Curriculum Vitae

Name: Hasan Shojaei

Place of Birth: Tehran, Iran

Date of Birth: 9-12-1956

Marital status: Married

Academic position: Professor



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Education

• **B.Sc:** Biology, National University of Iran, Tehran, Iran. 23/9/1975-23/9/1980

- M.Sc.: Medical Microbiology, Tehran University of Medical Sciences, Tehran, Iran. 23/9/89-23/9/1991
- PhD: Molecular Microbial Systematics, Department of Microbiology, School of Medicine; University of Newcastle upon Tyne, United Kingdom.1/3/1994-20/12/1997

PhD thesis: Molecular systematics of some medically important actinomycetes. 1997.

Academic experience

- 2011-todate: Professor. Dept of Microbiology, Medical school & Infectious Diseases Research Center, Isfahan University of Medical Sciences, Isfahan, Iran
- 2002- 2011: Associate professor: Dept of Microbiology, Medical school & Infectious Diseases Research Center, Isfahan University of Medical Sciences, Isfahan, Iran.
- 1997-2002: Assistant professor: Dept. of Microbiology, Shahrekord University of Medical Sciences, Shahrekord, Iran.

• 1990-1994: Lecturer in Microbiology and Molecular Biology. Shahrekord University of Medical Sciences, Shahrekord, Iran.

Professional experience

- 1996-1997: Witness Expert: In an industrial infringement case, High Court of Justice, Chancery Division, United Kingdom. A major role as a molecular taxonomist in determining the outcome of an industrial infrigement case between SMITHKLINE BEECHAM PLC and LEK PHARMACEUTICAL company.
- 1997-2002: Deputy for Research. Shahrekord University of Medical Sciences, Shahrekord, Iran.
- 2003-Todate: Member of Strategic & Research Committee. Iranian Molecular Medicine Network.
- 2011-2018: Board of Iranian Microbiology Association
- 2003-2005: Head of Research Institute. Isfahan University of Medical Sciences, Isfahan, Iran.
- 2000-2007: Consultant for Health Systems Research. Iranian Deputy for Research & Biotechnology. Tehran. Iran.

Microbiology and molecular skills

- Basic and advanced microbiology and molecular skills in particular with regard to Mycobacteria, Nocardia, Streptomyces; *Helicobacter pylorie*; *Clostridium difficile*; Pathogenic Shigella and Solmoenlla; MRSA Staphylococcus; *Listeria monocytogenes* and *Campylobacter jejuni*.
- DNA extraction, PCR, cloning
- DNA hybridization and probing including Ribotyping, RFLP, etc,
- MLST; Multilocus sequence typing (MLST)
- Multiple sequence alignment (MSA) and phylogenetic trees construction
- 16S rDNA, *hsp*65, *rpo*B and 16S-23S rDNA internal transcribed spacer (ITS) sequencing analyses
- Randomly Amplified Polymorphic DNA (RAPD) fingerprinting

Educational courses

 A two-month course on Health Systems Research. EMRO-World Health Organization. Thailand Health Systems Research Institute. Bangkok, Thailand. 2002.

- A one-week workshop on Research and Development. COHRED & WHO. Tehran.
 Iran. 2001.
- A four-week educational visit from family health care program in Singapore,
 Thailand and Malaysia. World Health Organization. 1985.
- A nine-week course on management and programming of primary health care.
 World Health Organization, Zagreb, Yugoslavia. 1988
- A one-week course on expanded program on immunization. National Institute for Health Research. Tehran, Iran.1985
- A two-week course on control of diarrheal diseases. National Institute for Health Research. Tehran, Iran.1986

Research projects

Current Projects:

 A comprehensive study on secondary metabolite production by Mycobacteria and Nocardia isolated from Iranian medicinal herbs, 2019-todate

Accomplished Projects

- Screening, isolation and molecular identification of biodegrading mycobacteria and nocardia from Iranian ecosystems and analysis of their biodegradation activity. 2015-2018
- Characterization of novel mycobacteria species with biodegrading activities isolated from Iranian ecosystems. 2016-2019 (the corresponding manuscript has been finalized for publication)
- Study on identification and molecular characterization of mycobacteria isolated from animal sources in Iran, 2016-2020

• Study on Phenotypic and Genotypic Characteristics of *Clostridium difficile* Isolates from Iranian Patients, 2016-2019

- Study on diverstiy of atypical mycobacteria isolated from water resources of Iranian hospitals by application of conventional and molecular microbiological approaches.
 2010-to 2017.
- Study on Prevalence and molecular characterization of non-tuberculous mycobacteria in hospital soil and dust of Iran; (2019)
- Study on diverstiy of *Nocardia* spp. isolated from Isfahan hospitals environments by application of conventional and molecular microbiological approaches-2011- 2017
- Genetic diversity of community-aquired Methicillin resistant *Staphylococcus aureus* isolated from 2-6 year old children by MultiLocus Sequence Typing (MLST), Isfahan, Iran. 2012- 2017.
- Study of dysentery outbreak in Naein & Ardestan, Isfahan by conventional and advanced Molecular Microbiology. 2007-2008.
- Molecular characterization of of mycobacteria isolated from clinical Specimens of Iranian patients. Iran. 2007-2010.
- Molecular characterization of of nocardia isolated from clinical Specimens of Iranian patients. Iran. 2007-2010.
- Genotyping study of Co-trimoxazole resistant *E. coli* strains in women with bacteriuria using molecular systematic approaches in Isfahan, Iran. 2006-2010
- A Comprehensive study on molecular epidemiology of pathogenic *Helicobacter pylori* in Isfahan, Iran. 2006 -2008.
- Development and Establishment of Health System Research Information Networking.
 Iran. 2002.
- Bacteriologic analysis of clean surgical wounds in surgery wards -Chahar-Mahal & Bakhtiari Hospitals. Iran. 2000.
- Study of bacterial hand contamination in food handlers. Iran. 2000
- Study of Vaginosis due to *Gardenella vaginalis*. Shahrekord, Iran. 1999-2000.
- Study of Medical students' success and failure. Shahrekord, Iran. 2000.

 Development of Health Systems Research in Iranian Primary Health Care Networking.Iran. 2000.

- Study of Deaning pattern in Shahrekord university of Medical Sciences. Shahrekord, Iran.1999.
- Study of bacteriuria in pregnancy in urban regions of Shahrekord, Iran.1999
- Molecular analysis of some medically important actinomycetes (PhD thesis). 1994-1997.

Novel Microbial Species Discovery

- Mycobacterium meyganense sp. nov., Mycobacterium omidense sp. nov., Mycobacterium seymarense sp. nov., Mycobacterium austroafricanum subspecies dezfulense subsp. nov., bioremediation-capable novel species from Iranian environmental samples. 2020 (A joint project with BCCM/ITM Mycobacterial Culture Collection, Institute of Tropical Medicine, Antwerp, Belgium; Finalized for Publication, Corresponding author; Conor J Meehan, email: c.meehan2@bradford.ac.uk)
- **Shojaei H**, Daley C, Gitti Z, Hashemi A, Heidarieh P, Moore ER, Daei Naser A, Russo C, van Ingen J, Tortoli E. **(2013)**. *Mycobacterium iranicum* sp. nov., a rapidly-growing scotochromogenic species isolated from clinical specimens on three different continents. Int J Syst Evol Microbiol. Apr;63(Pt 4):1383-9.
- **Shojaei H,** Magee JG, Freeman R, Yates M, Horadagoda NU, Goodfellow M. (2000). *Mycobacterium elephantis* sp, nov. a rapidly growing *Mycobacterium*. *International Journal of Systematic Bacteriology*. 50.1817-19.
- Shojaei H, Goodfellow M, Magee JG, Freeman R, Gould FK, Brignall CG. (1997),
 Mycobacterium novocastrense sp. nov, a rapidly-growing photochromogenic
 Mycobacterium. International Journal of Systematic Bacteriology 47: 1205-1207.

Publications

Gut microbiota in burned patients with Clostridioides difficile infection. (2021) Shoaei
 P, Shojaei H, Siadat SD, Moshiri A, Vakili B, Yadegari S, Ataei B, Khorvash F. Burns.

2021 Dec 1:S0305-4179(21)00345-4. doi: 10.1016/j.burns.2021.11.023. Epub ahead of print. PMID: 34924229.

- Molecular Typing of Community-acquired Methicillin-Resistant Staphylococcus aureus Isolated from 2- to 6-year old Children by Staphylococcal Protein A and Agr Typing in Isfahan, Iran. (2021) Mobasherizadeh S, Shojaei H, Azadi D, Havaei SA, Ataei B, Khorvash F. Adv Biomed Res. Jan 27;10:3. doi: 10.4103/abr.abr_139_20. PMID: 33959560; PMCID: PMC8095255.
- Phenotypic and Genotypic Characteristics of *Clostridium difficile* Isolates in Patients with Type 2 Diabetes in Iran; **(2020).** Parisa Shoaei, **Hasan Shojaei**, Kiana Shirani *Infection and Drug Resistance*; Volume 13 Pages 683—690; DOI https://doi.org/10.2147/IDR.S225829
- Identification and molecular characterization of mycobacteria isolated from animal sources in a developing country; **(2020)** R Dibaj, **H Shojaei**, T Narimani; *Acta Tropica* 204, 105297
- Prevalence and molecular characterization of non-tuberculous mycobacteria in hospital soil and dust of a developing country, Iran; (2019) M Davarpanah, D Azadi, H Shojaei; *Microbiology* 165 (12), 1306-1314
- Clostridium difficile isolated from faecal samples in patients with ulcerative colitis;
 (2019) P Shoaei, H Shojaei, M Jalali, F Khorvash, SM Hosseini, B Ataei, B Vakili et al.,
 BMC infectious diseases 19 (1), 361
- Molecular epidemiology of *Clostridium difficile* infection in Iranian hospitals; (2019) P
 Shoaei, H Shojaei, F Khorvash, SM Hosseini, B Ataei, H Tavakoli, ...; Antimicrobial
 Resistance & Infection Control 8 (1), 12
- Molecular characterization and genotyping of methicillin-resistant *Staphylococcus aureus* in nasal carriage of healthy Iranian children (2019); S Mobasherizadeh, H
 Shojaei, D Azadi, SA Havaei, S Rostami; *Journal of Medical Microbiology* 68 (3), 374-378.
- *Clostridium difficile* infection in cancer patients with hospital acquired diarrhea at the teaching hospitals in Iran: Multilocus sequence typing analysis (MLST) and ...; (2019) P

Shoaei, **H Shojaei**, F Khorvash, MS Hosseini, B Ataei, Z Esfandiari, ...; *Ann. Ig* 31 (4), 365-373.

- A case report of brain abscess caused by *Nocardia cyriacigeorgica* in a diabetic patient;
 (2018). M Khorshidi, S Navid, D Azadi, D Shokri, H Shojaei; *JMM case reports* 5 (9)
- Mycobacteriosis and tuberculosis: laboratory diagnosis; (2018) D Azadi, T
 Motallebirad, K Ghaffari, H Shojaei; The Open Microbiology Journal 12, 41
- Screening, isolation and molecular identification of biodegrading mycobacteria from
 Iranian ecosystems and analysis of their biodegradation activity; (2018), D Azadi, H
 Shojaei, S Mobasherizadeh, AD Naser; AMB Express 7 (1), 180,
- Molecular analysis and species diversity of Nocardia in hospital environment of a
 developing country, a potential health hazard. (2017). Rahdar, A, Azadi, D, Hasan
 Shojaei H, Abbas Daei naser. *Journal of Medical Microbiology*. 66 (3), 334-341
- Azadi, D., <u>Shojaei, H.</u>, Pourchangiz, M., Dibaj, R., Davarpanah, M. and Naser, A.D., (2016). Species diversity and molecular characterization of nontuberculous mycobacteria in hospital water system of a developing country, Iran. *Microbial Pathogenesis*. 100, 62-69
- Mobasherizadeh, S., <u>Shojaei, H.,</u> Havaei, S.A., Mostafavizadeh, K., Davoodabadi, F., Khorvash, F., Kushki, A.M., Daei-Naser, A. and Ghanbari, F., (2016). Nasal carriage screening of community-associated methicillin resistant *Staphylococcus aureus* in healthy children of a developing country. *Advanced Biomedical Research*, 5(1), p.144.
- Rahdar, H.A., Azadi, D., Daeinaser, A. and <u>Shojaei, H.,</u> (2016). Comparison of Three Methods of Isolation of the Genus Nocardia from the Soil of Hospitals in Isfahan Province, Iran, and its Identification Based on Phenotypic and Molecular Methods.
 Journal of Kerman University of Medical Sciences, 23(1), pp.44-54.
- Azadi, D. and <u>Shojaei, H.,(2016)</u>. The role of the laboratory in the diagnosis of tuberculosis. *Iranian Journal of Medical Microbiology*, 10(2), pp.1-15.
- Azadi D, Dibaj R, , Pourchangiz M, Naser AD, <u>Shojaei H</u>. (2016). First isolation of *Mycobacterium setense* from hospital water. *Journal of Coastal Life Medicine*. 4(4)331-333 DOI 10.12980/jclm.4.2016J5-121.

• **Shojaei H**; Rahdar HA. **(2016).** First report of isolation of *Nocardia otitidiscaviarum* from hospital water. *Journal of Coastal Life Medicine*. doi: 10.12980/jclm.4.2016J6-871.

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 Isolates in Iran. *Global journal of health science*, 8(8), p.185.
- Azadi D, Dibaj R, , Pourchangiz M, Naser AD, <u>Shojaei H</u>. (2014). First Report of Isolation of *Mycobacterium canariasense* from Hospital Water Supplies. *Scandinavian Journal of Infectious Diseases*. 1-5.
- Raji, S.H., <u>Shojaei, H.</u>, Ghorani, P.S. and Rafiei, E., (2014). Bacterial colonization on coated and uncoated orthodontic wires: A prospective clinical trial. *Dental research journal*, 11(6), p.680.
- Azadi D, Dibaj R; Pourchangiz M; Naser AD; <u>Shojaei H</u>. (2014). Molecular Isolation of Biodegradable mycobacteria from water supplies of Iranian hospitals. *Iranian Journal* of Microbiology, 6(4), 240-245.
- Dibaj R, Azadi D, Karami M, Naser AD, <u>Shojaei H.</u> (2014). First report of isolation of *Mycobacterium novocastrense* from water supplies. *Acta Pathologica, Microbiologica, et Immunologica Scandinavica* (APMIS). May;122(5):459-61.
- Nasiri, M. J., Rezaei, F., Zamani, S., Darban-Sarokhalil, D., Fooladi, A. A. I., <u>Shojaei, H.</u>, & Feizabadi, M. M. (2014). Drug resistance pattern of *Mycobacterium tuberculosis* isolates from patients of five provinces of Iran. *Asian Pacific Journal of Tropical Medicine*, 7(3), 193-196.
- Dibaj, R., Aslani, M. M., Heidarieh, P., Hashemi, A., Ataei, B., Daei-Naser, A., & <u>Shojaei</u>, <u>H.</u> (2014). Conventional and molecular investigation of Shigella isolates in relation to an outbreak in the area of Isfahan, Iran. *Iranian Journal of Microbiology*, 5(4), 339-344.

• Dibaj, R., Shoaei, P. and Shojaei, H., (2014). Study of Prevalence and Characteristics of Staphylococcus aureus and CA-MRSA Nasal Colonization in 2-5 Years Old Children in Isfahan. *Iranian Journal of Medical Microbiology*, 8(3), pp.22-30.

- Azadi, D., Dibaj, R., Naser, A.D. and Shojaei, H. (2013). Isolation of Nontuberculous Mycobacteria Existing in Isfahan (Iran) Hospital Water Supplies by Phenotypic Method. *Journal of Isfahan Medical School*, 30 (222).
- Shojaei, H., Daley, C., Gitti, Z., Hashemi, A., Heidarieh, P., Moore, E.R., Naser, A.D., Russo, C., van Ingen, J. and Tortoli, E., (2013). *Mycobacterium iranicum* sp. nov., a rapidly growing scotochromogenic species isolated from clinical specimens on three different continents. *International Journal of Systematic and Evolutionary Microbiology*, 63(4), pp.1383-1389.
- Hashemi-Shahraki A, Heidarieh P, Azarpira S, <u>Shojaei H</u>, Hashemzadeh M, Tortoli E.
 (2013). *Mycobacterium iranicum* infection in HIV-infected patient, Iran. *Emerging Infectious Diseases*. Oct;19(10):1696-7.
- Heidarieh P, Hashemi-Shahraki A, Khosravi AD, Zaker-Boustanabad S, <u>Shojaei H</u>,
 Feizabadi MM. (2013) *Mycobacterium arupense* infection in HIV-infected patients from
 Iran. *International Journal of STD & AIDS* 24.6: 485-487.
- Pourahmad F, <u>Shojaei H</u>, Heidarieh P, Khosravi A, Hashemi A. (2012). Report of two cases of *Mycobacterium europaeum* from Iran. *Japanese Journal of Infectious Diseases*.
 65.6 (2012): 539-541.
- <u>Shojaei H</u>, et al. (2012). Chronic Pulmonary Disease Due to *Mycobacterium monacense* Infection: The First Case from Iran. *Annals of Laboratory Medicine*. Jan;32(1):87-90.
- <u>Shojaei H</u>, et al (**2012**). Genetic diversity of Iranian clinical isolates of *Mycobacterium tuberculosis*. *New Microbiologica*. 35, 61-65.
- <u>Shojaei H</u>, Hashemi A, Heidarieh P, Pourahmad F, Daei Naser DN. (**2012**). Molecular Identification of Rare Clinical Mycobacteria by Application of 16S-23S Spacer Region Sequencing. *Iranian Journal of Basic Medical Sciences*, **15(1)**, **661-**8.

• Nikbin, V. S., Alikhani, M. Y., **Shojaei, H.**, Mousavi, S. F., Salmanzadeh-Ahrabi, S., & Aslani, M. M.(**2012**) Ribotyping of EPEC isolates from diarrheal and asymptomatic patients in Iran." *Gastroenterology and Hepatology from Bed to Bench* 5.2: 94.

- Shojaei H, et al (2011). Molecular microbiological investigation of Mycobacterium bovis BCG post-vaccination infection in Iranian patients. *International Journal of Tuberculosis and Lung Diseases*. 2011 Nov;15(11):1497-504.
- <u>Shojaei H</u>, et al. (2011). Clinical isolation of *Nocardia cyriacigeorgica* from patients with various clinical manifestations, the first report from Iran. *Japanese Journal of Medical Mycology* .52(1):39-43.
- Shojaei H, et al (2011). Species identification of neglected nontuberculous mycobacterial infections in a developing country. *Japanese Journal of Infectious Diseases* 64. 2011.1-7.
- <u>Shojaei H</u>, et al. (**2011**). Chronic pelvic pain due to *Mycobacterium parascrofulaceum* in an Iranian patient: first report of isolation and molecular characterization from Asia. *Brazlian Journal of Infectious Diseases*. Apr;15(2):186-7.
- <u>Shojaei H</u>, et al.(2011). *Mycobacterium novocastrense*-associated pulmonary and wound infections. *Emerging Infectious Diseases*. Mar;17(3):550-1.
- Shojaei H, et al (2011). Pulmonary and extrapulmonary infection caused by
 Mycobacterium conceptionense: the first report from Iran. *Journal of Royal Society of Medicine Short Reports*. April 20, vol. 2 no. 4 31.
- <u>Shojaei H</u>, et al (2011). First report of isolation of *Mycobacterium elephantis* from bronchial lavage of a patient in Asia. *Journal of Royal Society of Medicine Short Reports* April 2011 2:26.
- <u>Shojaei H</u>, et al (2011). First report on isolation and molecular characterization of clinical *Mycobacterium setense* isolates in Asia. *Japanese Journal of Infectious Diseases*.64(3):234-6.

• <u>Shojaei H</u>, et al, (2010). Molecular Identification and Conventional Susceptibility
Testing of Iranian Clinical *Mycobacterium fortuitum* Isolates. *Iranian Journal of Basic Medical Sciences*, Vol, No: 13; 3:210-15.

- Khashei R, Shojaei H, et al. (2009). Genetic Diversity and Drug Resistance of Helicobacter Pylori Strains in Isfahan, Iran. *Iranian Journal of Basic Medical Sciences*. Vol. 11, No. 3, 174-182.
- Feyzabadi M.M,Bahreh Mand A.R., Heydarieh P., <u>Shojaei H</u> (2008). Using multilocus enzyme electrophoresis to study the heterogenicity of clinical isolates of *Mycobacterium kansasii*. *Iranian Journal of Medical Microbiology*. 1(4):1-11.
- Shojaei H et al (2006). Efficacy of Simple Handwashing in Reduction of Microbial Hand Contamination of Iranian Food Handlers. Food Research Internaional. 39 (5). 525-529.
- <u>Shojaei H</u> et al.(2006). Surveillance of clean surgical procedures: An indicator to establish a baseline of a hospital infection problem in a developing country, Iran. *Indian Journal of Surgery* 2006;68:89-92.
- Magee, J. G.; <u>Shojaei, H.;</u> Goodfellow, M.; Wheeler, J.; Seiders, P.; Barrett, A.; Freeman, R. (2002). *Mycobacterium malmoense*: Taxonomy and pathogenicity. Abstracts of the General Meeting of the American Society for Microbiology, Vol: 102 Pages: 486.
- <u>Shojaei, H.</u> et al (2000). *Mycobacterium elephantis* sp,nov . a rapidly growing Mycobacterium. *International Journal of Systematic Bacteriology*.50.1817-19.
- Lai, S; <u>Shojaei, H</u>.; Manchester, N, L. (2000). The differentiation of *Carnobacterium divdergens* using the random amplification of polymorphic DNA polymerase chain reaction technique. *Letter in Applied Microbiology*, 30: 1-6.
- <u>Shojaei, H</u>.(1999) Molecular analysis of *M. avium -interacellular* complex. *Iranian Biomedical Journal*.3&4.63-70.
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• <u>Shojaei, H.</u> et al (1997), *Mycobacterium novocastrense* sp. nov, a rapidly–growing photochromogenic *Mycobacterium*. *International Journal of Systematic Bacteriology* 47: 1205-1207.

Books (Main author)

- Guideline for Tuberculosis Conventional & Molecular Diagnosis. (2011). ISBN: 978-964-524-274-7
- An introduction to food poisoning. (2004) ISBN: 964-94799-1-0.2004.
- An introduction to Conception, Epidemiology and Control of Nosocomial Infection. 2004. ISBN: 964-94799-0-2
- Health Systems Research. The lessons should be learnt. (2004). 964-94799-4-5-
- Health Systems Research. A data bank. (e-book).2004.

References

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