



Personal profile:

Name: Hamid Pajavand

Date of Birth: 1363 (1984), Yazd, Iran.

Marital status: Married

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Educations:

Ph.D in Medical Bacteriology **1396-1401**

Department of Bacteriology, Faculty of Medical Sciences, Tarbiat Modarres University, Tehran, Iran.

Thesis title: Investigation of the effect of Shikonin-derived carbon nanoparticles on biofilm formation and expression of *pelA*, *pslA* and *ppyR* genes in *Pseudomonas aeruginosa* and *icaA*, *icaC*, *icaD* and *bap* genes in *Staphylococcus aureus*

M.Sc. in Medical Bacteriology **1389-1391**

Department of Microbiology, Faculty of Medicine, Kermanshah University of Medical Sciences,
Kermanshah, Iran.

Thesis title: Frequency study of *cagA* and *vacA* genotypes among *Helicobacter pylori* isolates from patients with gastroduodenal disorder attending to Imam Reza Hospital in Kermanshah.

Attending conferences:

Pajavand H, Bakhtiari A, Kazemi M, Alvandi A H, Abiri R, Ghanbari P, Ghanbari A. A review of novel biomarkers for the diagnosis of Myocardial Infection. First annual meeting of Kermanshah University of Medical Sciences Students. March 2012, Kermanshah, Iran (Poster Presentation).

Pajavand H, Kazemi M, Bakhtiari A, Abiri R, Alvandi A H. Epidemiology of methicillin-resistant Staphylococcus aureus in Iran. First annual meeting of Kermanshah University of Medical Sciences Students. March 2012, Kermanshah, Iran (Poster Presentation).

Bakhtiari A, **Pajavand H**, Kazemi M, Abiri R, Alvandi A H. Meta-analysis of epidemiological isolated Vancomycin- Resistant Enterococci. First annual meeting of Kermanshah University of Medical Sciences Students. March 2012, Kermanshah, Iran (Poster Presentation).

Kazemi M, **Pajavand H**, Abiri R, Alvandi A H. Methods for rapid diagnosis of tuberculosis. First annual meeting of Kermanshah University of Medical Sciences Students. March 2012, Kermanshah, Iran (Poster Presentation).

Pajavand H, Abiri R, Alvandi Ah, Bakhtiari S, fatollahzade M, Khani M, Kazemi M. Frequency study of *cagA* among Helicobacter pylori isolates from patients with gasteroduodenal disorder attending to Imam Reza Hospital in Kermanshah (2011-2012) (Poster Presentation).

Alvandi Ah, Abiri R, Bagherabadi Sh, Yari F, Bakhtiari S, **Pajavand H**, Gholipour A. Analytical Sensitivity and Specificity of New Designed ureC Based PCR assay for Detecting of Helicobacter pylori in Biological and Environmental Samples (Poster Presentation).

Full articles published in refereed journals:

Fatollahzade M, Bastan MM, Shaabani M, Golestani A, Tabatabaei-Malazy O, Mohajeri-Tehrani M, Amini M, Khosravi S, **Pajavand H**, Larijani B. Sex disparity in the burden of NCDs and its four main subgroups in Iran 1990–2019: a systematic analysis from the global burden of disease study 2019. Journal of Diabetes & Metabolic Disorders. 2024 Dec;23(2):2207-24. <https://doi.org/10.1007/s40200-024-01489-1>

Hosseininasab SS, Naderifar M, Akbarizadeh MR, Hashemi N, Ghaderi M, **Pajavand H**, Satarzadeh N, Dousari AS. Synthesized arsenic nanoparticles and their high potential in biomedical applications: A review. Biotechnology and Bioengineering. 2024 Jul;121(7):2050-6.

Fatollahzadeh M, Meybodi HR, **Pajavand H**, Payab M, Ebrahimpur M, Ebrahimi P. Unusual presentation of tumor-induced osteomalacia mismanaged due to misdiagnosis: A literature

review based on a case report. *Clinical Case Reports*. 2024 May;12(5): e8885. DOI: 10.1002/ccr3.8885.

Shamkhali L, Mohabati Mobarez A, Siadat SD, **Pajavand H**. Comparing the production of carbon dots synthesized from *Lactobacillus acidophilus* and *Bifidobacterium bifidum* and investigating their antibacterial effects. *Nanomedicine Research Journal*. 2024 Mar 1;9(1):80-9.

Soltani A, Fatollahzadeh M, Izadi P, Rad ZA, Tavassol ZH, Pajavand H, Amini M, Hasani-Ranjbar S. Estrogen-insensitivity syndrome (EIS) in a female adolescent patient—a case report. *Journal of Pediatric Endocrinology and Metabolism*. 2024 Nov 26;37(11):990-4.

Khanahmad A, Ebrahimi Z, Abreshteh A, **Pajavand H**, Satarzadeh N, Dousari AS. Biological applications of nanoparticles synthesized via *Olea europaea* plant: a comprehensive review. *International Journal of Polymer Science*. 2024;2024(1):4418466.

Pajavand H, Mobarez AM, Barati A, Nikkhah M, Delnavazi MR, Abiri R, Houshang Alvandi A, Karimiravesh R. Evaluation of combined carbon dots and ciprofloxacin on the expression level of *pslA*, *pelA*, and *ppyR* genes and biofilm production in ciprofloxacin-resistant *Pseudomonas aeruginosa* isolates from burn wound infection in Iran. *Journal of Global Antimicrobial Resistance*. 2023 Dec 1;35:289-96.

Pajavand H, Mohabati Mobarez A, Nikkhah M, Abiri R, Delnavazi MR. Synthesis of C-dot by hydrothermal method and evaluation of its anti-bacterial effect against antibiotic resistant *S. aureus* and *K. pneumoniae*. *Nanomedicine Research Journal*. 2023 Apr 1;8(2):167-76. Doi:

Ebadi SA, **Pajavand H**, Asadi A, Asadollahi P, Fatollahzadeh M. Relationship of musculoskeletal diseases with microvascular and macrovascular complications in patients with diabetes in Iran. *Diabetes & Metabolic Syndrome: Clinical Research & Reviews*. 2021 Nov 1; 15 (6):102272.

Mahdie Fatollahzade, Arezoo Asadi, Afshin Davari, Abolfazl Fateh, Ashraf Mohabbati Mobarez and **Hamid Pajavand**. Coronavirus Disease 2019 in a Couple Patients Co-Infected with Untreated HIV. *Acta Scientific Microbiology*. June 12, 2021; Volume 4 Issue 7: 65-67. DOI: [10.31080/ASMI.2021.04.0874](https://doi.org/10.31080/ASMI.2021.04.0874)

Arezoo Asadi, Enayati Mohsen, Atieh Darbandi, **Hamid Pajavand** and Malihe Talebi. Antimicrobial Resistance, Virulence Factors, Diversity, and Genetic Clonality of *Enterococcus* Species from Clinical Samples. *Acta Scientific Microbiology*. June 24, 2021; Volume 4 Issue 7: 90-97. DOI: [10.31080/ASMI.2021.04.0878](https://doi.org/10.31080/ASMI.2021.04.0878)

Bakhtiari S, Hasanvand B, **Pajavand H**, Alvandi A, Abiri R. Rapid and accurate detection of *Helicobacter pylori* from biopsy specimens using loop-mediated isothermal amplification. *acta pathologica, microbiologica, et immunologica Scandinavica*. 2019 Jul;127(7):510-4. DOI.org/10.1111/apm.12953

Mohajer MD, **Pajavand H**, Abiri R, Alvandi A. Phenotypic and genotypic efflux pumps in resistance to fluoroquinolones in E. coli isolated from inpatients in Kermanshah hospitals in 2013. J Arak Uni Med Sci. 2017;20(9):22-32. <http://jams.arakmu.ac.ir/article-1-5024-en.html>

Jalilian S, Alvandi A, Jouybari TA, **Pajavand H**, Abiri R. Lack of association between the presence of dupA and babA 2 genes in Helicobacter pylori and gastroduodenal disorders. Molecular Genetics, Microbiology and Virology. 2017 Jan; 32:55-61. DOI: 10.3103/S0891416817010074

Abiri R, Bagherabadi S, Kashef M, Hasanvand B, **Pajavand H**, Gholipour A, Azizi M, Alvandi A. Detection of Helicobacter pylori in Drinking Water by Loop-Mediated Isothermal Amplification. Jundishapur Journal of Microbiology. 2017 Apr 30;10(4). DOI: 10.5812/jjm.41895

Khani M, Fatollahzade M, Pajavand H, Bakhtiari S, Abiri R. Increasing prevalence of aminoglycoside-resistant Enterococcus faecalis isolates due to the aac (6')-aph (2'') gene: A therapeutic problem in Kermanshah, Iran. Jundishapur journal of microbiology. 2016 Mar;9 (3). DOI: 10.5812/jjm.28923

Bakhtiari S, Alvandi A, **Pajavand H**, Navabi J, Najafi F, Abiri R. Development and diagnostic evaluation of loop-mediated isothermal amplification using a new gene target for rapid detection of Helicobacter pylori. Jundishapur Journal of Microbiology. 2016 May;9(5). DOI: [10.5812/jjm.28831](https://doi.org/10.5812/jjm.28831)

Pajavand H, Alvandi A, Mohajeri P, Bakhtyari S, Bashiri H, Kalali B, Gerhard M, Najafi F, Abiri R. High frequency of vacA s1m2 genotypes among Helicobacter pylori isolates from patients with gastroduodenal disorders in Kermanshah, Iran. Jundishapur journal of microbiology. 2015 Nov;8(11). DOI: [10.5812/jjm.25425](https://doi.org/10.5812/jjm.25425)

Books:

1. Real Time PCR. Cell Publications. 1400.

Patent:

Burn Cream with rapid healing and anti-bacterial properties.

Designations:

Member of executive committee of first International & 12th Iranian Congress of Microbiology, May 2011, Kermanshah, Iran.

Member of the Central Council of Medical Bacteriology Student Association of Tarbiat Modares University.

Training courses:

- 1- Workshop in PCR and Real Time PCR

- 2- Workshop in Tow Dimensional Electrophoresis
- 3- Workshop in Primer Design.
- 4- Workshop in Iran's digital library
- 5- Workshop in Research methodology
- 6- Workshop in Culture, isolation and antibiogram standardization
- 7- Workshop in the impact of human microbiota on health and disease

Sequence submission:

- 1- 31 partial sequences of intermediate region of *Helicobacter pylori vacA* gene were submitted in GenBank database with accession No. from KM099285 to KM099315.
- 2- 56 partial sequences of *Helicobacter pylori gyrA* gene were submitted in GenBank database.

Research Skills:

DNA and Plasmid Extraction

cDNA synthesis

PCR

Real-time PCR

Design Primer

Biological evaluations including anti-biofilm effects, antimicrobial

Nano particles

Computer Skills:

SPSS

Excel

PowerPoint

Word

Origin Pro

Graphpad prism

Teaching experience:

Microbiology practical course for M.Sc and Ph.D student of Tarbiat Modares University in (2022).

Teaching microbiology course for oral health technician associate degree of Kermanshah University of Medical sciences (2016).

Microbiology practical course for medical laboratory technology major (2011).