



Curriculum Vitae

Abbas Maleki , Ph.D

Clinical Microbiology Research Center,
Ilam University of Medical Sciences,
Ilam, Iran

E-mail: abbasmaleki_ilam@yahoo.com
maleki-a@medilam.ac.ir

Tel: +989187419401

Personal information:

Sex: Male

Date of Birth: 05/01/1983

Marital Status: Married

Place of Birth: Ilam city, Iran.

Nationality: Iranian

Current University Position

Assistant Professor, Clinical Microbiology Research Center, Ilam University of Medical Sciences.

Research Interest:

- 1) Molecular analysis for detection of antibiotic resistance genes.
- 2) Molecular detection of Pathogenic agents.
- 3) Molecular analysis of ESBL producing bacteria
- 4) Transferrin/ Lactoferrin binding proteins in gram negative bacteria

Membership of Association:

Member of Iranian Society of Microbiology.

Teaching Experiences:

Teaching physiology of microorganisms to M.Sc. Students.

Ilam University of Medical Sciences, Ilam, Iran

Teaching Clinical Microbiology to Medical Students.

Ilam University of Medical Sciences

Educational Background

2001 B.Sc: biology

Urmia University, Iran.

2006 Master of Sciens (MSc), Microbiology

Islamic Azad University of Zanjan, Zanjan, Iran

Title of MSc thesis: Frequency Analysis of ctxA, tcpA, Ace and Zot Genes Among *Vibrio Cholerae* Isolates of Epitomy of Summer 2005 in Iran By PCR 2006

2012 Ph.D: Medical Bacteriology

Ilam University of Medical Sciences

Ilam, Iran.

Title of Ph.D thesis: Evaluation of Potential Antibacterial Antisense PNA Against *Neisseria meningitides*.

Full Articles:

Published paper in 2010

1. Rapid identification of Iranian *Acinetobacter Baumannii* strains by single PCR assay using *BLA* *oxa*-51 -like carbapenemase and evaluation of the antimicrobial resistance profiles of the isolates. *Acta Microbiologica et Immunologica Hungarica*.

Published paper in 2011

2. Detection of Hepatitis B Virus DNA by Real-Time PCR in Chronic Hepatitis B Patients, Ilam, Iran. *Middle-East Journal of Scientific Research*.
3. Dissemination of Class 1, 2 and 3 Integrons Among Different Multidrug Resistant Isolates of *Acinetobacter baumannii* in Tehran Hospitals, Iran. *Polish Journal of Microbiology*.
4. Diversity of aminoglycoside modifying enzyme genes among multidrug resistant *Acinetobacter baumannii* genotypes isolated from nosocomial infections in Tehran hospitals and their association with class 1 integrons. *Acta Microbiologica et Immunologica Hungarica*.
5. The Prevalence of ESBLs Producing *Klebsiella pneumoniae* Isolates in Some Major Hospitals, Iran. *The Open Microbiology Journal*.
6. Phenotypic and Genotypic Assay for Detection of Extended Spectrum β -lactamases Production by *Klebsiella pneumoniae* Isolates in Emam Reza Hospital in Tabriz, Iran. *JOURNAL OF PURE AND APPLIED MICROBIOLOGY*.
7. The Role of *Bla*_{oxa}-Like Carbapenemase and Their Insertion Sequences (ISS) in the Induction of Resistance against Carbapenem Antibiotics among *Acinetobacter Baumannii* Isolates in Tehran Hospitals. *Roum Arch Microbiol Immunol*.

Published papers in 2012

8. Relationship between the Presence of the *nalC* Mutation and Multidrug Resistance in *Pseudomonas aeruginosa*. *International Journal of Microbiology*.
9. Antimicrobial resistance patterns and their encoding genes among *Acinetobacter baumannii* strains isolated from burned patients. *BURNS*.
10. Cross-Reaction between the Crude Hydatid Cyst Fluid Antigens of Human and Animals Origin in Response to Human IgG Class and Subclasses. *Journal of Parasitology Research*. *Roum Arch Microbiol Immunol*.

11. In vitro and in vivo antibacterial activity of acorn herbal extract against some Gram-negative and Gram-positive bacteria.
12. Multiplex PCR for Identification of *Vibrio cholerae* Genes. JOURNAL OF PURE AND APPLIED MICROBIOLOGY.
13. Prevalence of genomic island PAPI-1 in clinical isolates of *Pseudomonas aeruginosa* in Iran. Southeast Asian J Trop Med Public Health.
14. Prevalence of Intestinal Parasitic Infections among Suspected Referred Patients to Reference Laboratory of Ilam, West Iran. JOURNAL OF PURE AND APPLIED MICROBIOLOGY.

Published paper in 2013

15. Genomic Diversity and Virulence Genes among Clinical Isolates of *Pseudomonas aeruginosa*. Clin. Lab.
16. Survey in Iran of clarithromycin resistance in *Helicobacter pylori* isolates by PCR-RFLP. Southeast Asian J Trop Med Public Health.

Published paper in 2014

17. The correlation between the presence of quorum sensing, toxin-antitoxin system genes and MIC values with ability of biofilm formation in clinical isolates of *Pseudomonas*. Iranian Journal of Microbiology.
18. Estimation of the Parasitic Infection Prevalence in Children With *Helicobacter pylori* Infection in Ilam City (2012-2013). Arch Pediatr Infect Dis.
19. Differential Between Multi-Drug Resistance Pattern of Extended Spectrum beta-Lactamases Producing *E. coli* and *K. pneumonia*. JOURNAL OF PURE AND APPLIED MICROBIOLOGY.
20. Molecular Characterization of AmpC beta-Lactamases among *Klebsiella pneumoniae* Isolated from Ilam and Tehran Hospitals, from Iran. JOURNAL OF PURE AND APPLIED MICROBIOLOGY.

Published paper in 2015

21. Antibacterial, anti-swarming and anti-biofilm formation activities of *Chamaemelum nobile* against *Pseudomonas aeruginosa*. Rev Soc Bras Med Trop.
22. High Prevalence of AmpC β -Lactamases in Clinical Isolates of *Escherichia coli* in Ilam, Iran. Osong Public Health Res Perspect.

Published paper in 2017

23. 3rd Generation of Cephalosporins and Monobactam Resistant among Pathogenic Bacteria Collected from Ilam Hospitals during 2008 to 2015: A Systematic Review and Meta-analysis. Recent Pat Antiinfect Drug Discov.

24. Novel Information about *Neisseria meningitidis*: Identification of the Most Important Type II Toxin Antitoxin Systems. Infect Disord Drug Targets.
25. Hth-xre Toxin Antitoxin Loci And Many Unevaluated Toxin Antitoxin Loci In *Pseudomonas Aeruginosa* B136-33- Bioinformatics Analysis. Infect Disord Drug Targets.
26. mazE antitoxin of toxin antitoxin system and fbpA as reliable targets to eradication of *Neisseria meningitidis*. Curr Pharm Des.
27. Ethanolic Extract of *Berberis Vulgaris* Fruits Inhibits the Proliferation of MCF-7 Breast Cancer Cell Line Through Induction of Apoptosis. Infect Disord Drug Targets.

Published paper in 2018

28. Alarming and Threatening Signals from Health Centers About Multi Drug Resistance *Staphylococcus haemolyticus*. DOI:[10.2174/1871526518666180911142806](https://doi.org/10.2174/1871526518666180911142806)
29. Molecular analysis of uropathogenic *E.coli* isolates from Urinary tract infections in Ilam. DOI:[10.2174/1871526518666181113091322](https://doi.org/10.2174/1871526518666181113091322).

Published paper in 2019

30. Potent antimicrobial target in *Staphylococcus aureus* by bioinformatics analysis. DOI:[10.21203/rs.2.10601/v1](https://doi.org/10.21203/rs.2.10601/v1) .
31. The Prevalence of Shiga toxin-1 in *Shigella* spp. Isolates Collected from Diarrhea Patients, Ahvaz, Iran. DOI:[10.21203/rs.2.11096/v1](https://doi.org/10.21203/rs.2.11096/v1).
32. Evaluation of type II toxin-antitoxin systems, antibiotic resistance, and biofilm production in clinical MDR *Pseudomonas aeruginosa* isolates in Iraq. DOI:10.1016/j.genrep.2019.100546.
33. Phenotypic and Genotypic Characterization of ESBL-, AmpC-, and Carbapenemase-Producing *Klebsiella pneumoniae* and *Escherichia coli* Isolates. DOI:[10.1159/000500311](https://doi.org/10.1159/000500311).
34. Molecular characteristics, antimicrobial resistance profiles, and antibiotic resistance determinants in uropathogenic fluoroquinolone resistant-*Escherichia coli* isolates. DOI:[10.1016/j.genrep.2019.100584](https://doi.org/10.1016/j.genrep.2019.100584).
35. Rapid and direct molecular detection of *Streptococcus pneumoniae* and *Haemophilus influenzae* isolated in oropharynx and nasal cavity of children. DOI:[10.1016/j.nmni.2019.100632](https://doi.org/10.1016/j.nmni.2019.100632).

Published paper in 2020

36. Minocycline, Focused on mechanisms of resistance, antibacterial activity, and clinical effectiveness; Back to Future. DOI:[10.1016/j.jgar.2020.01.022](https://doi.org/10.1016/j.jgar.2020.01.022).
37. The characterization of bacterial communities of oropharynx microbiota in healthy children by combining culture techniques and sequencing of the 16S rRNA gene. DOI:[10.1016/j.micpath.2020.104115](https://doi.org/10.1016/j.micpath.2020.104115).
38. Antimicrobial resistance and genetic analysis of multi-drug resistant *Klebsiella pneumoniae* isolates by pulsed-field gel electrophoresis. DOI:[10.1016/j.genrep.2020.100638](https://doi.org/10.1016/j.genrep.2020.100638)
39. The *cagA* EPIYA Motifs and *vacA* Genotypes in Upper Gastrointestinal Diseases. DOI:[10.3103/S0891416820020068](https://doi.org/10.3103/S0891416820020068).

40. Asymptomatic carriers of *Neisseria meningitidis* and *Moraxella catarrhalis* in healthy children. DOI:[10.1016/j.nmni.2020.100691](https://doi.org/10.1016/j.nmni.2020.100691).
41. Antimicrobial resistance in *Clostridioides* (*Clostridium*) *difficile* derived from humans: A systematic review and meta-analysis. DOI:[10.1186/s13756-020-00815-5](https://doi.org/10.1186/s13756-020-00815-5).
42. Sub-minimum inhibitory concentrations of biocides induced biofilm formation in *Pseudomonas aeruginosa*. DOI:[10.1016/j.nmni.2020.100794](https://doi.org/10.1016/j.nmni.2020.100794).
43. Virulence-associated genes and toxin-antitoxin system genes of *Shigella flexneri*: Presence and expression in normal and thermal stress conditions. DOI:[10.1016/j.mgene.2020.100825](https://doi.org/10.1016/j.mgene.2020.100825).

Published paper in 2021

44. Antisense *mqsR* – PNA as a putative target to the eradication of *Pseudomonas aeruginosa* persisters. DOI:[10.1016/j.nmni.2021.100868](https://doi.org/10.1016/j.nmni.2021.100868).
45. Persister cells as a possible cause of antibiotic therapy failure in *Helicobacter pylori*. DOI:[10.1002/jgh3.12527](https://doi.org/10.1002/jgh3.12527).
46. The prevalence of shiga toxin-1 in non-shigella dysenteriae isolates collected from diarrhea samples in patients, ahvaz, iran. DOI : [10.2174/1871526520666201207122924](https://doi.org/10.2174/1871526520666201207122924)
47. Pathogenic bacteria in cheese, raw and pasteurised milk. DOI: [10.1002/vms3.604](https://doi.org/10.1002/vms3.604)

Published paper in 2022

48. The Effectiveness of Laboratory Parameters in Predicting the in-Hospital Mortality of Iranian Patients with Coronavirus Disease 2019 (COVID-19). DOI: [10.7416/ai.2022.2475](https://doi.org/10.7416/ai.2022.2475)
49. Antimicrobial resistance in *Vibrio cholerae* O1/O139 clinical isolates: a systematic review and meta-analysis. DOI: [10.1080/14787210.2022.2098114](https://doi.org/10.1080/14787210.2022.2098114)
50. TYPE II TOXIN- ANTITOXIN SYSTEMS IN CLINICAL ISOLATES OF ANTIBIOTIC RESISTANT *Acinetobacter baumannii*. DOI: [10.2298/GENSR2202625N](https://doi.org/10.2298/GENSR2202625N)
51. Novel Antimicrobial Target in *Acinetobacter Baumannii*. DOI: [10.7754/Clin.Lab.2021.210728](https://doi.org/10.7754/Clin.Lab.2021.210728)
52. Controlling the Heterogeneous Vancomycin Intermediated *Staphylococcus aureus* (hVISA) Through the Use of *Rosmarinus officinalis* L. Leaves Extract. DOI: [10.33640/2405-609X.3264](https://doi.org/10.33640/2405-609X.3264).
53. Survey on phenotypic resistance in *Enterococcus faecalis*: comparison between the expression of biofilm-associated genes in *Enterococcus faecalis* persister and non-persister cells. DOI: [10.1007/s11033-021-06915-8](https://doi.org/10.1007/s11033-021-06915-8)
54. In Vitro and In Silico Investigation of some Type II TA Genes in *H. Pylori*. DOI: [10.7754/Clin.Lab.2021.211002](https://doi.org/10.7754/Clin.Lab.2021.211002)
55. *relBE* toxin-antitoxin system as a reliable anti-biofilm target in *Pseudomonas aeruginosa*. DOI: [10.1111/jam.15585](https://doi.org/10.1111/jam.15585)
56. The novel putative target to the eradication of *Acinetobacter baumannii* persister cells. DOI: [10.1016/j.genrep.2022.101647](https://doi.org/10.1016/j.genrep.2022.101647)
57. Molecular typing and antibiotic resistance patterns among clinical isolates of *Acinetobacter baumannii* recovered from burn patients in Tehran, Iran. DOI: [10.3389/fmicb.2022.994303](https://doi.org/10.3389/fmicb.2022.994303)
58. Global status of antimicrobial resistance among environmental isolates of *Vibrio cholerae* O1/O139: a systematic review and meta-analysis. DOI: [10.1186/s13756-022-01100-3](https://doi.org/10.1186/s13756-022-01100-3)
59. The resistance mechanisms of bacteria against ciprofloxacin and new approaches for enhancing the efficacy of this antibiotic. DOI: [10.3389/fpubh.2022.102563](https://doi.org/10.3389/fpubh.2022.102563)

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60. Global Estimate of Clarithromycin Resistance in Clinical Isolates of *Helicobacter pylori*: a Systematic Review and Meta-Analysis. [DOI: 10.7754/Clin.Lab.2022.221032](https://doi.org/10.7754/Clin.Lab.2022.221032)
61. Trends in the Antibiotic Resistance of Non-Tuberculous Mycobacteria in Iran: A Systematic Review and Meta-Analysis.
62. Antimicrobial resistance and biofilm formation capacity among *Acinetobacter baumannii* strains isolated from patients with burns and ventilator-associated pneumonia. [DOI: 10.1002/jcla.24814](https://doi.org/10.1002/jcla.24814)
63. Antimicrobial resistance among clinical *Vibrio cholerae* non-O1/non-O139 isolates: systematic review and meta-analysis: Systematic Review and Meta-analysis. [DOI: 10.1080/20477724.2022.2114620](https://doi.org/10.1080/20477724.2022.2114620)
64. Evaluation of *Rosmarinus officinalis* Leaves Essential Oils Activity Against Vancomycin Intermediate *Staphylococcus aureus* (VISA) Isolated from Baghdad Hospital Patients. [DOI: 10.24996/ij.2023.64.5.5](https://doi.org/10.24996/ij.2023.64.5.5)
65. Molecular characterizations of antibiotic resistance, biofilm formation, and virulence determinants of *Pseudomonas aeruginosa* isolated from burn wound infection. [DOI: 10.1002/jcla.24850](https://doi.org/10.1002/jcla.24850)
66. Effect of ZnO nanoparticles on biofilm formation and gene expression of the toxin-antitoxin system in clinical isolates of *Pseudomonas aeruginosa*. [DOI: 10.1186/s12941-023-00639-2](https://doi.org/10.1186/s12941-023-00639-2)

Published paper in 2024

67. Investigating the Effectiveness of *mqsR*-Peptide Nucleic Acid as a Novel Solution for the Eradication of Persister Cells in Clinical Isolates of *Escherichia coli*. [DOI: 10.7754/Clin.Lab.2023.230406](https://doi.org/10.7754/Clin.Lab.2023.230406)
68. ERADICATION OF HETEROGENEOUS VANCOMYCIN INTERMEDIATED *STAPHYLOCOCCUS AUREUS* (hVISA) USING *PEGANUM HARMALA* L. SEEDS EXTRACTS. [DOI: 10.36103/fg0kcs57](https://doi.org/10.36103/fg0kcs57)
69. ANTIBACTERIAL ACTIVITY OF *TAMARIX APHYLLA* L. LEAVES EXTRACT ON HETEROGENEOUS VANCOMYCIN INTERMEDIATED *STAPHYLOCOCCUS AUREUS* (hVISA). [DOI: 10.36103/hwm37e61](https://doi.org/10.36103/hwm37e61)
70. Epidemiology of first- and second-line drugs-resistant pulmonary tuberculosis in Iran: Systematic review and meta-analysis. [DOI: 10.1016/j.jctube.2024.100430](https://doi.org/10.1016/j.jctube.2024.100430)
71. Effects of non-tuberculous mycobacteria on BCG vaccine efficacy: A narrative review. [DOI: 10.1016/j.jctube.2024.100451](https://doi.org/10.1016/j.jctube.2024.100451)
72. Mixed oral biofilms are controlled by the interspecies interactions of *Fusobacterium nucleatum*. [DOI: 10.1111/odi.14822](https://doi.org/10.1111/odi.14822)

Published paper in 2025

73. Antimicrobial Resistance of Environmental *V. cholerae* Non-O1/O139 Isolates: Systematic Review and Meta-analysis. [DOI: 10.2174/0118715265294870241002091842](https://doi.org/10.2174/0118715265294870241002091842)
74. Injectable hydrogel and its potential therapy for peri-implantitis. [DOI: 10.1080/00914037.2025.2543363](https://doi.org/10.1080/00914037.2025.2543363)
75. Investigation of antimicrobial and anti-adherent properties of fabricated cobalt–chromium alloy modified with TiO₂ coating. [DOI: 10.1016/j.rsufi.2025.100530](https://doi.org/10.1016/j.rsufi.2025.100530)

76. Systematic review and meta-analysis of colistin heteroresistance in *Klebsiella pneumoniae* isolates. [DOI: 10.1186/s12879-025-10600-7](https://doi.org/10.1186/s12879-025-10600-7)