In the Name of God



Personal profile

Name: Abdolrazagh Marzban

Marital Status: married, 1 child (daughter)

Telephone number: +9866-33204005

Mobile number: +989164011432

Email: marzban86@gmail.com, marzban86@hotmail.com

Education

B.Sc. in Molecular Biology, Genetic, Shahid Chamran University, Ahwaz (1382-1386)

M.Sc. in Microbiology, Shahid Beheshti University, Tehran (1386-1389)

Ph.D in Pharmaceutical Biotechnology at Mashhad University of Medical Sciences (1390-1395)

Master thesis

Identification of Iran Indigenous Phosphate Accumulating Bacterium and Optimization of P-uptake Conditions

Thesis Supervisor: Dr. Gholamhossein Ebrahimipour

Thesis advisors: Dr. Javad Fakhari

Doctoral thesis

Production, Isolation and characterization of antimicrobial bioactive compounds from native microorganisms of mangrove ecosystem inside Iranian Gheshm Island.

Thesis Supervisors: Dr. Abolghasem Danesh (Mashhad University of Medical Sciences) and Dr. Gholamhossein Ebrahimipour (Shahid Beheshti University, faculty of biological Sciences).

Articles in English

- Behnam Ashrafi, Marzieh Rashidipour, Abdolrazagh Marzban, Setareh Soroush, Mojgan Azadpour, Somayeh Delfani, Ramak Parvin. Mentha piperita essential oils loaded in a chitosan nanogel with inhibitory effect on biofilm formation against S. mutans on the dental surface. Carbohydrate Polymers. 2019, 212(15):142-149. DOI: 10.1016/j.carbpol.2019.02.018
- ⑤ Farhad Gilavand, Abdolrazagh Marzban, and Amirarsalan Kavyanifard. L-Asparaginase-producing Rouxiella species isolation, antileukemia activity evaluation, and enzyme production optimization. Res Mol Med (RMM). 6(3): 29-44.
- Sayyad Khanizadeh, Javad Koshki. Antiparasitic properties of curcumin: A review. AIMS Agriculture and Food, 2018, 3(4): 561–578. DOI: 10.3934/agrfood.4. 561
- © Kourosh Cheraghipour, Mohammad Ali Mohaghegh, Omid Mardanshah, Javad Koshki, Kobra Moradpour, Nader Pestechian, Javad Akhtari, **Abdolrazagh Marzban**. Vaccine Design Based on Live Attenuated Cells of Toxoplasma gondii: A Review. 2018, 5(4):1-11.
- Maryam Gholami, Kiana Shahzamani, Abdolrazagh Marzban, Hamed Esmaeil Lashgarian. Evaluation of antimicrobial activity of synthesised silver nanoparticles using Thymus kotschyanus aqueous extract. IET Nanobiotechnology, 2018, 12(8): 1114-1117.
- Manouchehr Teymouri, Maryam Karkhane, Farhad Gilavand, Javad Akhtari, Abdolrazagh Marzban. Extracellular Lipase Purification from

- a Marine Planomicrobium sp. MR23K and Productivity Optimization in a Pilot-Scale Submerged Bioreactor. NASB, 2018, 88(2): 739-746.
- Marzban, Mohammad Estaji, M Gholami, Hossein Masoumi asl, Jamshid Raheb. Multiple Locus Variable Number Tandem Repeat Analysis (MLVA) for Typing Pseudomonas Aeruginosa Isolated from Urine Samples of Different Patients. Journal of Babol University of Medical Sciences. 2018, 20(2): 56-63.
- Maryam Karkhane, Abdolrazagh Marzban, Hamed Esmaeil Lashgarian, Mohammad Rez Zali. Genetic Variations in Host Factors and their Critical Role on HCV Medication. Research in Molecular Medicine, 2017, 5(1):6-16.
- © Teymouri M, Karkahne M, Marzban M, **Abdolrazagh Marzban***. Designing of phosphate and organic carbon removal by response surface method. NASB, 2017, 87(4):1167–1176. DOI:10.1007/s40011-015-0686-7
- Abdolrazagh Marzban, Gholamhossein Ebrahimipour, Maryam Karkhane, Manouchehr Teymouri. Metal resistant and phosphate solubilizing bacterium improves maize (Zea mays) growth and mitigates metal accumulation in plant. Biocatalysis and Agricultural Biotechnology, 2016, 8(8): 13-17.
- Maryam Karkhane, Abdolrazagh Marzban, Alireza Rafiei, Javad Akhtari. Cancer Stem Cells: Cell Heterogeneity in Cancer and Nanotechnology Approaches for Their Treatment. Journal of Mazandaran University of Medical Sciences, 2016, 25(133): 361-375.
- Mahtab Ghorbanmovahed, Gholamhossein Ebrahimipour, Javad Akhtari, Abdolrazagh Marzban. Production of anti-leukemia L-asparaginase by a strain of Staphylococcus Isolated from Agricultural Soil. Journal of Mazandaran University of Medical Sciences. 2016, 25(132): 1-12.

- Maryam Karkhane, Mohamad Amin Pourhosiengholi, Mohammad Reza Akbariyan Torkabad, Zahra Kimiia, Seyed Mehdi Mortazavi, Seyed Karim Hossieni Aghdam, **Abdolrazagh Marzban**, Mohammad Reza Zali. Annual antibiotic related economic burden of healthcare associated infections; a cross-sectional population based study. Iranian journal of pharmaceutical research: IJPR. 2016, 15(2): 605-610.
- Maryam Karkhane, Mohamad Amin Pourhoseingholi, Zahra Kimiia, Seyed Mehdi Mortazavi, Mohammad Reza Akbariyan Torkabad, Seyed Karim Hossieni Aghdam, Abdolrazagh Marzban, Mohammad Reza Zali. Attitudes toward nosocomial infections associated mortality at intensive care units, and evaluation of the risk factors. Archives of Clinical Infectious Diseases. 2016, 11(2): e22504, 7p. DOI: 10.5812/archcid.22504
- Manouchehr Teymouri, Javad Akhtari, Maryam Karkhane, Abdolrazagh Marzban. Assessment of phosphate solubilization activity of Rhizobacteria in mangrove forest. Biocatalysis and Agricultural Biotechnology, 2016, 5: 168-172.
- © Gilavand F, **Marzban A*,** Ebrahimipour G, Karkhane M. Investigation of Hydrocarbon Bio-Removal by The Indigenous Bacteria Isolated from Crude Oil Contaminated Soils. J Microbiol Biotechnol Food Sci, 2015, 5(3): 212-215. DOI:10.15414/jmbfs.2015/16.5.3.212-215
- © GH Ebrahimipour, A Moradi, M Karkhane, **A. Marzban**. Antibiotics and heavy metal resistance of three strains of pseudomonas aeruginosa isolated from different ecological areas. Medical Laboratory Journal, 2015, 8(4): 55-60.
- © Farhad Gilavand, Gholamhossein Ebrahimipour, Maryam Karkhane, Abdolrazagh Marzban. Evaluation of Aliphatic and Aromatic Compounds Degradation by Indigenous Bacteria Isolated from Soil Contaminated with Petroleum. Journal of Environmental Health Enginering, 2015, 3(1): 42-50.
- Azam Moradi, Gholamhossein Ebrahimipour, Maryam Karkhane,
 Abdolrazagh Marzban. Surveying the Antioxidant and the
 Antimicrobial Effects of Aqueous and Ethanolic Extract of Rumex
 Alveollatus L. on In-vitro Indicator Microorganisms. Journal of Fasa

- University of Medical Sciences/Majallah-i Danishgah-i Ulum-i Pizishki-i Fasa, 2015, 4(4):
- © Ebrahimipour G, Gilavand F, Karkhane M, Kaviyanifard A, Teymouri M, Marzban A*. Bioemulsification activity assessment of an indigenous strain of halotolerant Planococcus and partial characterization of produced biosurfactant. Int J Environ Sci Technol, 2014, 11:1379–1386. DOI: 10.1007/s13762-014-0548-5
- © Karkhane M, Kimiia Z, Akbariyan T.M.R, Mortazavi S. M, Hossieni A.S.K, Pourhoseingholi A, Marzban A, Pourhoseingholi M.A, Zali M.R. Relationship Between Blood Transfusion and Risk of Nosocomial infection in Intensive Care Unit Patients. Iran J Clin Infect Dis, 2012, 7(1):21-24.
- © Rostami Nejad M, Karkhane M, Marzban A, Nazemalhosseini ME, Rostami K. Gluten related disorders. Gastroenterol Hepatol Bed Bench, 2012, 5(1):1-7.
- Mohseni S, Karkhane M, Sepehr S, Hosseinkhani S, Marzban A. Study of Resistance of Indigenous Bacteria Involved in the Process of Copper Bioleaching to Silver and Mercury Toxic Metals in Different Concentrations. J Pure Appl Microbiol, 2011, 5(2): 603-609.
- Marzban A*, Ebrahimipour G, Karkhane M, Mohseni S, Moradi A, Alaee H. Study of Heavy Metal and Antibiotic Resistance on a Pseudomonas Aeruginosa Strain Isolated from Soils Contaminated with Coal Tar. Int J Biotechnol Biochem, 2011, 7(4): 451-456.
- Mohseni S, Marzban A, Sepehr S, Hosseinkhani S, Karkhaneh M, Azimi A. Investigation of some heavy metals toxicity for indigenous Acidithiobacillus ferrooxidans isolated from Sarcheshmeh copper mine. Jundishapur J Microbiol, 2011, 4(3): 159-166.
- © Rezvanipour H, Mirghaffari N, Marzban M, **Marzban A**. Determination of Biochemical Oxygen Demand (BOD) without nitrification and mineral oxidant bacteria interferences by carbonate turbidimetry. Res J Pharm, Biol Chem Sci, 2014, 5(5): 90-95.
- © Ebrahimipour G, Moradi A, Mehrdad M, **Marzban A**, Alaee H. Evaluation of antimicrobial substance produced by a bacterium isolated from *Parmacella iberica*. Jundishapur J Microbiol, 2011, 4(3): 131-140.

Articles in Persian

- ◆ Lashgarian H, Marzban A, Estaji M, Gholami M, Masoumi asl H, Raheb J. Multiple Locus Variable Number Tandem Repeat Analysis (MLVA) for Typing Pseudomonas Aeruginosa Isolated from Urine Samples of Different Patients. JBUMS. 2018; 20 (2):56-63.
- Maryam Karkhane, **Abdolrazagh Marzban**, Alireza Rafiei, Javad Akhtari. Cancer Stem Cells: Cell Heterogeneity in Cancer and Nanotechnology Approaches for Their Treatment. J Mazandaran Univ Med Sci 2016, 25(133): 361-375.
- Mahtab Ghorbanmovahed, Gholamhossein Ebrahimipour, Javad Akhtari, **Abdolrazagh Marzban***. Production of anti-leukemia L-Asparaginase by a strain of *Staphylococcus* Isolated from Agricultural Soil. J Mazandaran Univ Med Sci 2016, 25(132): 1-12
- Azam Moradi, Ebrahimpour G, Maryam Karkhane, Abdolrazagh Marzban. Surveying the Antioxidant and the Antimicrobial Effects of Aqueous and Ethanolic Extract of Rumex Alveollatus L. on In-vitro Indicator Microorganisms. J Fasa Univ Med Sci 2015, 4(4): 418-426
- Gilavand Farhad, Ebrahimipour Gholamhossein, Karkhane Maryam, **Marzban Abdolrazagh***. Evaluation of Aliphatic and Aromatic Compounds Degradation by Indigenous Bacteria Isolated from Soil Contaminated with Petroleum 2015;3(1):41-50.
- Azam Moradi, Maryam Karkhane, **Abdolrazagh Marzban**: Antibiotics and Heavy Metal Resistance of Three Strains of *Pseudomonas Aeruginosa* Isolated from Different Ecological Areas. mljgoums 2015, 8(4): 55-60.
- Ebrahimipour Gholamhossein, Marzban **Abdolrazagh**, Karkhane Maryam, Fakhari Javad. Study on hydrocarbons degrading bacteria from soils contaminated with petroleum. J Microb Biotechnol 2012;4(13):15-22.
- Alaei Hawry, Ebrahimipour Gholamhossein, Mehrdad Seyed Morteza, Moradi Azam, **Marzban Abdolrazagh**. Evaluation of Effects The Bacterium with Antimicrobial Activity Isolated From The Frog Skin (Hyla

- Savignyi), and Its Identification Phylogenetical and Biochemical. J Microb Biotechnol 2010;1(3):1-8.
- Karkhane Maryam, Mohseni Sara, Sepehr Shayesteh, Hossienkhani Saman, **Marzban Abdolrazagh**, Azimi Ali. Production of Iranian Indigenous Acidithiobacillus ferrooxidans Colony in Modified Solid Media and Investigation Capability in Copper Bioleaching. J Microb Biotechnol 2010;1(3):41-47.
- **O Marzban Abdolrazagh**, Ebrahimipour Gholamhossein, Karkhane Maryam, Fakhari Javad, Alaee Hawry, Moradi Azam. Evaluation of phosphate uptake by the indigenous bacterium isolated from soil contaminated with coal tar under the aerobic and anaerobic conditions. J Microb Biotechnol 2010;2(5):13-20.

Presentation

- Marzban A, Karkhane M. Microfluidic method to determine bacterial population into food and drugs. Innovative Laboratorial Techniques Congress. 1-3,Oct, 2014, Tehran, Iran.
- Ebrahimipour G, **Marzban A***, Karkhane Maryam. Evaluation of L-Asparaginase Production as Anti-Leukemia Enzyme by A Streptomyces Strain Isolated From Mangrove Forest. The 7th International and 12th National Congress on Quality Improvement in Clinical Laboratory, Tehran, 17-20 April, 2014.
- Danesh A, Ebrahimipour G, Iranshahi M, **Marzban A*.** Isolation of halophilic fungi producing antibacterial enzymes. The 7th International and 12th National Congress on Quality Improvement in Clinical Laboratory, Tehran, 17-20 April, 2014.
- Danesh A, Ebrahimipour G, Iranshahi M, **Marzban A*.** Evaluation of antimicrobial activity for an indigenous bacterial strain isolated from mangrove sediments in Qeshm Island. 3th Iranian Congress on Natural Toxins, School of Pharmacy, Shahid Beheshti University of Medical Sciences, Tehran, 18-20 Feb. 2014.

- Danesh A, Ebrahimipour G, Iranshahi M, **Marzban A*.** Isolation and characterization of L-asparginase from mangrove bacterial strain: a tumor growth inhibitor. 3th Iranian Congress on Natural Toxins, School of Pharmacy, Shahid Beheshti University of Medical Sciences, Tehran, 18-20 Feb. 2014.
- **Marzban A*,** Ebrahimipour G, Karkhane M, Fakhari J. study of hydrocarbon pollutants removal by an indigenous bacterium isolated from contaminated soils. Conference on Environmental Biotechnology, may 26-27, 2013, Tehran, Iran. (**oral presentation**)
- Karkhane M, **Marzban A**, Ebrahimipour G. Relationship between polyphosphate and resistance to antibiotic and metals in a strain of *Pseudomonas aeruginosa* 4th Iranian conference on clinical microbiology, Isfahan, 2010. (poster)
- Moradi A, Ebrahimipour G, Mehrdad M, **Marzban A***, Alaee H, Salamian N. Isolation and characterization the best bacterium producing antimicrobial compound from root of *Avicenna marina* and evaluation of antimicrobial effect on several standard laboratory strains. The 3nd Iranian Congress of Clinical Microbiology, Shiraz, 2009. (poster)
- Marzban A*, Ebrahimipour G, Alaee H, Fakhari J. phylogenetic and classic characterization of antimicrobial substance producing bacterium isolated from soils contaminated with coal tar. The 3nd Iranian Congress of Clinical Microbiology, Shiraz, 2009. (poster)
- Moradi A, Ebrahimipour G, Mehrdad SM, Alaee H, **Marzban A**. Extraction and Purification of Antimicrobial Agent Produced by a Strain of Pseudomonas Isolated from Native *Parmacella iberica*. The 11th Iran Microbiology Congress and 1st Eastern Mediterranean Microbiology in Medical Science Gilan University, 1389. (poster)
- ⊙ Alaee H, Ebrahimipour G, Mehrdad SM, **Marzban A**, Moradi A. Phylogenetic Analysis and Identification of Antimicrobial Activity Isolated from Frog Skin (*Bofu surds*). The 11th Iran Microbiology Congress and 1st Eastern Mediterranean Microbiology in Medical Science Gilan University, 1389. (poster)

- ⊙ Karkhane M, **Marzban A**, Ebrahimipour G, Alaee H. Isolation of One Strain of *Pseudomonas Aeruginosa* from Wastewater and Investigation of Antibiotic Resistance. The 11th Iran Microbiology Congress and 1st Eastern Mediterranean Microbiology in Medical Science Gilan University, 1389. (poster)
- Karkhane M, **Marzban A**, Ebrahimipour G. Isolation and Identification of Heavy Metals Resistant Bacterium from Waste Water and Measurement of Resistance Concentration. The 11th Iran microbiology congress and 1st Eastern Mediterranean microbiology in medical science Gilan University, 1389. (poster)
- **Marzban A***, Ebrahimipour G, Karkhane M. Optimization of Phosphate Uptake on A Bacterium Isolated from Soils Contaminated with Coal Tar. The 11th Iran Microbiology Congress and 1st Eastern Mediterranean Microbiology in Medical Science Gilan University, 1389. (poster)
- **⊙ Marzban A***, Ebrahimipour G, Alaee H, Fakhari J. Isolation of Accumulating Polyphosphate Bacterium from Contaminated Coal Tar Soils and Study on Its Application for Wastewaters. The 6th National Biotechnology Congress of Iran, Tehran, 13-15 Aug, 2009. (poster)
- O Alaee H, **Marzban A,** Ebrahimipour G, Mehrdad SM, Mollajafari K, Moradi A. Isolation and identification of antimicrobial agent producing bacterium from Frog Skin (*Bofu surds*) and Characterization of its antimicrobial substance. The 6th National Biotechnology Congress of Iran, Tehran, 13-15 Aug, 2009. (poster)
- Marzban A*, Ebrahimipour G, Karkhane M, Alaee H. Study of Bioremediation of Organic and Phosphate Pollutants From Waters and Wastewaters by Iranian Native Bacterium. International Persian Gulf Congress, Booshehr, 1388. (poster)
- Marzban A*, Ebrahimipour G, Karkhane M. Evaluation of Phosphate removal by one strain of *Pseudomonas* Isolated from Soils Contaminated with Coal Tar. 2nd Medical Student Research Congress of Tehran Network, 1391. (poster)

- Marzban A*. Study and Analysis of Antimicrobial Substance Obtained From an *Alcaligenes* Strain Isolated from Digestive Apparatus of *Boleophthalmus Dussumieri*. 3th research congress of postgraduate students of Mashhad University of Medical Sciences, Mashhad, 1390. (poster)
- Marzban A*. Biodegradation and removal of petroleum pollutant by bacterial strain isolated from soils contaminated with oil. 3th research congress of postgraduate students of Mashhad University of Medical Sciences, Mashhad, 1390.
- Alaee H, **Marzban A,** Ebrahimipour G, Mehrdad SM, Mollajafari K, Moradi A. Isolation and identification of bacterium producing antimicrobial substance and its antimicrobial substance. National Conference of Biology Student (NCBS), Shahrkord, 1388. (poster)
- Marzban A*, Alaee H, Ebrahimipour G, Fakhari J. Isolation of bacterium producing antimicrobial substance from Soils contaminated with coal tar and identification by classical and 16s rDNA analysis. National conference of biology student (NCBS), Shahrkord, 2009. (Oral presentation)
- Ebrahimipour G, **Marzban A***, Danesh A, Iranshahi M. Resistance pattern to antibiotics and heavy metals associated with polyphosphate accumulation in a strain of *Pseudomonas aeruginosa*. 14th International Iranian Congress of Microbiology, Tehran, 2013. (poster)
- Danesh A, Ebrahimipour G, Iranshahi M, **Marzban A***. Antimicrobial Effects of Crude Extracts of Mangrove Plant (*Avicennia Marina*) Against Bacterial and Fungal Strains. 14th International Iranian Congress of Microbiology, Tehran, 2013. (poster)
- Alaee H, Ebrahimipour G, Moradi A, **Marzban A**, Amiri S. Isolation and Identification of bacterium producing Antimicrobial substance from Frog Skin (*Hyla savignyr*) and Extraction of its Antimicrobial Substance. SIM annual Meeting and Exhibition, 26-30 July, 2009, Westin Harbour Castle-Torento, Canada. (poster)
- Marzban A*, Ebrahimipour G, Karkhane M, Fakhari J, Alaee H. Optimization of phosphate uptake on a strain of *Pseudomonas aeruginosa*

under aerobic growth conditions. 1th European Congress on Environmental Pathologies 9-10 October 2009, Zenith de Rouen, France. (poster)

Experiences & project

- O Research project in tiltle: "Evaluation of the protective effect of probiotic bacteria on acute lithium toxicity in rat". (Code number: 931555)
- O Research project in title: "Study of probable protective effect of probiotic bacteria' administration on Fe-serum concentration of ferrous-sulfate poisoned rats". (Code number: 931416)
- O A survey of the status of Self-medication within diseases associated with the children below 5 years ago in Ardakan city, 2016. (Code number: 4591)
- **O** Working background in waste management of OEOC to treat petroleum pollutants using in situ bioremediation in Khuzestan, the south of Iran for two years from 1388 to 1390.
- O Researching in the project of identification of two bacterial strain producing antimicrobial substance from frog skin (*Rana ridibunda*), extraction and purification of antimicrobial substance. Shahid Beheshti University, microbiology department, under supervising Dr. Ebrahimipour, 1388, Tehran, Iran.
- O Researching in the project of isolation and identification of acidophilic chemolitrophic bacteria in order to copper bioleaching. Shahid Beheshti University, microbiology department, under supervising Dr. Ebrahimipour, 1388, Tehran, Iran.

Skills

- ➡ Bioedit, Chromas, Gene runner & Primer design, Mega4, NCBI blast, Protein Modeling, Endnote, Spss, Graphpad prism, Minitab, Experimental Design (DOE)
- DNA extraction & PCR, siRNA design

- Microsoft office (Word, PowerPoint, Excel, outlook), Photoshop
- Academic writing, Manuscript editing

Membership

- **②** Editorial board of Plant Biotechnology Persa. Journal belong to Ilam University of Medical Sciences.
- ♦ Scientific student group of genetic and molecular Biology, Shahid Chamran University, Faculty of Basic Science. From 1382-1386
- Reviewer for Journal of agricultural science and technology
- Reviewer for international congress of microbiology
- Reviewer for African Journal of Biotechnology Research
- Reviewer for International Research Journal of Public and Environmental Health
- Reviewer for Fasa Journal of Medical Sciences
- Reviewer for Journal of Polymer Science
- Reviewer for Research in Molecular Medicine
- Reviewer for Iranian Journal of Public Health

Interesting and researching

O Pharmaceutical products, plant drugs, Probiotic and Probiotic production, Microbial drugs fermentation, Drug discovery, Molecular microbiology, Medical Enzymology, Antimicrobial and heavy metal resistance, hazardous material removal, Bioremediation, Biological wastewater treatment, Biogas production

Symposium / Workshop

- ★ White Blood Cells Disorders Workshop held in Tehran University of Medical Sciences, Tehran, October 2009.
- Applied biostatistics workshops held in Mashhad University of Medical Sciences, School of Pharmacy, 2013. 4 workshops including I) Introduction of statistics principle II) confidence interval-definitions and applications III) continuous data analysis IV) P-value significance.