Name: Farzaneh

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Education

1989-1995 DCLS, Doctorate degree in Medical Laboratory Science

Shahid Beheshti University of Medical Sciences, Tehran, Iran.

1983- 1986 Medical Laboratory Science

Isfahan University of Medical Sciences, Isfahan, Iran.

Employment History

1998-present Director of Persian Type Culture Collection (PTCCi, WDCM 124)

2002-2020 Microbiology consultant of Shafa-e Sari pharmaceutical company

Professional Membership

1996-present Faculty member of Biotechnology Department, IROST

1995-present Member of Iranian Medical Council

Executive positions:

- 1- Head of the Persian Type Culture Collection, 1997 to present
- 2- Member of the Board of Biotechnology Faculty; Iranian Organization for Science and Technology, 2005 to present
- 3- Member of the Kharazmi International Award, biotechnology Jury committee, 2003 to present
- 4- Member of the IVD Jury committee, office of Health Technology Development, Ministry of Health, Treatment and Medical Education, 2014 to 2019
- 5- Member of the Genetic and Biological Resources Working Group, The Vice Presidency for science and technology, 2010 to 2021

Research Involvement

- Biodiversity of lactic acid bacteria in food related ecosystems
- The diversity of sourdough starter microbiomes
- Isolation and identification of potent biosurfactant producing bacterial strains from oil contaminated soils in Masjed soleyman oil field
- Isolation and identification of saprophyte yeasts for biocontrol of aflatoxin
- Screening of Lovastatin producer fungi
- Study of antibacterial activity of newly designed recombinant proteins

Publications:

- 1- Yasaman Ahmadbeigi, Neda Soleimani, **Farzaneh Azizmohseni**, Zahra Amini-Bayat. ZAM-CS, a novel chimeric endolysin with enhanced stability and rapid action against methicillin-resistant *Staphylococcus aureus*. BMC Microbiol **25**, 357 (2025). https://doi.org/10.1186/s12866-025-04074-5
- 2- Yasaman Ahmadbeigi, Neda Soleimani, **Farzaneh Azizmohseni**, Zahra Amini-Bayat. Biofilm formation and eradication of Staphylococcus aureus: a study of culture conditions and endolysin ZAM-CS effect. Iran J Microbiol 2025 Aug;17(4):586-592. doi: 10.18502/ijm.v17i4.19247.
- 3- A Noori, Z Amini-Bayat, S Mirdamadi, **F Azizmohseni**, S Borhani. A Safer Lytic Alternative: Multi-omics and Immunoinformatics Reveal Reduced Inflammatory Impact of a Chimeric Endolysin Against Antibiotic-induced Immune Dysregulation. Iranian Journal of Allergy Asthma and Immunology 2025: 1-12.
- 4- Maliheh Safavi, Mahroo Seyed Jafari Olia, **Farzaneh Azizmohseni***, Soheila Shokrollahzadeh, Somayeh Keypour. Evaluation of anticancer and antibacterial activities of different strains of Ganoderma isolated from Caspian Hyrcanian forests. New Zealand Journal of Botany, February 2025. https://doi.org/10.1080/0028825X.2024.2439480
- 5- Momen, S., Soleimani, N., **Azizmohseni, F**. *et al.* Characterization and bioinformatic analysis of a new chimeric endolysin against MRSA with great stability. *AMB Expr* **14**, 143 (2024). https://doi.org/10.1186/s13568-024-01812-2
- 6- Sara Torkaman, Seyed Heydar Mahmoudi Najafi, Alireza Ashori, **Farzaneh Aziz Mohseni**. 2024 Chemoselective modification of chitosan with arginine and hydroxyproline: Development of antibacterial composite films for wound healing applications. Int J Biol Macromol Dec;282 (Pt 3): 137081
- 7- Sanaz Momen, Neda Soleimani, **Farzaneh Azizmohseni**, Yasaman Ahmadbeigi, Seddigheh Borhani, Zahra Amini-Bayat. 2024. Characterization and bioinformatic analysis of a new chimeric endolysin against MRSA with great stability. AMB Express Dec 26;14(1):143
- 8- Shokrollahzadeh S., Tayar Sh., **Azizmohseni F.,** Safavi M., Keypour S. 2023. Fungal decolorization of toxic Triphenylmethane dye by newly isolated Ganoderma fungi: Growth, enzyme activity, kinetics. Bioresour. Technol. Rep. 24: 101654

- 9- Mousavian Z., Safavi M., Salehirad A. **Azizmohseni F.**, Hadizadeh M., Mirdamadi S. 2023. Improving biomass and carbohydrate production of microalgae in the rotating cultivation system on natural carriers. AMB Expr 13: 39
- 10- Mousavian, Z., Safavi, M., **Azizmohseni, F.**, Hadizadeh M., Mirdamadi S. 2022. Coupling Non-Linear Regression Analysis with a Predictive Model Using Spectrophotometric Data to Estimate Microalgae Concentration. Microbio. Metab. Biotechnol. 5: 42-55
- 11- Mousavian, Z., Safavi, M., **Azizmohseni, F.** *et al.* 2022. Characterization, antioxidant and anticoagulant properties of exopolysaccharide from marine microalgae. AMB Expr 12 (1): 27
- 12- Poorasadollah D., Bagheri L. T., Heydarinasab A., Yaghmaei S., **Azizmohseni F**. 2021. Biological activated carbon process for biotransformation of azo dye Carmoisine by Klebsiella spp. Environ. Technol. 5: 1-17.
- 13- Rahmani H., Mahmoudi Najafi S. H., Ashori A., Arab Fashapoyeha M., **Azizmohseni F.**, Torkamana S. 2020. Preparation of chitosan-based composites with urethane cross linkage and evaluation of their properties for using as wound healing dressing. Carbohydr. Polym. 230 (15): 115606
- 14- Erfanmanesh A., Beikzadeh B, **Azizmohseni F**., Nikaein D., Mohajerfar T. 2019. Ulcerative dermatitis in barramundi due to coinfection with *Streptococcus iniae* and *Shewanella algae*. Dis. Aquat. Org 134: 89–97.
- 15- Faezi M., Javanbakht S., Azizmohseni F., Alikhani F. E. 2018. Isolation and characterization of bacterial strains from shoreline waters of Caspian Sea with novel antibacterial activity. Int. J. Mol. Clin. Microbiol. 8 (2): 982-992
- 16- Mohammadipanah F., Parvizi L., Hamedi J., **Azizmohseni F**.2017. Protective effects of cryoprotectants and lyoprotectants on survival of persipeptide producing *Streptomyces zagrosensis* UTMC 1154. Biopreservation and Biobanking 15: (5) 451-456.
- 17- Shokrollahzadeh S., **Azizmohseni F.**, Golmohammad F. 2015. Characterization and kinetic study of PAH–degrading *Sphingopyxis ummariensis* bacteria isolated from a petrochemical wastewater treatment plant. Advances in Environmental Science and Technology 1: 1-9.
- 18- N. Samadi, N. Abadanian, R. Ahmadkhaniha, F. Amini, D. Dalili, N. Rastkar, E. Safaripour, **F. Azizmohseni**. 2012. Structural characterization and surface activities of biogenic rhamnolipid surfactants from pseudomonas aeruginosa isolate MN1 and synergistic effects against methicilin-resistant *Staphylococcus aureus*. Folia Microbiol 57: 501-508.
- 19- H. Ghojavand, F. Vahabzadeh and **F. Azizmohseni**. 2011. A halotolerant, thermotolerant, and facultative biosurfactant producer: Identification and molecular characterization of a bacterium and evolution of emulsifier stability of lipopeptide biosurfactant. Biotechnology and Bioprocess Engineering 16: 72-80.
- 20- Fazeli M, Tabatabaei Yazdi M, Adrangi S, Jami K, Tasharrofi N, **Azizmohseni F**.2009. Optimization of cultural conditions for production of chitinase by a soil isolate of *Massilia timonae*. Biotechnology, 8:93-99
- 21- Golkaran D, Eslamifar A, Jamalifar H, Fazeli MR, **Azizmohseni F.** 2009. Intra/extra synthesis of silver nanoparticles by an autochthonous strain of *Proteus mirabilis* isolated from photographic waste. Journal of biomedical nanotechnology, 5: 247-263
- 22- Mirdamadi S., Atashgahi S., Rajabi F., **Azizmohseni F**., Roayaei M., Hamedi J. 2008. Cell entrapment of Lactobacillus casei subsp. Casei ATCC 39392 for lactic acid production. Iranian Journal of Biotechnology, 6: 16-21

- 23- Shokrollahzadeh S., **Azizmohseni F**., Golmohammad F., Shokouhi H., Khademhaghighat F. 2008. Biodegradation potential and bacterial diversity of a petrochemical wastewater treatment plant in Iran. Bioresources Technology, 99:6127-6133
- 24- Tabatabaei Yazdi M., Zarrini G., Mohit E., Faramarzi M. A., Setayesh N., Sedighi N., **Azizmohseni F**.2006. *Mucor heimalis*: A new source of uricase production. World Journal of Microbiology and Biotechnology, 22: 330-335.
- 25- Mirdamadi S., Rajabi A., Khalilzadef P., Akbarzadeh A., **Azizmohseni F**. 2005. Isolation of bacteria able to metabolize high concentration of formaldehyde. World Journal of Microbiology and Biotechnology, 21: 1299-1301.
- 26- Tabatabaei Yazdi M., Faramarzi M. A., Ghasemi Y., Amini M., Shokravi Sh., **Azizmohseni F**. 2004. Biotransformation of hydrocortisone by a natural isolate of *Nostoc moscorum*. Phytochemistry, 65: 2205-2209.
- 27- Faramarzi M. A., Tabatabaei Yazdi M., Amini M., Azizmohseni F., Zarrini G., Amini A., Shafiee A. 2004. Microbial production of testosterone and testololactone in the culture of *Aspergillus terreus*. World Journal of Microbiology and Biotechnology, 20: 657-660.
- 28-Bakhtiari M. R., Moazami N., Fallahpour M., Mirdamadi S., Tabatabaee M., Norouzian D., **Azizmohseni F**. 2003. Production and purification of cyclosporine A from fermentation broth of *Tolypocladium infatum*. Scientica Iranica, 10: 367-371.
- 29- Samiee S. M., Moazami N., Haghighi S., **Azizmohseni F.**, Mirdamadi S., Bakhtiari M. R. 2003. Screening of Lovastatin production by filamentous fungi. Iranian Biomedical Journal, 7: 29-33.
- 30-Mirdamadi S., Sadeghi H., Sharifi N., Fallahpour M., **Azizmohseni F**., Bakhtiari M. R. 2002.Cmparison of lactic acid isomers produce by fungul and bacterisl strains. Iranian Biomedical Journal, 6: 69-75.
- 31- Mirdamadi S., Khalilzadeh P., Rajabi A., Azizmohseni F. 2003. Isolation and adaptation of microorganisms for hexamine biodegradation. Journal of Science, 29: 233-245 (Persian Article)
- 32- Hassannia MR. Azizmohseni F., Yeganeh V., Ghanjvar S. 2006. Study on members of Vibrionaceae family potentially used as probiotic in shrimp aquaculture. Iranian Scientific Fisheries Journal, 4: 21-31 (Persian Article)
- 33- Mirdamadi S., Azizmohseni F., Rajabi A. 2007. Lactic acid production by Lactobacillus strains isolated from different ecosystems. Iranian Journal of Nutrition Sciences and Food Technology, 3: 21-31. (Persian Article)
- 34- Taghizadeh T., Zare D., Mortazavi, S., Azizmohseni F., Azin M., Heydarin M. (2009). Improving the quality and flavor of tofu by using Taguchi experimental design. Iranian Journal of Nutrition Sciences and Food Technology, 4: 57-64. (Persian Article)

Congress presentations:

1- Organizing a Consortium of Iranian Biobanks: providing a framework for coordination and quality improvement. Farzaneh Azizmohseni (Lecture). The 23rd National and 11th Internaional Iranian congress of Biology. (September 9-11, University of Tehran)

- 2- An engineered endolysin with binding ability to *Acinetobacter Baumannii* outer membrane. Noura H., Bakhtiari N., **Azizmohseni F.**, Amini-Bayat Z. The 1th International Conference on Science and Technology. (February 25-26, 2024, Iranian Research Organization for Science and Technology, Iran)
- 3- Evaluation of the CHAPK -SH3b endolysin effect on different strains of Staphylococcus by plate lysis assay. Ahmadbeigi Y., Soleimani N., **Azizmohseni F.**, Amini-Bayat Z. The 24th Iran's International Congress of Microbiology. (September 18-20, 2023, Iranian Research Organization for Science and Technology, Tehran, Iran)
- 4- Microalgae Polysaccharide: A Promising Natural Food Supplement Source. Mousavian Z. Safavi M., **Azizmohseni F.**, Hadizadeh M. Mirdamadi S. The 4th international and 29th National Iranian Food Science and Technology Congress. (May 2-3, 2023, Iranian Research Organization for Science and Technology, Iran)
- 5- New endolysin against Acinetobacter baumannii: antibacterial effect. Noura H., Bakhtiari N., Azizmohseni F., Amini Bayat Z. The 23rd Iran's International Congress of Microbiology. (August 30-September 1, 2022, Tehran University of Medical Sciences, Tehran, Iran)
- 6- Evaluation of 3 antibacterial peptides cytotoxicity on MCF-7 cell line. Bakhtiari N., Hadizadeh M.
- **Azizmohseni F.** The 22th National and 10th International Congress on Biology. (August 31-September 2, 2022, Shahrekord University, Shahrekord, Iran)
- 7- Optimization of ammonium sulfate precipitation of a chimeric peptidoglycan hydrolyzing Enzyme. Ahmadbeigi Y., Soleimani N., Azizmohseni F., Amini-bayat Z. Iran's 22nd International virtual congress of Microbiology (August 28, 2021, Tehran University of Medical Sciences
- 8- Treatment of Drug-Resistant S*taphylococcus aureus* by Double Acting Peptidoglycan Hydrolyzing Enzyme. Amini-bayat Z., Noori A., Mirdamadi S., **Azizmohseni F.**, Arab S. Sh. The 1st International Hybrid Mode Conference. (August 11-12, 2021, Kohat University of Science and Technology (KUST), Kohat, Pakistan)
- 9- Design & expression of a new artilysin against antibiotic resistant A. baumannii. Bakhtiari N., **Azizmohseni** F. The 12th National and 4th International Biotechnology Congress of Islamic Republic of Iran. (August 22-24, 2021, Tehran, Iran)
- 10- Different effects of bacterial host strains and inducers on expressing of two recombinant antibacterial protein. Homa Noura, Nahid Bakhtiari1, **Azizmohseni F**., Zahra Amini-Bayat. The 21th National and 9th International Congress on Biology. (February 16-18, 2021, Semnan University, Iran)
- 11- Biosafety assessment of probiotics. **Azizmohseni F.** Oral presentation; The 21th International Congress of Microbiology of Iran (November 16, 2020, Tehran, Iran)
- 12- Screening of Iranian strains of *Gonoderma lucidum* in removing malachite green dye in solid culture medium. Taiar S., Shokrolahzadeh S., Khandan N., Asghari Z., **Azizmohseni F**. Safavi M., Keypur S. The 3rd International and 11th National Biotechnology Congress of Islamic Republic of Iran (September 1-3, 2019, Razi Conference Center, Tehran, Iran).
- 13- Evaluation of antibacterial activity of three different extracts of *G. appalanatum* and *G. adspersum* collected from North of Iran. The 8th National Congress on Medicinal Plants (April 24-25, 2019, Tarbiat Modares University, Tehran, Iran)
- 14- Removal of malachite green dye from aqueous medium by a native Iranian strain of *Ganoderma lucidum*. Taiar S., Shokrolahzadeh S., Khandan N., Asghari Z., **Azizmohseni F**. Safavi M., Keypur S. The 3rd

- International and 11th National Biotechnology Congress of Islamic Republic of Iran (September 1-3, 2019, Razi Conference Center, Tehran, Iran).
- 15- Distribution and deposit of biological resources in BRCs. **F. Azizmohseni,** 19th International Congress of Microbiology, School of Medicine, Tehran University of Medical Sciences, Iran, 4-6 Sep. 2018
- 16- The study of antibacterial activity of laccate *Ganoderma* collected from Hyrcanian forests. S. Keypour, **F. Azizmohseni**, M. Safavi, S. Mahmoodnia, S. Shokrollahzadeh. 1st International Congress and 2nd National Conference on Biotechnology of Medicinal Plants and Mushrooms, University of Zanjan, 27-28 Aug 2018, Iran
- 17- The role of BRCs in providing infrastructure for biotechnology and microbial research. **Azizmohseni F.**, New approaches and concepts in Microbiology, Lahijan University, Iran, 24-25 Feb. 2016 (Oral presentation)
- 18- The Role of BRCs in providing biological validated materials for medical diagnosis. **Azizmohseni F.**, The 7th International & 12th National Congress on Quality improvement in Clinical laboratory. 17-20 April 2014, Tehran, Iran (Oral presentation)
- 19- Challenges ahead of the biological resources centers. **Azizmohseni F.**, The National congress on genetic and biological resources, Royan Institute, Tehran, Iran 22-23 Feb. 2011 (Oral presentation)
- 20- Study of antimicrobial effect of nisin, encapsulated nisin in liposomes and Lactococcus lactis as a nisin producer on food borne pathogens. Mirdamadi Saeed, Agha Ghazvini Shadi, Fallahpour Masoud, **Azizmohseni Farzaneh**, International Conference on Food Innovation. 25-29 October 2010, Valencia, Spain. (Abstract)
- 21- Case study on *Aspergillus flavus* and *A. parasiticus*. **Azizmohseni F.,** Microbial Commons Workshop. 25-26 February 2009, Brussels, Belgium.
- 22- Isolation and identification of bactriocin producer Lactobacilli. Mirdamadi S., Tangestani M., **Azizmohseni** F., Amirmozafari N., The first National Functional Food, Tarbiat Modares University, Tehran, Iran 14-15 Mar.,2008
- 23- An activated sludge process to reduce the pollution load of a petrochemical wastewater, Shokrollahzadeh S., Golmohammad F., **Azizmohseni F**., Shokouhi H., The 18th International Congress of Chemical and Process Engineering, 27-31 August 2008, Praha, Czech Repoblic. (Abstract)
- 24- Screening of lactobacillus strains for bio-preservative production and probiotic activities from Iranian yogurt. S.mirdamadi, F. Azizmohseni, M. fallahpour, M. Tangestani, 10th European Nutrition Conference, July 10-13, 2007, Paris, France. (Poster)
- 25- The Potential of aYeast, *Pseudozyma fusiformata* Strain Y76 to Control *Aspergillus flavus* for Reducing Aflatoxin in Pistachio, **Azizmohseni F**., Afsahhejri L., Azar M., The 11th International Conference of Culture Collections, 7-12 October, 2007 Goslar, Germany. (Oral Presentation, Full paper)
- 26- Preliminary study to use saprophytic yeasts as biocontrol agents against *Aspergillus flavus* in pistachio, Afashhejri L, Azar M, **Azizmohseni F**., International Conference on Innovations in Food and Bioprocess Technologies, 12-14 December, 2006 Bangkok, Thailand. (Oral presentation, Full paper)
- 27- Optimization of lactic acid production by immobilized cells of *Lactobacillus casei supsp. casei*, Mirdamadi S., Atashgahi S., Roayayi M., Rajabi A., **Aizzmohseni F**., Hamedi J., The 8th National Congress of Microbiology, 23-25 May 2006, Isfahan, Iran. (Abstract)

- 28-Pilot plant production of lactic acid in media containing ruptured Saccharomyces cerevisiae by STR, Mirdamadi S., Rajabi A., **Azizmohseni F**., Atashgahi S., The 8th National Congress of Microbiology, 23-25 May 2006, Isfahan, Iran.
- 29- Screening of saprophytic yeasts as biocontrol agents against *Aspergillus flavus* in pistachio. Afsahhejri L., Azar M., **Azizmohseni F**., The 16th Congress of Food Industry, 12-13 April 2006, Gorgan, Iran. (Oral presentation)
- 30- Recovery of L (+)-lactic acid by precipitation and anion exchange chromatography, Mirdamadi S., Beikmohamadi L., Rajabi A., **Azizmohseni F**., The 4th National Biotechnology Congress, , 15-17 August, 2005 Kerman, Iran.
- 31- Fed batch production of L(+) *lactic acid by Lactobacillus casei ssp. casei* in stirred tank reactor(STR), Mirdamadi S., Rajabi A., **Azizmohseni F**., The 4th National Biotechnology Congress, , 15-17 August, 2005 Kerman, Iran. (Abstract)
- 32- Utilization of molasses for economical L(+) lactic acid production by fed- batch fermentation of *lactic acid* by Lactobacillus casei ssp. casei PTCC 1608, Mirdamadi S., Beikmohamadi L., Rajabi A., Azizmohseni F., The 4th National Biotechnology Congress,15-17 August, 2005 Kerman, Iran. (Abstract)
- 33- Self-sterification of lactic acid and effect of CO2 and H+, Mirdamadi S., Rajabi A., **Azizmohseni F**., The 4th National Biotechnology Congress, 15-17 August, 2005 Kerman, Iran. (Abstract)
- 34- Stability of *Aspergillus ficuum* phytase in different preservation methods and its formulation with bran for adding to poultry diet, Hosseyni pajooh K., Sharifi N., Mirdamadi S., **Azizmohseni F**., The 4th National Biotechnology Congress, 15-17 August, 2005 Kerman, Iran. (Abstract)
- 35- Continuous degradation of Formaldehyde by Immobilized isolated bacteria, Mirdamadi S., Rajabi A., Azizmohseni F., Akbarzadeh A., Khalilzadeh P., Vaez J., 1st International Conference on Environmental, Industrial, and Applied Microbiology (BioMicroWorld 2005) March 15-18th 2005, Badajoz, Spain. (Abstract)
- 36- Screening of Hexamine degrading bacteria, Mirdamadi S., Rajabi A., **Azizmohseni F.**, Akbarzadeh A., Khalilzadeh P., Farahmand B., 1st International Conference on Environmental, Industrial, and Applied Microbiology (BioMicroWorld 2005) March 15-18th 2005, Badajoz, Spain. (Abstract)
- 37- Batch and fed batch production of L (+) Lactic acid by stirred Tank Reactor, Mirdamadi S., Rajabi A., **Azizmohseni F**., Farzi M., Sharifi N., The 2nd Congress on Applied Biology (international approach), 29-30 sep., 2004 Mashhad, Iran.
- 38- Evaluation of optimized conditions of lactic acid production using taguchi method by Lactobacillus casei subsp. casei, Mirdamadi S., Beikmohamadi L., Rajabi A., **Azizmohseni F.**, Farzi M., The 2nd Congress on Applied Biology (international approach), 29-30 sep., 2004 Mashhad, Iran.
- 39- Lactic acid production by immobilized Lactobacillus casei subsp. casei, Mirdamadi S., Farzi M., Rajabi A., **Azizmohseni F**., Sharifi N., The 2nd congress on applied biology (international approach), 29-30 sep., 2004 Mashhad, Iran.
- 40- Optimization of phytase production by *Aspergillus ficcium*, Sharifi N., Hosseynipajooh Kh., Mirdamadi S., **Azizmohseni F.**, The 2nd congress on applied biology (international approach), 29-30 sep., 2004 Mashhad, Iran.
- 41- Comparison of lactic acid production by free and immobilized lactobacillus casei, Mirdamadi S., Farzi M., Rajabi A., **Azizmohseni F.**, Sharifi N., 12th Iranian Biology Conference, 31 Aug -2 sep, 2004 Hamadan University.

- 42- Batch and fed batch production of L (+) lactic acid by lactobacillus casei subsp casei., in stired tank reactor, Mirdamadi S., Rajabi A., **Azizmohseni F**., Farzi M., Sharifi N., 12th Iranian Biology Conference, 31 Aug -2 sep, 2004 Hamadan University.
- 43- Partial purification and catalytic characterization of phytase enzyme of Aspergillus ficcum., Hosseinypajooh Kh., Sharifi N., Mirdamadi S., **Azizmohseni F**., 12th Iranian, Biology Conference, 31 Aug -2 sep, 2004, Hamadan University.
- 44- Production of L (+) Lactic acid from Sugarcane molasses by Lactobacillus casei ssp. Casei strain PTCC 1608, Mirdamadi S., Beikmohamadi L., **Azizmohseni F**., 7th Iranian Microbiology Congress, Semnan University of Medical Sciences, Iran 2 -4 Feb., 2005.

Research projects

Principal investigator:

- 1- Isolation of Microorganisms involved in MEOR from Masjid Soleyman Reservoir (2007-2009)
- 2- Using Molecular techniques for authentication of microbial strains (2009-2011)
- 3- The biologic properties of different *Ganoderma* strains isolated from Hyrcanian Forest (2017- 2022)
- 4- Isolation and identification of sourdough microbiota. (2019-present)

Co-Investigator:

- 1- Study on production of lovastatin by Aspergillus strains isolated from different ecosystems (2003-2005)
- 2- Human calcitonin gene expression using patatin classI specific promoter and signal peptide in transgenic potato plants t. (2005-2007)
- 3- Design and development of a biofilter for hydrogen sulfate absorption (2006-2008)
- 4- Isolation and identification of microorganisms from Abadan petrochemical wastewater treatment plant (2006-2007)
- 5- Lab scale production of yoghurt starters (2009-2010)
- 6- Characterization of PAH-degrading microorganisms isolated from Abadan petrochemical wastewater treatment plant (2009-2010)
- 7- Study on Lactic acid bacteria in yogurt starter cultures. (2008-2010)
- 8- Study on microbial flora of Soroush and Nowruz oil fields in the Persian Gulf (2010-2012)
- 9- Production of chimeric endolysin against methicillin-resistant Staphylococcus aureus (2022-2025)

Thesis Supervisor/ Consultant

- 1- Isolation and Identification of Kombucha Microorganisms, Azita Namazi, Master's thesis. Islamic Azad University, Science and Research Branch
- 2- Isolation of Hexamine Decomposing Microorganisms, Puneh Khalilzadeh, Master of Microbiology, Islamic Azad University, Qom Branch
- 3- Isolation of Formaldehyde Decomposing Microorganisms, Afsaneh Rajabi, Master of Microbiology, Islamic Azad University, Qom Branch
- 4- Determination of the Chemical Structure of Two New Antivirals, Maryam Farzan, Doctor of Pharmacy, Islamic Azad University, Tehran, Faculty of Pharmacy
- 5- Control of Aspergillus flavus Growth by Saprophytic Yeasts to Reduce Aflatoxin Levels in Pistachios, Lili Afseh Hejri, Master's thesis, Shahid Beheshti University of Medical Sciences
- 6- Detection of bacteriocins produced by *Lactobacilli* strains and their antibacterial activity. Mehrnoush Tangestani Gholami, MSc, Islamic Azad University, Lahijan Branch
- 7- The effects of cheese-fermenting microorganisms on the aroma and flavor of tofu. Tahmineh Taghizadeh, MSc, Food Science and Engineering, Islamic Azad University, Sabzevar
- 8- Isolation and identification of phenanthrene-degrading bacteria from oil-contaminated marine sediments. Master's thesis, Islamic Azad University
- 9- Investigation of phage contamination of *Lactobacilli* isolated from Iranian dairy samples, Mona Bassmechi, Master's thesis, Islamic Azad University, Pharmaceutical Sciences Faculty, Tehran
- 10- Presentation of a suitable method for maintaining a persimycine producing strain, Leila Parvizi. Master's thesis Faculty of Science, University of Tehran
- 11- Evaluation of the antibacterial activity of MSC, a phage-derived chimeric endolysin, against *Staphylococcus aureus*, Sanaz Momen, MSc in Microbiology, Shahid Beheshti University.
- 12- Extraction, characterization and investigation of the inhibitory effect of extracellular polysaccharides of *Chlorophyta* sp. isolated from the Persian Gulf on *Helicobacter pylori*. Zahra Mousavian, PhD in Microbiology, Institute of Biotechnology, Iranian Organization for Science and Technology
- 13- Production and activity evaluation of a new three-domain chimeric endolysin against methicillinresistant *Staphylococcus aureus*, Atefeh Noori, PhD in Microbial Biotechnology, Institute of Biotechnology, Iranian Organization for Science and Technology
- 14- Production and evaluation of a new fusion protein based on endolysin plyF307 and calcin N against *Acinetobacter baumannii*, Hama Noura, PhD in Molecular Cell Biology, Institute of Biotechnology, Iranian Organization for Science and Technology

Collaboration in the development of ISIRI standards:

- 1- Aseptic processing of health care products Part 2: Filtering, ISIRI No.: 9414-2
- 2- Aseptic processing of health care products Part 3: Freeze drying, ISIRI No.: 9414-3
- 3- Aseptic processing of health care products Part 5: In-situ sterilization, ISIRI No.: 9414-5
- 4- Probiotic microorganisms Characteristics and in vitro test methods: ISIRI No.:19459