

Curriculum Vitae

Last name: Fatahi-Bafghi

First name: Mehdi

Date of birth: 1985/9/23

Place of birth: Bafgh - Yazd –Iran

Nationality: Iranian

Email address: mehdifatahi371@gmail.com /mehdifatahi@ssu.ac.ir

EDUCATION

Dates

University/Grade

2015: Ph.D in medical bacteriology/Tehran University of Medical Sciences, School of public health.

2011: M.Sc. in Medical Microbiology/Isfahan University of Medical Sciences.

2008: B.Sc in Medical Laboratory Sciences/Ahvaz Jundishapur University of Medical Sciences.

RESEARCH ACTIVITY (Publication)

Fatahi-Bafghi M, Zandi H. Whole-Genome Sequencing in Food-borne Pathogenic Bacteria. Journal of food quality and hazards control. 2021; 8: 94-95

Fatahi-Bafghi M, Naseri S, Alizehi A. Genome analysis of probiotic bacteria for antibiotic resistance genes. Antonie van Leeuwenhoek. 2022;1-15. (Corresponding author)

Riahi H S, Heidarieh P, **Fatahi-Bafghi M**. Genus *Pseudonocardia*: What we know about its biological properties, abilities and current application in biotechnology. Journal of Applied Microbiology. doi.org/10.1111/jam.15271. (Corresponding author)

Fatahi-Bafghi M. Nocardiosis from 1888 to 2017. Microbial Pathogenesis. 2018; 114: 369–384.(Corresponding author)

Majidzadeh M, Heidarieh P, **Fatahi-Bafghi M**, Vakili M. Antimicrobial activity of Actinobacteria isolated from dry land soil in Yazd, Iran. Mol Biol Rep. 2021;48(2):1717-23. (Corresponding author)

Saghafi F, Mirzaie F, Gorji E, Nabi meybodi R, **Fattahi M**, Mahmoodian H, Zareshahi R. 2021. Antibacterial and anti-Trichomonas Vaginalis effects of Rosa Damascena mill petal oil (a persian medicine product), aqueous and hydroalcoholic extracts. BMC Complementary Medicine and Therapies. 2021; 21(1): p. 1-10.

Rashidi Ashjerdi, P, Zabihi M, Ranjbar Am, Hekmatimoghaddam S, **Fatahi Bafghi M**, Healing effects of Solanum nigrum fruit extract on second-degree burn wounds and its antibacterial activity against common pathogens of burn infection. Adv Pharmacol Ther J. 2021; 1(1): p. 1-12.

Fazeli H, Faghri J, Kabiri P, **Fatahi Bafghi M**, Arabestani MR. Identification of Beta-Lactamase-producing *Pseudomonas aeruginosa* with multiple antibiotic resistances. J Isfahan Med Sch. 2011;29(154).

FazeliH, **Fatahi Bafghi M**, Faghri J, Akbari R. Molecular study of PER and VEB genes in MDR strains of *Pseudomonas aeruginosa* in different clinical samples. J Kerman Univ Med Sci, 2012; 19(4): 345-353.(Corresponding authors)

Fatahi Bafghi M, Soori T, Heidarieh P, Rasouli-Nasab M, Habibnia SH, Eshraghi SS. Isolation and phenotypic identification of *Nocardia nova* complex of breast abscess in a patient with pemphigus vulgaris: the first report from Iran. Iran J Breast Dis. 2012;5(2-3):44-9.

Fatahi Bafghi M, Eshraghi SS, Rasouli-Nasab M, Habibnia SH, Heidarieh P. A comparative study on different *Nocardia* isolation techniques: Letter to the Editor. J Isfahan Med Sch. 2013;31(244).

Eshraghi SS, **Fatahi Bafghi M**, Ghafouri A, Heidarieh P, Habibnia SH, Rasouli-Nasab M, et al. Isolation and identification of *Nocardia asteroides* complex isolated from thigh abscess in a patient with Behçet's syndrome: the first report from Iran. Tehran Univ of MedJ. 2013;71(7).

Fatahi Bafghi M, Rasouli-Nasab M, Habibnia SH,Heidarieh P,Eshraghi SS. Which method is more suitable for *Nocardia* isolation of polymicrobial site? BJMM. 2013;7(2):01.

Fatahi Bafghi M, Habibnia SH, Heidarieh P , Fateh A, Rasouli-Nasab M, Eshraghi SS. Molecular techniques in *Nocardia* identification. J Isfahan Med Sch. 2014; 32(281).

Habibnia SH, Heidarieh P, Pourmand M, **Fatahi Bafghi M**, Eshraghi SS. Comparison of paraffin bait, Humic acid vitamin B agar and paraffin agar methods to isolate *Nocardia* from soil. Medical Laboratory Journal. 2014;7(5):29-36.

Fatahi Bafghi M, Eshraghi SS, Heidarieh P, Habibnia SH, Rasouli-Nasab M. Nocardiosis in immune disorder disease. Malays J Med Sci. 2014;21(1):75-6.

Rasouli-Nasab M, Habibnia SH, Heidarieh P, **Fatahi Bafghi M**, Pourmand MR, Eshraghi SS. Identification of *Nocardia*

species isolated from soil samples of the city of Tehran, Iran, using phenotypic tests. J Isfahan Med Sch. 2014; 31(265).

Fatahi Bafghi M, Eshraghi SS, Abdollahi A, Negahban S, Ashrafi A, Heidarieh P, et al. Isolation and identification of *Nocardia* in suspected tuberculosis samples using paraffin baiting technique. SMJ. 2014;2(2 Apr).

Fatahi Bafghi M, Heidarieh P, Rasouli-Nasab M, Habibnia SH, Eshraghi SS. The importance of determination and isolation of *Nocardia* in patients with cerebral abscess. JKMU. 2014;21(3):264-6.

Fatahi Bafghi M, Heidarieh P, Habibnia SH, Rasouli-Nasab M, Kalantar Neyestanaki D, Afshar D, et al. Phenotypic and molecular properties of the *Nocardia* species. AVECINNA J Clin Microb Infect. 2014;1(1):e19215.

Fatahi Bafghi M, Eshraghi SS, Heidarieh P, Habibnia SH, Rasouli-Nasab M. DNA extraction from *Nocardia* species for special genes analysis using PCR. N Am J Med Sci. 2014;6(5):231.

Fatahi Bafghi M, Heidarieh P, Soori T, Saber S, Meysamie A, Gheitoli K, et al. *Nocardia* isolation from clinical samples with the paraffin baiting technique. Germs. 2015;5(1):12.

Habibnia SH, Rasouli-Nasab M, Heidarieh P, **Fatahi Bafghi M**, Pourmand MR, Eshraghi SS. Phenotypic characterization of *Nocardia* spp. isolated from Iran soil microflora. Int J Environ Health Eng. 2015;4(1):20.

Ghorbani M, Marashi M, **Fatahi Bafghi M**. Relationship between Parkinson disease and *Nocardial* infections. Austin J Clin Neurol. 2015;2(3): 1032.(Corresponding authors)

Kalantar-Neyestanaki D, **Fatahi Bafghi M**. The Modified Hodge Test: Is it an appropriate method for detection of KPC enzyme or not? Iran J Microbiol. 2015;7(2):123-4.

Andalibi F, **Fatahi Bafghi M**, Heidarieh P, Rasouli-Nasab M, Habibnia SH, Pourmand MR, et al. Isolation and Identification of *Nocardia* spp. using phenotypic methods from soil samples of North Khorasan province. JMB. 2015;4(1, 2):8-14.

Habibnia SH, Rasouli-Nasab M, Heidarieh P, **Fatahi Bafghi M**, Eshraghi SS. DNA extraction of aerobic actinomycetes, NCBMJ. 2015; 5 (17) :96-99.

Fatahi Bafghi M. *Rhodococcus equi*: are phenotypic tests the best method for accurate identification? Comp Clin Pathol. 2015;24(5):979.(Corresponding author)

Dehkordi SH, Bigham-Sadegh A, Karimi I, Momeny M, Balali-Dehkordi S, **Fatahi Bafghi M**, et al. Radiological and histological comparison between nano-bioglass and commercial bioglass in bone healing in a rabbit model. Comp Clin Pathol. 2016:1-5.

Kalantar-Neyestanaki D, Mirsalehian A, Emaneini M, Jabalameli F, **Fatahi-Bafghi M**, Mansouri Sh. The importance of extended-spectrum β -lactamases in gram-negative enteric bacilli and the phenotypic methods of detection. J Kerman Univ Med Sci. 2016: 23 (3), 380-405.

Seyyed-Yousefi S, **Fatahi-Bafghi M**, Eshraghi SS, Hoseini B, Habibnia SH, Rasouli-Nasab M, Heidarieh P. Observation of *Nocardia asteroides* complex in a patient with corneal ulceration: The first case report from Iran. J Kerman Univ Med Sci. 2016: 23 (2), 234-249.

Fatahi-Bafghi M, Yousefi N. Role of *Nocardia* in activated sludge. Malays J Med Sci. 2016: 23 (3),8.

Ahani A, Yousefi S, **Fatahi Bafghi M**, Shakeri N, Norozi AR, Eshraghi SS. The first report of *Nocardia asteroides* complex from a patient with nasolacrimal obstruction duct from Iran. Razi j Med Sci. 2016;23(147):99-103.

Majelan PA, **Fatahi-Bafghi M**, Alizadeh J, Pourramezan N, Afshar D. The loop-mediated isothermal amplification method

instead of PCR in detection goals. ZJRMS. 2016;18(6).

Fatahi-Bafghi M, Heidarieh P, Rasouli-Nasab M, Habibnia SH, Hashemi-Shahraki A, Eshraghi SS. Comparison of restriction enzyme pattern analysis and full gene sequencing of 16S rRNA gene for *Nocardia* species identification, the first report of *Nocardia transvalensis* isolated of sputum from Iran, and review of the literature. *Antonie van Leeuwenhoek*. 2016;109(10):1285-98.

Fatahi-Bafghi M. Comparative of phenotypic tests in aerobic actinomycetes. *IJMCM*. 2016; 5 (1) :463-468. (Corresponding author)

Fatahi-Bafghi M. *Nocardia* identification at the genus level. *Circulation Journal*. 2017;81(2):270. (Corresponding author)

Fatahi-Bafghi M, Eshraghi SS. *Nocardia* isolation of soil. *Adv Biomed Res*. 2017;6(1):1. (Corresponding author)

Fatahi-Bafghi M. Phenotypic and molecular identification of *Nocardia* in brain abscess. *Adv Biomed Res*. 2017;6(1):49. (Corresponding author)

Rasouli-Nasab M, **Fatahi-Bafghi M**, Habibnia SH, Heidarieh P, Eshraghi SS. Comparison of various methods for isolation of *Nocardia* from soil. *ZJRMS*. 2017;19(2).

Ghasemi FS, Eshraghi SS, Andalibi F, Hooshyar H, Kalantar-Neyestanaki D, Samadi A, **Fatahi Bafghi M**. Anti-Bacterial Effect of Propolis Extract in Oil Against Different Bacteria. *ZJRMS*. 2017;19(3). (Corresponding author)

Bakhshi M, **Fatahi Bafghi M**, Astani A, Ranjbar V, Zandi H, Vakili M. Antimicrobial Resistance Pattern of *Escherichia coli* Isolated from Chickens with Colibacillosis in Yazd, Iran.. 2017;4(3):74-8.

Andalibi F, **Fatahi-Bafghi M**. *Gordonia*: isolation and identification in clinical samples and role in biotechnology. *Folia microbiologica*. 2017;62(3):245-52. (Corresponding author)

Safaei S, **Fatahi-Bafghi M**, Pouresmaeil O, Role of *Tsukamurella* species in human infections: first literature review. *New Microbe and New Infect*. 2018; 22: 6–12. (Corresponding author)

Rasouli-Nasab M, Habibnia S, Heidarieh P, **Fatahi-Bafghi M**, Hashemi-Shahraki A, Eshraghi SS. Molecular Identification of *Nocardia* Strains from the Soil by *hsp65* Gene: Polymerase Chain Reaction-Restriction Fragment Length Polymorphism (RFLP) and Analysis of Sequence 16S rRNA Gene. *Archives of Clinical Infectious Diseases*. 2018;13(4): e14962.

Akbari R, **Fatahi-Bafghi M**, Fazeli H. Nosocomial Infections Pathogens Isolated from Hospital Personnel, Hospital Environment and Devices. *Journal of Medical Bacteriology*. 2018;7(1-2):22-30.

Majidzadeh M, **Fatahi-Bafghi M**. Current taxonomy of *Rhodococcus* species and their role in infections. *European Journal of Clinical Microbiology & Infectious Diseases*. 2018;1-18. (Corresponding author)

Pouresmaeil O, **Fatahi-Bafghi M**, Safaei S. The role of nontuberculous mycobacteria in cutaneous infections of diabetic patients: a literature review. *Iranian Journal of Dermatology*. 2018;21(1):14-9. (Corresponding author)

Fatahi-Bafghi M. Comment on: A case of granulomatosis with polyangiitis complicated by two opportunistic infections. *International journal of rheumatic diseases*. *International journal of rheumatic diseases*. 2019;22(4):752. (Corresponding author)

Fatahi-Bafghi M, Rasouli-nasab M, Yasliani-Fard S, Habibnia S, Gharehbaghi F, Eshraghi SS, et al. Diversity and Antimicrobial Activity of Actinomycetes Isolated from Lut Desert: The Extremely Arid Climatic Zones of Iran. *International Journal of Peptide Research and Therapeutics*. 2019;25: 1201–1207.

Fatahi-Bafghi M. Antibiotic resistance genes in the Actinobacteria phylum. *European Journal of Clinical Microbiology & Infectious Diseases*. 2019;38: 1599–1624. (Corresponding author)

Fatahi-Bafghi M. Analysis of comments and questions in letters to the editor about nocardiosis. *Comp Clin Pathol*. 2019;28: 1811–1813. (Corresponding author)

Pouresmaeil O, Zandi H, Kalantar-Neyestanaki D, Safaei S, **Fatahi-Bafghi M**, Vakili M. Molecular Identification of *MefE*

and AmpC Resistance Genes in ATCC Bacteria. Avicenna J Clin Microbiol Infect. 2020; 6(4): 142-143. (Corresponding author)

Bakhshi M, Zandi H, **Fatahi Bafghi M**, Astani A, Ranjbar VR, Vakili M. A survey for phylogenetic relationship; presence of virulence genes and antibiotic resistance patterns of avian pathogenic and uropathogenic *Escherichia coli* isolated from poultry and humans in Yazd, Iran. Gene Reports. 2020; 20.

Fatahi-Bafghi M. Role of *Williamsia* and *Segniliparus* in human infections with the approach taxonomy, cultivation, and identification methods. Ann Clin Microbiol Antimicrob. 2021;20(1):1-9. (Corresponding author)

Fatahi-Bafghi M. Characterization of the *Rothia* spp. and their role in human clinical infections. Infect Genet Evol. 2021:104877. (Corresponding author)

Majidzadeh M, Heidarieh P, **Fatahi-Bafghi M**, Vakili M. Antimicrobial activity of Actinobacteria isolated from dry land soil in Yazd, Iran. Mol Biol Rep. 2021;48(2):1717-23. (Corresponding author)

Saghafi F, Mirzaie F, Gorji E, Nabi meybodi R, **Fattahi M**, Mahmoodian H, Zarehshahi R. 2021. Antibacterial and anti-Trichomonas Vaginalis effects of Rosa Damascena mill petal oil (a persian medicine product), aqueous and hydroalcoholic extracts. BMC Complementary Medicine and Therapies. 2021; 21(1): p. 1-10.

Rashidi Ashjerdi, P, Zabihi M, Ranjbar Am, Hekmatimoghaddam S, **Fatahi Bafghi M**, Healing effects of Solanum nigrum fruit extract on second-degree burn wounds and its antibacterial activity against common pathogens of burn infection. Adv Pharmacol Ther J. 2021; 1(1): p. 1-12.

Deposited sequences in public database (NCBI)

2014: 1

KJ756843

2015: 45

KP338818/KP338817/KP338816/KP338815/KP338814/KP338813/KP338812/KP338811/KP877311/KP877310/KP877309/KP406583/KP234025/KP137548/KP137547/KP137546/KP137545/KP137544/KP137543/KP137542/KP137541/KP137540/KP137539/KP137538/KP137537/KP137536/KP137535/KP137534/KP137533/KP137532/KP137531/KP137530/KP137529/KP137528/KP137527/KP137526/KP137525/KP137524/KP137523/KP137522/KP137521/ KP137520/KP137519/KP137518/KP137517, KT223784, KT223783, KT223782.

2016: 29

KU356872,KU356873,KU356875,KU356882,KU356883,KU356884,KU356884,KU356885,KU356885,KU356886,KU356886,KU356887,KU356887,KU356888,KU356888,KU356889,KU356889,KU356890,KU356890,KU356891,KU356891,KU356892,KU356892,KU356893,KU356893,KU356894,KU356894,KX268120, KX268121.

2017: 16

KY542274,KY542273,KY542272,KY542271,MF290419,MF290420,MF290421,MG181998,MG181999, MG182001,MG182002,MG242452,MG242453,MG242454,MG242455,MG242456

2018:25

MH588244, MH588243, MH588242, MH588241, MH588240, MH588239, MH588238, MH588237, MF290421, MF290420, MF290419, MF170173, MH886652, MH878975, MH837511, MG242456, MG242455, MG242454, MG242453, MG242452, MG182002, MG182001, MG182000, MG181999, MG181998, MH837511, MH878975, MH886652

2019:15

MK544093, MK544096, MK544097, MK544132, MK544135, MK544424, MK559093, MK583767, MK583930, MK583931, MK583935, MK583940, MK583941, MK583942, MK583943

Conference presentations and seminars

- 1- Molecular study of PER and VEB genes in MDR strains of *Pseudomonas aeruginosa* in different clinical samples. (4th Iranian Congress of Clinical Microbiology, November, 2010).
- 2- Surveillance of bacterial contamination of equipment and personnel in the various sectors in a university hospital in Isfahan. (4th Iranian Congress of Clinical Microbiology, November, 2010).
- 3- The comparison of *Nocardia* isolation techniques such as Paraffin Bait, Humic acid vitamin B agar and Paraffin agar from Tehran soil. (The 6th International & 11th National Congress on Quality Improvement in Clinical Laboratory, April, 2013).
- 4- Characterization of *Nocardia* spp. isolated from Iran soil samples using phenotypic traits. (The 6th International & 11th National Congress on Quality Improvement in Clinical Laboratory, April, 2013).
- 5- Isolation and identification of *Nocardia* species of breast abscess in a woman suffering from pemphigus vulgaris: the first report from Iran. (The 12th International Congress of Immunology and Allergy April, and May 2014).
6. Rapid and suitable method for DNA extraction of *Nocardia* species (The 15th International and Iranian Microbiology Congress of Microbiology, August, 2014).
7. Isolation of *Nocardia* by paraffin baiting method of soil Iran (The 15th International and Iranian Microbiology Congress of Microbiology, August, 2014).
8. *Nocardia* isolation with sucrose gradient method of soil from the North and Northwest in Iran (The 6th International & 11th National Congress on Quality Improvement in Clinical Laboratory, February, 2015)
9. Identification of *Nocardia abscessus* by using sequencing 16S rRNA gene (The 6th International & 11th National Congress on Quality Improvement in Clinical Laboratory, February, 2015).
10. Phenotypic and molecular identification of *Nocardia* spp. from a patient with corneal ulceration, the first report from Iran (The 16th International and Iranian Microbiology Congress of Microbiology, August, 2015).
11. Molecular identification of *Nocardia* spp. isolated from Iran soil (The 16th International and Iranian Microbiology Congress of Microbiology, August, 2015).
12. Cutaneous nocardiosis: the first study from Iran . The eighth International Congress on Clinical and Laboratory and the first National Congress of Basic Medical Sciences, 2016, oral presentation.
13. The first report of *Nocardia* species of thigh abscess in a man suffering from Behçet's disease from Iran. The 13th International Congress of Immunology and Allergy of Iran, Tabriz, Iran, April 2016, oral presentation.
- 20th international congress of microbiology, Kerman, Iran, August 2019, oral presentation.
14. Chairs in ESCMID 2022-Nocardiosis

Workshop

How to Write and Get Published? Springer in Tehran University of Medical Sciences, 2012 (participate).

Professional experience

1. *Nocardia* isolation of various clinical specimens and soil sample with conventional media, paraffin baiting technique, paraffin agar, and humic acid agar.
2. Professional experience characterizing of bacteria based on phenotypic techniques.
3. Determination of drug susceptibility for bacteria (Proportional method and broth micro dilution test).
4. Application of PCR-sequencing (16S rRNA, *hsp65*, *rpoB*, *secA*, *gyrB*, *sod*) and PCR restriction fragment length polymorphism analysis (PRA) for molecular identification of bacteria.
5. Phenotypic and molecular identification of *Streptomyces* spp., *Actinomyces* spp., *Pseudonocardia* spp., *Rhodococcus* spp., *Gordonia* spp., *Tsukamurella* spp. and *Amiclatopsis* pp.
6. Survey of new antibiotics in actinomycetes family.
7. Pulsed-Field Gel Electrophoresis (PFGE), Random Amplified Polymorphic DNA (RAPD) and Repetitive Sequence-based PCR (rep-PCR) for investigation of molecular epidemiology.
8. Phylogenetic analysis and systematic in bacteria.
9. Extended spectrum β - lactamase (ESBL) and metallo-beta lactamase identification in Gram- negative bacteria

with phenotypic and molecular methods.

10. Whole genome sequence analysis

11- Systematics and Taxonomy

12- Food microbiology

Editorial board:

Review Editor for evolutionary and genomic microbiology (Frontiers in Microbiology/Frontiers in Genetics)

Annals of Applied Microbiology & Biotechnology Journal

Clinical Pathology & Research Journal

Annals of Public Health Research & Clinical Practice

Annals of microbiology and immunology

Journal of Bioinformatics, Genomics and Proteomics

Journal of Molecular Sciences

International Journal of Medical and Health Research

I3 Medical Sciences

JResLit Journal of Biotechnology

Current Trends in Medicine

American Journal of Surgery and Clinical Case Reports

Microbes and Immunology Research journal

Open Journal of Public Health
