

# IN THE NAME OF GOD

## Scientific Curriculum Vitae *Ebrahim Kouhsari*



### Personal Data

**Last Name: First Name:** Ebrahim Kouhsari  
**Birth:** January 28, 1987, Azadshahr, Golestan, Iran.  
**Position:** Ph. D in Medical Bacteriology  
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**Language:** Persian, English: Upper Intermediate (MCHE: 58/100) (Internal exam)

### Education

- B.Sc. in microbiology, Azad university branch of Gorgan, Gorgan, Iran, 2005-2009.
- MSc in Medical Mycology, Tehran University of Medical Sciences, Tehran, Iran, 2011-2013.
- PhD in Medical Bacteriology, Iran University of Medical Sciences, Tehran, Iran, 2013-2018.

### Teaching Experiences

- Iran University of Medical Sciences; Teaching Practical Laboratory of Microbiology for Nursing, Midwifery and Medicine students, 2013-2014.
- Iran University of Medical Sciences; Teaching Practical Laboratory of Microbiology for Optometry students, 2015-2016.
- Iran University of Medical Sciences; Teaching Microbiology for Optometry students, 2015-2016.
- Ilam University of Medical Sciences; Medical bacteriology for lab sciences students, 2019-2020.
- Ilam University of Medical Sciences; Laboratory quality control (QC) for lab sciences students, 2019-2020.
- Ilam University of Medical Sciences; Medical bacteriology for Dentistry students, 2019-2020.

## **Research Projects (up to now)**

1. Molecular analysis of dominant bacterial flora of the gut microbiota in people with inflammatory bowel disease (IBD) compared with healthy subjects in GOUMS 2019.
2. The prevalence and impact of *Clostridium difficile* infection in patients with IBD and it's relation with relapsing IBD in GOUMS 2019.
3. Resistome analysis of *Helicobacter pylori* strains isolated from gastric biopsy samples in Shahid Sayyad Shirazi Hospital, Gorgan, 2019.
4. Evaluation of effectiveness of probiotics and vitamin D as a supplementation drugs for remission in Patients IBD
5. Evaluation of variation in antibiotic resistance genes associated with different classes of integrons in clinical Acinetobacter baumannii strains isolated from different cities in Iran
6. Evaluation of enterotoxigenic *Bacteroides fragilis* strains producing *bft* gene by molecular method in clinical samples of patients in Tehran hospitals.2011
7. Prevalence of hepatitis B occult in intravenous drug users referred to Addiction Treatment Centers in Gorgan city.2011
8. Molecular and Typing Analysis of Toxigenic *Clostridium difficile* obtained from Patients Suspected of CDI, Staff and Environment in IUMS Hospitals.2015
9. The Study of Antifungal activities of *Bifidobacterium bifidum* PTCC 1644 and *Lactobacillus frementum* PTCC 1744 Standard Strains on mould growth and inhibition of aflatoxin-producing of toxigenic *Aspergillus parasiticus*, 2012
10. The Study of phenotypic and genotypic common bacteria found in Diabetic foot ulcers of patients and determining the pattern of antimicrobial resistance.2016

## Publications

### ❖ Published or accepted Papers (up to now)

1. Sedighi M, Zahedi Bialvaei A, Hamblin MR, Ohadi E, Asadi A, Halajzadeh M, Lohrasbi V, Mohammadzadeh N, Amiriani T, Krutova M, Amini A. Therapeutic bacteria to combat cancer; current advances, challenges, and opportunities. *Cancer Medicine*. 2019 Jun;8(6):3167-81.
2. Azizian K, Pustokhina I, Ghanavati R, Hamblin MR, Amini A, Kouhsari E. The potential use of theranostic bacteria in cancer. *Journal of Cellular Physiology*. 2020 Nov 10.
3. Sholeh M, Maleki F, Krutova M, Bavari S, Golmoradi R, Sadeghifard N, Amiriani T, Kouhsari E. The increasing antimicrobial resistance of *Helicobacter pylori* in Iran: A systematic review and meta-analysis. *Helicobacter*. 2020 Oct;25(5):e12730.
4. Sholeh M, Krutova M, Forouzesh M, Mironov S, Sadeghifard N, Molaeipour L, Maleki A, Kouhsari E. Antimicrobial resistance in *Clostridioides* (*Clostridium*) difficile derived from humans: a systematic review and meta-analysis. *Antimicrobial Resistance & Infection Control*. 2020 Dec;9(1):1-1.
5. Tigecycline Antibacterial Activity, Clinical Effectiveness and Mechanisms and Epidemiology of Resistance: Narrative Review, EK ET AL. *European Journal of Clinical Microbiology and Infectious Disease*, 2021.
6. Kouhsari E, Azizian K, Sholeh M, Shayestehpour M, Hashemian M, Karamollahi S, Yaghoubi S, Sadeghifard N. Clinical, epidemiological, laboratory, and radiological characteristics of novel Coronavirus (2019-nCoV) in retrospective studies: A systemic review and meta-analysis. *Indian Journal of Medical Microbiology*. 2020 Nov 16.
7. Khoshnood S, Heidary M, Hashemi A, Shahi F, Saki M, Kouhsari E, Eslami G, Goudarzi H. Involvement of the AcrAB efflux pump in ciprofloxacin resistance in clinical *Klebsiella pneumoniae* isolates. *Infectious Disorders Drug Targets*. 2020 Sep 5.
8. Ohadi E, Lotfali E, Ahmadi A, Ghafouri Z. Microbiological Detoxification of Mycotoxins: Focus on Mechanisms and Advances. *Infectious Disorders-Drug Targets*. 2020;20:1-9.
9. Characteristics of *Clostridioides difficile* colonization in Ilamian children. M. Sayyadi, E. Kouhsari, G. Kalvandi, H. Kazemian, Z. Ghafouri. *Annali di igiene : medicina preventiva e di comunit*, 2020.
10. Moradkasani S, Jazi FM, Sadeghifard N, Kouhsari E, Kalani BS, Pakzad I. Multiple-Locus Variable-Number Tandem-Repeat Analysis Genotyping of *Brucella* Isolates from Iran. *Clinical laboratory*. 2020 Oct 1;66(10):1979-86.
11. Haddadi MH, Mahdian S, Gheysarzadeh A, Khosravi M, Abangah G, Maleki A, Kouhsari E, Sadeghifard N. The *cagA* EPIYA Motifs and *vacA* Genotypes in Upper Gastrointestinal Diseases. *Molecular Genetics, Microbiology and Virology*. 2020 Apr;35(2):105-11.
12. Kouhsari E, Mehr SH, Sholeh M. Comments on the published systematic review and meta-analysis on the increasing antibiotic resistance in *Clostridioides difficile*. *Anaerobe*. 2020;61.
13. Hemati S, Kouhsari E, Sadeghifard N, Maleki A, Omidi N, Mahdavi Z, Pakzad I. Sub-minimum inhibitory concentrations of biocides induced biofilm formation in *Pseudomonas aeruginosa*. *New Microbes and New Infections*. 2020 Nov 1;38:100794.

14. Mahdian N, Kouhsari E, Gheysarzadeh A, Maleki A, Valadbeigi H, Sadeghifard N. The Prevalence of Shiga toxin-1 in non-Shigella dysenteriae isolates collected from diarrhea samples in patients, Ahvaz, Iran. *Infectious Disorders Drug Targets*. 2020 Dec 7.
15. Clonal lineage analysis of *Shigella flexneri* isolates circulating in Ahvaz, Iran. Maryam Karkoub, Ebrahim Kouhsari, Soheila Khaghani, Clinical laboratory, 2020.
16. Neutrophil-to-Lymphocyte ratio as a poor prognostic factor in Iranian COVID-19 patients, Clinical laboratory, 2020.
17. Atashzar MR, Hamblin MR, Maleki F, Kouhsari E. Tumor cryotherapy using Ice-producing bacteria. *Medical hypotheses*. 2020 Nov 1;144:110101.
18. Roshandel G, Amini A, Amiriani T, Maleki F, Aghchelli B, Ahmadnia A, Panahi P, Ghafouri Z, Sholeh M, Kouhsari E. Esophageal cancer crisis in Golestan province, Iran; focus on risk factors: Back to future. *Govaresh*. 2020 Jul 12;25(2):112-40.
19. Soleimani M, Salehi Z, Fattahi A, Lotfali E, Yassin Z, Ghasemi R, Abedinifar Z, Kouhsari E, Ahmadkhani F, Mirkalantari S. Ocular Fungi: Molecular Identification and Antifungal Susceptibility Pattern to Azoles. *Jundishapur Journal of Microbiology*. 2020 Mar 1;13(3).
20. Zaini F, Lotfali E, Fattahi A, Siddig E, Farahyar S, Kouhsari E, Saffari M. Voriconazole resistance genes in *Aspergillus flavus* clinical isolates. *Journal de Mycologie Médicale*. 2020 Mar 26:100953.
21. Tajik S, Shokri F, Rostamnezhad M, Khoshnood S, Mortazavi SM, Sholeh M, Kouhsari E. Fosfomycin: A look at its various aspects. *Gene Reports*. 2020 Mar 5:100640.
22. Ghafouri Z, Seyyedian S, Nikbakht J, Kouhsari E, Bayat S, Zargar H, Houshmand G. Correction: Effect of Sodium Cromoglycate on Acetic Acid-induced Ulcerative Colitis in Mice. *The Korean Journal of Gastroenterology*. 2020 Feb 1;75(2):115-.
23. Kouhsari E, Douraghi M, Krutova M, Yaseri HF, Talebi M, Baseri Z, Moqarabzadeh V, Sholeh M, Amirmozafari N. The emergence of metronidazole and vancomycin reduced susceptibility in *Clostridium difficile* isolates in Iran. *Journal of global antimicrobial resistance*. 2019 Sep 1;18:28-33.
24. Maleki A, Zamirnasta M, Taherikalani M, Pakzad I, Mohammadi J, Krutova M, Kouhsari E, Sadeghifard N. The characterization of bacterial communities of oropharynx microbiota in healthy children by combining culture techniques and sequencing of the 16S rRNA gene. *Microbial Pathogenesis*. 2020 Mar 3:104115.
25. Kouhsari E, Douraghi M, Fakhre Yaseri H, Talebi M, Ahmadi A, Sholeh M, Amirmozafari N. Molecular typing of *Clostridioides difficile* isolates from clinical and non-clinical samples in Iran. *Apmis*. 2019 Apr;127(4):222-7.
26. Kouhsari E, Mohammadzadeh N, Kashanizadeh MG, Saghafi MM, Hallajzadeh M, Fattahi A, Ahmadi A, Niknejad F, Ghafouri Z, Asadi A, Boujary Nasrabad MR. Antimicrobial resistance, prevalence of resistance genes, and molecular characterization in intestinal *Bacteroides fragilis* group isolates. *Apmis*. 2019 Jun;127(6):454-61.
27. Asadi A, Abdi M, Kouhsari E, Panahi P, Sholeh M, Sadeghifard N, Amiriani T, Ahmadi A, Maleki A, Gholami M. Minocycline, Focused on mechanisms of resistance, antibacterial activity, and clinical effectiveness; Back to Future. *Journal of Global Antimicrobial Resistance*. 2020 Feb 12.
28. Maleki A, Mansournia F, Ghafourian S, Taherikalani M, Pakzad I, Mohammadi J, Kouhsari E, Mahmoudi M, Sadeghifard N. Rapid and direct molecular detection of *Streptococcus pneumoniae* and

- Haemophilus influenzae isolated in oropharynx and nasal cavity of children. *New Microbes and New Infections*. 2020 Jan 1;33:100632.
29. Jahromy SH, Rahbar M, Bialvaei AZ, Asadi A, Jahromy SH, Eslami P, Mardani M, Kouhsari E. Prevalence of fosfomycin resistance genes and antimicrobial susceptibility of clinical urinary extended-spectrum beta-lactamase-producing *Escherichia coli* and *Klebsiella pneumoniae* isolates. *Reviews in Medical Microbiology*. 2020 Apr 1;31(2):86-91.
30. Maleki A, Mirnaseri Z, Kouhsari E, Taherikalani M, Pakzad I, Mohammadi J, Sadeghifard N. Asymptomatic carriers of *Neisseria meningitidis* and *Moraxella catarrhalis* in healthy children. *New Microbes and New Infections*. 2020 May 8;100691.
31. Alhusseini LB, Maleki A, Kouhsari E, Ghafourian S, Mahmoudi M, Al Marjani MF. Evaluation of type II toxin-antitoxin systems, antibiotic resistance, and biofilm production in clinical MDR *Pseudomonas aeruginosa* isolates in Iraq. *Gene Reports*. 2019 Dec 1;17:100546.
32. Al Marjani MF, Kouhsari E, Ali FS, Authman SH. Evaluation of type II toxin-antitoxin systems, antibiotic resistance profiles, and biofilm quorum sensing genes in *Acinetobacter baumannii* isolates in Iraq. *Infectious disorders drug targets*. 2020 May 25.
33. Persistence of Coronavirus: a new paradigm of COVID-19 management, EK L.B. Alhusseini, L.T.Yassen *Annali di Igiene, Medicina Preventiva e di Comunità*, 2021.
34. Maleki A, Moslem MS, Kouhsari E, Pakzad I, Ghafari Z, Khaghani S, Sadeghifard N. Virulence-associated genes and toxin-antitoxin system genes of *Shigella flexneri*: Presence and expression in normal and thermal stress conditions. *Meta Gene*;27:100825.
35. Valadbeigi H, HatamiLak M, Maleki A, Kouhsari E, Sadeghifard N. Molecular characteristics, antimicrobial resistance profiles, and antibiotic resistance determinants in uropathogenic fluoroquinolone resistant-*Escherichia coli* isolates. *Gene Reports*. 2020 Mar 1;18:100584.
36. Moradkasani S, Kouhsari E, Jazi FM, Kalani BS, Pakzad I. Evaluation of putative toxin-antitoxins systems in clinical *Brucella melitensis* in Iran. *Infectious disorders drug targets*. 2020 Jan 16.
37. Mina Aghamali, Mansour Sedighi, Sara Abbasian, Ebrahim Kouhsari\*. "Fosfomycin: mechanisms and the increasing prevalence of resistance". *Journal of Medical Microbiology*; 2018: 1-15.
38. Mehrdad Gholami et al., The diversity of class B and class D carbapenemases in clinical *Acinetobacter baumannii* isolates, *Le Infezioni in Medicina*, n. 4, 329-335, 2018.
39. Abbas Zare, Ebrahim Kouhsari, Nour Amirmozafari, Maryam Roudbary, and Mohammad R. Boujary Nasrabadi. "Antibacterial, antifungal and cytotoxic activities of some medicinal plants against multidrug resistance pathogens." *Reviews in Medical Microbiology* 29, no. 4 (2018): 182-188.
40. Kouhsari, Ebrahim, et al. "Clostridium difficile infection: a review." *Reviews in Medical Microbiology* 29.3 (2018): 103-109.
41. Kouhsari, Ebrahim, et al. "A review on common laboratory methods for detection of carbapenemase Gram-negative bacilli." *Razi Journal of Medical Sciences* 24.165 (2018): 47-65.
42. Bialvaei AZ, Ebrahim Kouhsari, Salehi-Abargouei A, Amirmozafari N, Ramazanzadeh R, Ghadimi-Daresajini A, Sedighi M. Epidemiology of multidrug-resistant *Acinetobacter baumannii* strains in Iran: a systematic review and meta-analysis. *Journal of Chemotherapy*. 2017 Jun 17:1-1.

43. Mitra Gholami, Rashin Mohammadi, Mohsen Arzanlou, Fakhraddin Akbari Dourbush, Ebrahim Kouhsari, Gharib Majidi, Seyed Mohsen Mohseni and Shahram Nazari. In vitro antibacterial activity of poly (amidoamine)-G7 dendrimer. *BMC Infectious Diseases* (2017) 17:395.
44. Ebrahim Kouhsari, Ghadimi-Daresajini A, Abdollahi H, Amirmozafari N, Mahdavi SR, Abbasian S, Mousavi SH, Yaseri HF, Moghaderi M. The potential roles of bacteria to improve radiation treatment outcome. *Clinical and Translational Oncology*. 2017;1-3.
45. RD Ghazvini, Ebrahim Kouhsari, F Niknejad, E Zibafar, SJ Hashemi. Evaluation of antifungal activities of Bifidobacterium bifidum And Lactobacillus fermentum against toxigenic Aspergillus parasiticus - *The Open Microbiology Journal*, 2016, 10, 1-5.
46. Shahram Nazari; Mahdi Farzadkia; Ebrahim Kouhsari; Fakhraddin Akbari Dourbush Akbari Dourbush; Soudabeh Alizadeh Matboo.Nano Polyamidoamine-G7 (NPAMAM-G7) Dendrimer Synthesis and Assessment the impact of its antibacterial on Pseudomonas Aeruginosa, Klebsiella Oxytoca, Shigella Dysenteriae, Staphylococcus Aureus and Bacillus Subtilis in vitro , *Razi Journal of Medical Sciences*, 2016. Vol. 23, No. 150.
47. Ali Raefi , Saba Amiri Kojouri,Mohammad hasan Rjabi,Ebrahim naghi pour, Soleiman mokarrari, Nasim arab sarhadi, Ebrahim Kouhsari\* . The study of prevalence and antimicrobial susceptibility of bacterial isolated from urinary tract in hospitalized patients of Shohda hospital, Gonbad, *Navidno journal* (Mashhad University of Medical Sciences),2016, 10;16. 41-48.
48. RD Ghazvini, Ebrahim Kouhsari, F Niknejad, E Zibafar, SJ Hashemi. Evaluation of antifungal activities of Bifidobacterium bifidum And Lactobacillus fermentum against toxigenic Aspergillus parasiticus - *Tropical Medicine and International Health*, volume 20 suppl 1 pp 171–441 september 2015.
49. Mansour Sedighi, Mohsen Moghoofei, Ebrahim Kouhsari, Abazar Pournajaf. In silico analysis and molecular modeling of RNA polymerase, sigma S (RpoS) protein in Pseudomonas aeruginosa PAO1- *Reports of Biochemistry & Molecular Biology*,2015.
50. Amini, A. and Asghar Ayatollahi, A. and Ghaemi, E.A. and Rahimi, S. and Koohsar, F. and Kazemi, R., Ebrahim Kouhsari. and Roustaei, M. Comparison of ferment sugars, produce hemolysis and measuring growth in methicillin-resistant and methicillin-sensitive Staphylococcus aureus isolates from inpatients and healthcare workers in Gorgan Hospitals, North of Iran, *BIOSCIENCES BIOTECHNOLOGY RESEARCH ASIA*, 2013, Vol. 10(1), 77-84.

## Scientific Activities

Member of the Exceptional Talent Development Center (ETDC), Tehran University of medical sciences, 2011-2013.

Ranked second master's exam the Ministry of Health, 2011 in medical mycology.

## Attendance in Workshops and courses

- Scientific writing
- Peer review and Critical Appraisal

- Evidence based medicine
- Endnote
- Curriculum Development and Educational Programming
- The introduction of molecular methods PCR
- Protocol Isolation, culture and molecular methods on anaerobic bacteria particularly *Clostridium difficile*

### Attendance in congress and seminar:

- THE 2nd IRANIAN CONGRESS OF MEDICAL BACTERIOLOGY, Tehran, Iran
- 3rd congress medical mycology iran, Tehran, Iran

### **Laboratory Skills**

*Mostly Expert in*

- Molecular typing of bacteria
- Primer and probe designing for molecular methods
- Culture and isolation of anaerobic bacteria infectious agents
- Culture, detection and antibiogram of *clostridium difficile*
- DNA extraction

### **Research Interests**

- Molecular epidemiology of nosocomial infections especially anaerobic bacteria by phenotypical and molecular methods
- Nosocomial infection (anaerobic bacteria)