

CV

Dr. Mohammad
Mohammadzadeh

In the name of God

Personal Information

First Name: Mohammad

Last Name: Mohammadzadeh Shamsaldini

Date of Birth: 1984

Marriage status: married

Nationality: Iranian

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Qualifications

Ph.D : Medical Bacteriology, Shahid Beheshti University of Medical sciences 2011-2016.

MS.c: Medical microbiology, Pasteur Institute of Iran 2009-2011.

BS.c: Microbiology, Karaj Azad University 2004-2008.

Thesis

Ph.D: Evaluation of genetic diversity of *Escherichia coli* pathotypes among *Escherichia coli* isolates from Tehran selected hospitals by RAPD-PCR

MS.c: Evaluation of genetic make up of LEE (Locus of enterocyte effacing): pathogenicity in Enteropathogenic *E.coli* isolates: investigation on presence of effector molecules encoded by LEE

Work experiences

1- Board of Directors of the Scientific Society of Microbiology of Karaj Azad University 2005-2007.

2- Working in Clinical Diagnostic Laboratory of Omid Hospital, Tehran, Iran 2007-2008.

3- Working in Clinical Diagnostic Laboratory of Emam Hosein Hospital, Tehran, Iran 2008-2013.

4- Working in Clinical Diagnostic Laboratory of Taleghani Hospital, Tehran, Iran 2013-2015.

5- Working in Clinical Diagnostic Laboratory of Modarres Hospital, Tehran, Iran 2015-2017.

6- Head of Diagnostic Laboratory of Ariateb clinic, Varamin, Iran 2011-2017.

7- Faculty of Science, Department of Microbiology, Alborz University of Medical Sciences, Alborz, Iran from 2017

Research Projects

1- Identifying pathogenicity Islands encoding genes, antimicrobial resistance and molecular typing of Uropathogenic *Escherichia coli*

isolates of kidney recipient patients admitted to Tehran selected hospitals

2- Evaluation of genetic diversity of *Escherichia coli* pathotypes among *Escherichia coli* isolates from Tehran selected hospitals by RAPD-PCR

3- Evaluation of the genetic makeup of LEE (Locus of interest effacing): pathogenicity in Enteropathogenic *E.coli* isolates: investigation on the presence of effector molecules encoded by LEE

4- Prevalence of Metallo- β -lactamases among imipenem-resistant gram negative isolates from selected hospitals of Karaj

5- Identification of *Campylobacter jejuni* and *Campylobacter coli* in Animal husbandry staffs by multiplex PCR

6- Evaluation of *Lactobacillus* species in healthy women and women with vaginitis

7- Investigating of the effect of Curcumin on the expression of *gacA* and *retS* genes in *Pseudomonas aeruginosa*

8- HTLV-1-associated myelopathy/tropical spastic paraparesis (HAM/TSP) versus Adult T-Cell Leukemia/Lymphoma (ATLL), A systems virology study

9- Frequency and comparison of Lactobacillaceae family (*Lactobacillus acidophilus* and *Lactobacillus plantarum*) in patients with glioma and healthy individuals by molecular method

10- Molecular Epidemiology Pattern of HTLV-1/2 Virus in Specimens of Alborz Blood Transfusion Organization

11- The sub-inhibitory effect of azithromycin and ciprofloxacin on virF gene expression in Enteroinvasive *Escherichia coli* and *Shigella Flexneri*

12- Investigation of the effect of Adherent-invasive *Escherichia coli* colonization on the incidence of coronary artery atherosclerosis

Congress presentations

- 1- The 3rd congress of clinical Microbiology, Shiraz, Iran 2011.
- 2- The 11th congress of Microbiology, Langrud, Iran 2012.
- 3- The 12th congress of Microbiology, Kermanshah, Iran 2013.
- 4- The 9th congress of clinical Microbiology, Shiraz, Iran 2015.

Thesis supervisions and advisements

- 1- Identification of *Campylobacter jejuni* and *Campylobacter coli* in Animal husbandry staffs by multiplex PCR, Alborz University of Medical Sciences.
- 2- Evaluation of *Lactobacillus* species in healthy women and women with vaginitis, Alborz University of Medical Sciences.
- 3- Analysis of relative expression of *sufu* and *gli* genes in hedgehog signaling pathway in prostate cancer patients

4- Evaluation of gene expression variations controlling biofilm formation in *Pseudomonas aeruginosa*

5-Investigating of the effect of Curcumin on the expression of *gacA* and *retS* genes in *Pseudomonas aeruginosa*

6- Sub-inhibitory effect of Ciprofloxacin and Azithromycin on expression of *virF* gene of *Shigella flexnery* and Enteroinvasive *Escherichia coli*

7- Evaluating Bacterial Contamination of Water Supply in Dental Units at Alborz University of Medical Science Using Microbial Culture and Colony Count in 2019

8- Distribution of pathogenicity islands in Uropathogenic *Escherichia coli* isolated from urine of patients admitted to Shahid Modarres Hospital in 2015, Shahed University.

9- Effect of specific peptide antisense on *gyrA* gene expression in *staphylococcus aureus*, Shahid Beheshti University of Medical Sciences.

10- Investigation of the effect of Adherent-invasive *Escherichia coli* colonization on the incidence of coronary artery atherosclerosis

Publications

1- Prevalence of Metallo- β -lactamase among imipenem-resistant *Acinetobacter spp* isolated from selected hospitals in Karaj

- 2- Genetic evaluation of Locus of enterocyte effacement pathogenicity island (LEE) in Enteropathogenic *Escherichia coli* isolates (EPEC)
- 3- Distribution of Enterotoxigenic *Escherichia coli* among *E.coli* isolates from diarrheal samples referred to educational hospitals in Tehran-Iran.
- 4- Molecular detection of lactose fermenting Enteroinvasive *Escherichia coli* from patients with diarrhea in Tehran-Iran
- 5- Phenotypic and genotypic detection of Metallo-Beta-Lactamases among imipenem-resistant gram negative isolates
- 6- Frequency of Enteroaggregative *Escherichia coli* isolates from diarrheal patients referred to Tehran hospitals
- 7- Characterization of Enteropathogenic *Escherichia coli* associated with diarrhea among Iranian Infants
- 8- Prevalence and molecular distribution of *Legionella pneumophila* in cold water taps across Alborz province, Iran.
- 9- Genetic diversity and antibiotic susceptibility of uropathogenic *Escherichia coli* isolates from kidney transplant recipients

10- Inhibition of growth and gene expression in *Staphylococcus aureus* by anti-gyrA peptide nucleic acid

11- Investigating the Effect of Nano-Curcumin on the Expression of Biofilm Regulatory Genes of *Pseudomonas aeruginosa*

12- Distribution of Pathogenicity islands among Uropathogenic *Escherichia coli* isolates from patients with Urinary tract infections

13- Contamination of Water Sources of Karaj Hospitals with *Legionella pneumophila* and *Campylobacter jejuni*

Executives

1- Educational assistant director of the Department of Microbiology, Alborz University of Medical Sciences 2017-2021

2- Head of Evaluation Committee of Education Development Organization, Alborz University of Medical Sciences 2017-2019

3- Director of Educational Affairs of School of medicine, Alborz university of Medical Sciences from 2021

4- Head of the Self-Evaluation and Accreditation Committee of School of medicine, Alborz university of Medical Sciences from 2021

Skills and expertise

1. Molecular biology techniques (PCR, electrophoresis, PFGE, RAPD, RFLP, SDS PAGE, Realtime PCR, Cloning, ...)
2. Immunologic tests (ELISA, Blotting methods, ...)
3. Bioinformatics (Gel compare, Primer designing, Gene submitting, ...)
4. Computer skills (SPSS, Office, Endnote, ...)
5. Clinical lab experiments (Hematology, Biochemistry, Parasitology, Blood bank,...)