mice. **Pathogens and disease**. **2014**, 72(3), pp. 197–207. DOI: <u>10.1111/2049-632X.12206</u>.

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Conferences

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- A Member of Executive Committee. 5th Virology and 1st Vaccine Congress of Iran; May 2009; Karaj, Iran.
- A Member of Scientific Committee. 15th Iranian and International Congress of Microbiology; August 2014; Tehran, Iran.
- A Member of Executive Committee. 4th Iranian Congress on Progress in Tissue Engineering and Regenerative Medicine; November 2018; Tehran, Iran.

Oral Presentations

- Meghdad Abdollahpour-Alitappeh*, Zahra Keshtkaran, Majid Lotfinia, Esmaeil Kavi, Mohammad Hossein karimi*. Antibody-Drug Conjugates (ADCs) for Cancer Therapy; Key Requirements. Oral Presentation. 2nd Annual Congress of Chemistry, Chemical Engineering, and Nanotechnology with from Research to National Development. 14 March 2019, Tehran, Iran.
- Abdollahpour-Alitappeh Meghdad, Lotfinia Majid, Keshtkaran Zahra, Mohammad Hossein Karimi. Lacto-N-fucopentaose (LNFP III) loaded electrospun Polydioxanone (PDO) scaffolds in treatment of non-healing wounds: a combination of biological and mechanical modulation of type 2 immune response and MQ polarization toward M2 macrophage. Oral Presentation. 4th International and 6th National Congress of Wound and Tissue Healing (The Future of Wounds and Scars). 19-22 November 2019. Razi Conference Center, Tehran; Iran.
- Zeinab Rastegar Moghadam Barkharaman, Saeme Asgari, <u>Meghdad Abdollahpour-Alitappeh</u>. *HER2-positive breast cancer-targeting antibody-drug conjugates (ADCs) in clinical trials*. 16th International congress of Medical Lab. and Clinic. Razi International Conference Centre, Tehran, Iran. 21-23 Dec. 2024.

Poster Presentations

- Meghdad Abdollahpour-Alitappeh, Pejvak Khaki, Sohiela Moradi bidhendi, Majid Esmaelizad, Keivan Tadayon. Standardization of Variable—Number Tandem-Repeat method for characterization of pathogenic Leptospira.spp. 11th Iranian Microbiology Congress & 1 East Mediterranean Microbiology Congress, Guilan University of Medical Sciences, 10-13 May 2010, Guilan, Iran.
- Pejvak Khaki, Sohiela Moradi bidhendi, Galayanee Doungchawee, Majid Esmaelizad, Raha Ashor Zadeh, <u>Meghdad Abdollahpour-Alitappeh</u>, Mohammad Reza Afkhamnia. Detection of pathogenic Leptospires in urine from cattle by PCR.

- P. Khaki*, M. Abdollahpour-Alitappeh, S. Moradi Bidhendi, M. Esmaelizad, K. Tadayon (Karaj, IR). Genomic identification of pathogenic and non-pathogenic Leptospires by multilocus variable-number tandem-repeat analysis. 20th European Congress of Clinical Microbiology and Infectious Diseases (ECCMID). April 12, 2010.
- Meghdad Abdollahpour-Alitappeh, Pejvak Khaki, Sohiela Moradi bidhendi, Hamid Najminejad, Majid Esmaelizad, Keivan Tadayon. Genetic characterization of Variable–Number of Tandem-Repeat method for differentiation between Leptospira.Canicola & icteroheamorrhagiae serovars. 11th Iranian Genetic Congress, 22-24 May 2010, Tehran, Iran.
- Meghdad Abdollahpour-Alitappeh, Pejvak Khaki, Sohiela Moradi bidhendi, Hamid Najminejad, Majid Esmaelizad, Keivan Tadayon. Molecular differentiation between Leptospira Canicola & Leptospira icterohaemorrhagiae serovars by Variable-Number Tandem-Repeat (VNTR) analysis. 2nd National Congress on Leptospirosis, Mazandaran University of Medical Sciences.
- Mehdi Ghamgosha, Hamid Najminejad, <u>Meghdad Abdollahpour-Alitappeh</u>. The first Case Report of Mycetoma in Zahedan. 6th Iranian Congress of Clinical Microbiology & The First International Congress of Clinical Microbiology.
- Meghdad Abdollahpour-Alitappeh, Sohiela Moradi bidhendi, Majid Esmaelizad, Keivan Tadayon, Pejvak Khaki. Genomic characterization of pathogenic Leptospira spp.by Variable—Number of Tandem-Repeat method. VIIth meeting of the International Leptospirosis Society, September 19th- 22nd, 2011. Mérida, Yucatán, MEXICO.
- Meghdad Abdollahpour-Alitappeh, Mazaher Gholipourmalekabadi, Mohamad Eftekhary, Amir Zarebkohan, Jamal Adiban, Behrouz Farhadihosseinabadi. Amniotic epithelial cell encapsulation in the anti-MAdCAM-1coated alginate microcapsules; a new strategy for IBD therapy. 4th National Congress on the Development of Medical and Reconstructive Medical Engineering in Iran; Tehran, Iran; 2019.
- Meghdad Abdollahpour-Alitappeh, Zahra Keshtkaran, Esmaeil Kavi, Azade Amini Kadijani, Mohammad Hossein karimi. <u>Personalized medicine in patients with colorectal cancer</u>. The 3rd Iranian International <u>Personalized Medicine Congress; Tehran; Iran; 2019.</u>
- Meghdad Abdollahpour-Alitappeh, Majid Lotfinia, Sina Ostevar. Antibody—drug conjugates (ADCs) for cancer therapy; consideration for ADC synthesis. National Conference on New Technologies in the Field of Chemical Engineering and Life Sciences; Tehran; Iran; 2019.
- Esmaeil Kavi, Gholamhossein Teimouri, Zahra Keshtkaran, Mohammad Hossein karimi, <u>Meghdad Abdollahpour-Alitappeh</u>. *Biomarkers Expressed in Cancer Stem Cells in Colorectal Cancer*. <u>International Congress of Updates in common Gastrointestinal Cancers; Golestan; Iran; 2019</u>.
- Meghdad Abdollahpour-Alitappeh, Zahra Keshtkaran, Mohammad Hossein karimi, Gholamhossein Teimouri, Esmaeil Kavi. Panitumumab-conjugated antibodies for the treatment of colorectal cancer patients. International Congress of Updates in common Gastrointestinal Cancers; Golestan; Iran; 2019.
- Meghdad Abdollahpour-Alitappeh, Gholamhossein Teimouri, Farshad Bargrizaneh, Hossein Shayesteh. Herbs suitable for the treatment of type 2 diabetes: a review. The 8th international conference on green gold; Tehran; Iran; 2019.
- Behrouz Farhadihosseinabadi, Mozhdeh Mohammadian, Ameneh Jafari, <u>Meghdad Abdollahpour-Alitappeh</u>, Mazaher Gholipuormalekabadi, Koushan Sineh Sepehr, Ali Samadikuchaksaraei, Hassan Niknejad. *Type 2 Immune Response and Skin Tissue Engineering*. TISSUE ENGINEERING: Part A. Volume 28, Supplement 1, 2022. Mary Ann Liebert, Inc.
- Sina Ostevar. <u>Meghdad Abdollahpour-Alitappeh</u>. Treatment of diabetic ulcers with honey: A systematic review. The first research congress of students of Hormozgan University of Medical Sciences. 2019.

Books

Authored Book

 Meghdad Abdollahpour-Alitappeh, Ali Karimi, Zahra Pakbaz, and Sajjad Yaghoubi. Descriptive textbook of medical microbiology.

Translated Books

- Medical biotechnology; Bernard R. Glick, Terry L. Delovitch, Cheryl L. Patten (Translated into Persian by <u>Meghdad Abdollahpour-Alitappeh</u>, Hamid Madanchi, Faezeh Maghsoud, Mohadeseh Mohsenabadi Farahani, Farnaz Khodabakhsh, Narges Hosseini, Saeed Zanganeh, Zohreh Soltanpour, Mehdi Kadivar, Amineh Khoshnazar, Kimia Rafiei Bozhani, Amirhossein)
- A Comprehensive Overview of Basic and Advanced Molecular Cell Techniques (Translated into Persian by Behrouz Johari, Saeed Kargozar, Jamil Zargan, Zohreh Soltanatpour, Mehdi Kadivar, <u>Meghdad</u> <u>Abdollahpour-Alitappeh</u>, Majid Lotfinia, Mohammad Moradi, Daniel Ashiani)

Professional Experiences

- Familiar with specialized softwares
- DNA & RNA purification
- PCR and Real-time PCR
- Agarose and polyacrylamide gel electrophoresis
- Molecular Cloning
- Primer design
- Cell culture (Cell bank of Pasteur Institute of Iran)
- Production of monoclonal antibody (hybridoma and large scale)
- Bioconjugation techniques (lysine- and cysteine-based conjugation)
- Production of Antibody-Drug Conjugate (In-vitro scale)
- Handling, feeding, and collecting specimen from mouse, rat, rabbit, etc.
- Animal manipulation: Immunization, creating Tumor, feeder layer
- Immunological techniques: such as MTT, western blotting, ELISA, TUNEL and Flow cytometry
- Biochemistry techniques: PAGE, SDS-PAGE, purification techniques, including affinity chromatography,
 FPLC and HPLC (size exclusion, reverse phase and HIC)
- Design, establishment and setup of Cellular and Molecular Biology Research Center at Larestan University of Medical Sciences, Larestan, Iran
- Design and establishment of animal house for research at Larestan University of Medical Sciences, Larestan, Iran

As a PI

- Development and Characterization of STING agonist-Conjugated Rituximab (an Immunostimulating Rituximab Conjugate) (*PI; Pasteur Institute of Iran, Iran; 2025*)
- Antibody-drug conjugates against breast cancer in clinical trials (PI; Larestan University of Medical Sciences, Larestan, Iran; 2022)
- The evaluation of Engineered scaffold by 3D Printing of human placenta extracellular matrixfibroin silk-alginate for deep wound healing in mouse model (PI; Larestan University of Medical Sciences, Larestan, Iran; 2021)
- Design, construction, and evaluation of Covid-19 real-time PCR diagnostic kit (PI; Larestan University of Medical Sciences, Larestan, Iran; 2021)
- Evaluation of immune responses following administration of non-parenteral pertussis nanovaccine prepared by CpG in an animal model (PI; Grash University of Medical Sciences, Grash, Iran; 2020)
- Investigation and comparison of the effect of metformin and everolimus in age-associated phenotypical and functional features of T lymphocytes in vitro and in vivo (*PI; Larestan University* of *Medical Sciences, Larestan, Iran; 2020*)
- Synthesis and evaluation of anti-microbial peptide against Multidrug-resistant Pseudomonas aeruginosa strains using combined Filtering Database Technology and Template-Assisted Approach methods (PI; Grash University of Medical Sciences, Grash, Iran; 2019)
- Development and biological assessment of MMAE-trastuzumab antibody—drug conjugates (ADCs)
 (PI; Research Grant Award for Young Assistant Professor; Ministry of Health and Medical Education; 2019)
- Production of PEI-miR-126 nanoplex and evaluation of its effects on function, survival and angiogenesis of Human Langerhans Island cells (*PI; Larestan University of Medical Sciences, Larestan, Iran; 2018*)

As a Co-PI

- In silico prediction of multi-epitope subunit vaccine using structural and non-structural viral proteins to prevent Ebstein-Barr virus-related malignancies (*Co-PI*; *Shahrekord University of Medical Sciences, Shahrekord, Iran*; 2024)
- A review of new approaches in gastric cancer immunotherapy (Co-PI; Shahrekord, Iran; 2022)
- The role of the immune system in the pathogenesis of schizophrenia: a review (Co-PI; Shahrekord University of Medical Sciences, Shahrekord, Iran; 2022)
- Evaluation of changes in IL-10 and TNF-alpha cytokines in response to injection of polytopic structures containing HPV E5 and E7 genes in C57BL/6 tumor mice model (*Co-PI; Shahrekord University of Medical Sciences, Shahrekord, Iran; 2022*)
- Design and Performance Evaluation of a Chemical Autoclave Indicator Strip (Co-PI; Larestan University of Medical Sciences, Larestan, Iran; 2022)
- Liver Cancer Stem Cells: A Review of Biomarkers, Signaling Pathways, and Targeted Therapeutic Strategies (*Co-PI*; *Shahrekord University of Medical Sciences, Shahrekord, Iran*; *2021*)
- The evaluation of 3D Printing scaffold by human placenta extracellular matrix- fibroin silk-alginate on osteogns of mesenchymal stem cells in vivo (Co-PI; Larestan University of Medical Sciences, Larestan, Iran; 2021)
- <u>Evaluation of Survival rate of patients with Kidney cancer in Asian countries A systematic review</u>
 <u>and meta-analysis</u> (*Co-PI; Larestan University of Medical Sciences, Larestan, Iran; 2021*)

- Investigating the Epidemiological status of COVID-19 in Larestan University of Medical Sciences in the period February 2020 to June 2021 (Co-PI; Larestan University of Medical Sciences, Larestan, Iran; 2021)
- Evaluation of cytotoxicity effects of Trastuzumab (Herceptin) on various breast cancer cell lines
 (Co-PI; Zanjan University of Medical Sciences, Zanjan, Iran; 2018)
- Serotyping of Salmonella spp. Isolated from Livestock and Poultry in Fars Province, Iran (Co-PI; Razi Vaccine and Serum Research Institute, Iran; 2010)
- Field Evaluation of a Trivalent Inactivated Klebsiella Vaccine for Poultry (*Co-PI; Razi Vaccine and Serum Research Institute, Iran; 2009*)
- Isolation and Identification of Pathogenic Leptospira Serovars in Tehran Province (Co-PI; Razi Vaccine and Serum Research Institute, Iran; 2008)

Course Teaching

- ADC Design and Development (M.Sc.-level course in Medical Biotechnology- Shahid Beheshti University-May 2025)
- ADC Design and Development (Ph.D.-level course in Pharmaceutical Biotechnology-Pasteur Institute of Iran-April 2025)
- Lectures for Talented Students at Larestan University of Medical Sciences (Personalized Medicine, 2019)
- Lectures for Professors at Larestan University of Medical Sciences ("Biology for Peace, 2019", "Ethics in Biotechnology" and "Introduction to Biotechnology, 2019")
- Microbiology (Laboratory) for B.Sc.. nursing students (2019; Larestan University of Medical Sciences)
- Information Technology (IT) for B.Sc.. Anesthesia Technology students (2019, 2021, 2022; Larestan University of Medical Sciences)
- Information Technology (IT) for B.Sc. operation room students (2018, 2019, 2021, 2022; Larestan University of Medical Sciences)
- Information Technology (IT) for B.Sc. nursing students (2018, 2019, 2021, 2022; Larestan University of Medical Sciences)
 - Biochemistry for B.Sc. Anesthesia Technology students (2022; Larestan University of Medical Sciences) Biochemistry for B.Sc. operation room students (2021, 2022; Larestan University of Medical Sciences)
- Biochemistry for B.Sc. nursing students (2018, 2019, 2021, 2022; Larestan University of Medical Sciences)
- Immunology Principles for B.Sc. Nutritional Sciences students (2019, 2021, 2022; Larestan University of Medical Sciences)
- Immunology for B.Sc. operation room students (2019, 2021, 2022; Larestan University of Medical Sciences)
- Immunology & Genetics for B.Sc. nursing students (2018, 2019, 2021, 2022; Larestan University of Medical Sciences)
- Medical Microbiology course for medical students (2013; Islamic Azad University, Zahedan Branch)
- Genetic Engineering course for M.Sc. students (2011; Islamic Azad University, East Tehran Branch)
- Specialized English language course for M.Sc. students (2011; Islamic Azad University, East Tehran Branch)
- Translation Techniques in English, TOEFL (MSRT & MHLE) preparation courses (2009-2017)
- Immunology course for M.Sc. students (2008; Razi Vaccine and Serum Research Institute)
- Molecular and Cellular Biology course for M.Sc. students (2008; Razi Vaccine and Serum Research Institute)

Workshop Instructors

- Design and Construction of Antibody-Drug Conjugate (ADC) (August 2025; Biotechnology Society of the Islamic Republic of Iran)
- Design and Optimization of Antimicrobial Peptides (April 2025; Gerash University of Medical Sciences)
- Strategies for making antibody-drug conjugates (ADCs; March 2025; Pasteur Institute of Iran)
- Design and Optimization of Antimicrobial Peptides (January 2025; Neyshabur University of Medical Sciences)

Supervised Master's/PhD Theses

Supervised Theses

- Fatemian, Fatemeh Sadat (Expected: August 2025). Synthesis and Mechanistic Evaluation of an Anti-CD20 Antibody-Drug Conjugate (Rituximab-SMCC-DM1) in Non-Hodgkin Lymphoma: Impact on Apoptotic Signaling via qPCR and Protein Analysis. [Master's Thesis in Cellular and Molecular Biology, Islamic Azad University, Science and Research Branch, Tehran, Iran]. Role: Principal Supervisor. (Thesis Ongoing)
- Asadollahi, Negar (Expected: June 2024). Development and Assessment of a Trastuzumab-CL2A-SN-38 Conjugate for the Treatment of Breast Cancer: Evaluation in SKBR3 and MDA-MB-468 Cell Lines. [Master's Thesis in Medical Biotechnology, Islamic Azad University, Tehran Medical Branch, Tehran, Iran]. Role: Principal Supervisor. (Thesis Ongoing)
- Rastegar Moghadam Barkharaman, Zeinab (Expected: April 2025). Synthesis and Evaluation of the Antitumor Activity of the Antibody-Drug Conjugate Rituximab-CL2A-SN38 Against CD20-Positive Cancer Cells for the Treatment of Non-Hodgkin Lymphoma. [Master's Thesis in Biochemistry, Islamic Azad University, Tehran Medical Branch, Tehran, Iran]. Role: Principal Supervisor. (Thesis Ongoing)
- Javaher, Saleh (Defended: September 2023). Identification, Evaluation, and Modification of Plant-Derived Cyclic Peptides with Anticancer Properties Using a Combined Database Filtering and Template-Based Approach: A Computational Modeling Study. [Master's Thesis in Plant Biotechnology, Shahid Beheshti University of Medical Sciences, Tehran, Iran]. Role: Principal Supervisor.

Co-Supervised Theses

- Shirini, Elahe (Defended: February 2024). Evaluation of Changes in IL-10 and TNF-alpha Cytokines in Response to Injection of Polytopic Construct Containing HPV E5 and E7 Genes in a C57BL/6 Mouse Tumor Model. [Master's Thesis in Immunology, Shahrekord University of Medical Sciences, Shahrekord, Iran]. Role: Thesis Advisor. (Main Supervisor: Dr. Nader Bagheri).
- Ghiyath-Zadeh, Amir Mohammad (Defended: February 2024). Investigating the Synergistic Effects of Metabolites Derived from Pichia Yeast Isolated from Horse Milk in Combination with Antibiotics on Gram-Positive and Gram-Negative Bacteria. [Doctor of Veterinary Medicine (DVM) Thesis, Islamic Azad University, Babol Branch, Babol, Iran]. Role: Thesis Advisor. (Main Supervisor: Main Supervisor: Dr. Seyed Masoud Hashemi Karouei).
- Maleki, Hossein (Defended: February 2023). Stimulation of the Immune System in Mice Using a Combination of Pediococcus acidilactici and Pichia Yeast Against Systemic Infection by Escherichia coli Bacteria. [Master's Thesis in Microbiology, Islamic Azad University, Babol Branch, Babol, Iran]. Role: Thesis Advisor. (Main Supervisor: Dr. Seyed Masoud Hashemi Karouei).

- Bozorgi, Mohammad Hossein (Defended: February 2023). Immune System Stimulation by Pediococcus acidilactici Bacteria and Pichia kudriavzevii Against Candidiasis Through Interleukin-17 Production and Cellular Respiration. [Doctor of Veterinary Medicine (DVM) Thesis, Islamic Azad University, Babol Branch, Babol, Iran]. Role: Thesis Advisor. (Main Supervisor: Dr. Seyed Masoud Hashemi Karouei).
- Shokri Bashli, Amirhossein (Defended: February 2023). Stimulation of the Immune System in Mice Using Pediococcus acidilactici Bacteria Against Staphylococcus aureus. [Master's Thesis in Microbiology, Islamic Azad University, Babol Branch, Babol, Iran]. Role: Thesis Advisor. (Main Supervisor: Dr. Seyed Masoud Hashemi Karouei).
- Abdi, Golrokh (Defended: February 2023). Stimulation of the Immune System in Mice Using Pichia Yeast Against Systemic Infection Induced by E. coli. [Master's Thesis in Microbiology, Islamic Azad University, Babol Branch, Babol, Iran]. Role: Thesis Advisor. (Main Supervisor: Dr. Seyed Masoud Hashemi Karouei).
- Nematzadeh Gharakhili, Faizeh (Defended: April 2021). Evaluation of the Drug Interaction Between a Metabolite Derived from Lactobacilli and Antibiotics on Bacteria Causing Urinary Tract Infections. [Master's Thesis in Microbiology, Islamic Azad University, Babol Branch, Babol, Iran]. Role: Thesis Advisor. (Main Supervisor: Dr. Seyed Masoud Hashemi Karouei).
- Azizi Alamdari, Mohammadrasoul (Defended: April 2021). Evaluation of the Drug Interaction Between a Metabolite Derived from Pediococcus and Antibiotics on Bacteria Isolated from Urinary Tract Infections. [Master's Thesis in Microbiology, Islamic Azad University, Babol Branch, Babol, Iran]. Role: Thesis Advisor. (Main Supervisor: Dr. Seyed Masoud Hashemi Karouei).
- Vase'i, Maryam (Defended: November 2020). Evaluation of the Antifungal Effects of Aqueous and Alcoholic Extracts of Rue (Ruta graveolens) on the Growth of Standard and Pathogenic Candida albicans. [Doctor of Veterinary Medicine (DVM) Thesis, Islamic Azad University, Babol Branch, Babol, Iran]. Role: Thesis Advisor. (Main Supervisor: Dr. Seyed Masoud Hashemi Karouei)
- Rajabi, Amirreza (Defended: September 2020). Isolation and Identification of Penicillium chrysogenum and Penicillium notatum with Antibacterial Effects from Citrus Fruits. [Doctor of Veterinary Medicine (DVM) Thesis, Islamic Azad University, Babol Branch, Babol, Iran]. Role: Thesis Advisor. (Main Supervisor: Dr. Seyed Masoud Hashemi Karouei).
- Pazoki, Nasrin (Defended: December 2020). Investigating the Association of Y Chromosome Microdeletions in AZF Regions with Male Infertility in Patients with Azoospermia and Oligospermia using STS Sequencing and Multiplex PCR in Tehran. [PhD Thesis in Molecular Genetics, Islamic Azad University, Science and Research Branch, Tehran, Iran]. Role: Thesis Advisor. (Main Supervisor: Dr. Mitra Salehi).
- Najminejad, Hamid (Defended: September 2019). Development of a Non-Injectable Nanovaccine for Pertussis and Evaluation of its Immune Responses in an Animal Model. [PhD Thesis in Molecular Medicine, Yazd University of Medical Sciences, Yazd, Iran]. Role: Thesis Advisor. (Main Supervisor: Dr. Mohammad Hasan Sheikhha).

Honors and Awards

• Head of the Student Research Committee, Pasteur Institute of Iran (2025 - Present)

- Head of <u>Incubation and Innovation Center</u>, Larestan University of Medical Sciences, Larestan, Iran (2022-2023)
- Head of Cellular and Molecular Biology Research Center, Larestan University of Medical Sciences, Larestan, Iran (2020-2023)
- Research Director at Larestan University of Medical Sciences (2018-2023)
- Top researcher at Larestan University of Medical Sciences, 2021
- Setup of Coronavirus Detection Laboratory in Larestan, 2020
- Top researcher at Larestan University of Medical Sciences, 2019
- Cover Image (Journal of Cellular Physiology-Cover Image, Volume 235, Number 1, January 2020; https://onlinelibrary.wiley.com/doi/abs/10.1002/jcp.29259)
- Cover Image (IUMB Journal- Cover Image, Volume 71, Number 11, January 2019)
- Top Cited Paper 2020-2021 (WILEY)-(Potential drugs used in the antibody-drug conjugate (ADC) architecture for cancer therapy)
- Top Downloaded Paper 2018-2019 (Journal of cellular physiology)-(Antibody–drug conjugates (ADCs) for cancer therapy: Strategies, challenges, and successes)
- Top professor at Larestan University of Medical Sciences, 2019 (Elected by Larestan University of Medical Sciences' students)
- Research Grant Award for Young Assistant Professor (Ministry of Health and Medical Education)
- Ranked 9th position in the countrywide PhD entrance exam, 2010
- Ranked 17th position in the countrywide M.Sc. entrance exam, 2007
- Ranked first position in the countrywide B.Sc.. entrance exam, 2004

Scientific Webs

- https://www.scopus.com/authid/detail.uri?authorld=56433588400
- https://scholar.google.com/citations?user=Yu8XQzUAAAAJ&hl=en
- https://www.researchgate.net/profile/Meghdad-Abdollahpour-Alitappeh
- https://orcid.org/0000-0002-5260-2527
- https://publons.com/researcher/1644187/meghdad-abdollahpour-alitappeh/
- https://isid.research.ac.ir/Meghdad Abdollahpouralitappeh

Memberships

- Member of the Knowledge Translation Committee, Pasteur Institute of Iran (2025 Present)
- A member of Faculty Members of Macro-region 5 Medical Universities in Iran (2018-2023)
- A member of Ethics Committee at Larestan University of Medical Sciences (2018-2023)
- A member of Research Committee at Larestan University of Medical Sciences (2018-2023)

Computer and software Skills

- EndNote (reference management)
- GraphPad Prism (statistics software)
- SPSS 24 (statistics software)

- NCBI and PubMed
- Word
- Excel
- Power point

References

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