



HAMIDREZA HOURI

Ph.D. in Medical Microbiologist,
Research Institute for Gastroenterology and Liver Diseases,
Shahid Beheshti University of Medical Sciences.

PERSONAL INFORMATION

Name: Hamidreza Houry
Date Of Birth: September 20, 1990
Nationality: Iranian
Gender: Male

CONTACT

Phone
+98-21-22432518

LinkedIn
<https://www.linkedin.com/in/hamidreza-houri-23098911a>

e-mails
hr.houri@sbmu.ac.ir
hr.houri@gmail.com

ORCID
<https://orcid.org/0000-0002-6813-0229>

ADDRESS

Foodborne and Waterborne Diseases
Research Center, Research Institute for
Gastroenterology and Liver Diseases,
Shahid Beheshti University of Medical
Sciences, Yaman St, Evin, Tehran, Iran.
P.O.BOX: 1985717411.

Summary

I am currently an assistant professor at the Research Institute for Gastroenterology and Liver Diseases, Shahid Beheshti University of Medical Sciences. I am a member of Iran's National Elites Foundation from Oct 2015 up to now. I have published several scientific papers in various peer-reviewed journals. I have had some teaching responsibilities, hence, I taught various microbiology and laboratory courses to both undergraduate and postgraduate students at Shahid Beheshti University of Medical Sciences as well as Islamic Azad University, Tehran Medical Branch. I have extensive experience in mentoring and supervising Ph. D. and master's students. Accordingly, I led a highly collaborative research group on the role of human-resident microbes in the pathogenesis of chronic gastrointestinal and neurological disorders such as cancers and autoimmune diseases. I have also served as a member of the Executive and Scientific Committees at several conferences and workshops.

EDUCATION

Ph.D. in Medical Bacteriology | February 2015-September 2019

Department of Microbiology, School of Medicine, Shahid Beheshti University of Medical Sciences, Tehran, Iran.

(GPA: 19/ 20. Tantamount to 3.87/4)

Supervisors: Prof. Fatemeh Fallah and Prof. Samira Mohammadi-Yeganeh.

Dissertation title: Exploiting yoeB-yefM toxin-antitoxin system of *Streptococcus pneumoniae* for the selective killing of human breast cancer cells

Master of Science in Medical Microbiology | September 2012- February 2015

Department of Microbiology, School of Medicine, Shahid Beheshti University of Medical Sciences, Tehran, Iran.

(GPA: 18.50/20. Tantamount to 2.80/4)

Supervisors: Prof. Fatemeh Fallah (Full Professor) and Dr. Sedigheh Rafiei

Tabatabaei (Associate Professor).

Thesis: "Evaluation of capsular types and drug resistance patterns of invasive pediatric *Streptococcus pneumoniae* isolates in Iran".

Bachelor of Science in Cellular and Molecular Biology | 2008- 2012

Islamic Azad University, Karaj Branch (GPA: 17.17/ 20. Tantamount to 3.65/4).

FIELDS OF RESEARCH INTEREST

- ✓ The human microbiome impacts on health and diseases.
- ✓ The role of pathobionts of the gastrointestinal microbiota in the development of inflammatory disorders and cancers.
- ✓ Pathogen sequencing and interrogating host-immune system interactions.

- ✓ Multi-omics strategies uncover host-pathogen interactions.
- ✓ Metagenomic approaches to analyze antimicrobial resistance and reistome.

ACHIEVEMENT & AWARDS

- ✓ Member of Iran's National Elites Foundation (2015-present).
- ✓ Exceptionally talented student by Exceptional Talents Center of Shahid Beheshti University of Medical Sciences.
- ✓ Ranked 2nd in the national-wide university entrance exam for Ph.D. degree (2015).
- ✓ Ranked 2nd in the national-wide university entrance exam for M.Sc. degree (2012).
- ✓ Selected as the Special Young Lecturer during Ph.D. study, Islamic Azad University, Tehran Medical Branch.

ACADEMIC AND SCIENTIFIC EXPERIENCE

- **January 2021-present**
Employer: Research Institute for Gastroenterology and Liver Diseases, Shahid Beheshti University of Medical Sciences.
Position: Senior Researcher
Duties: Teaching various medical microbiology and bioinformatic courses, supervising postgraduate students as the co-supervisor, leading a collaborative research team, and participating member of the Research Projects Evaluation Committee.
- **September 2015-June 2020**
Employer: Islamic Azad University, Tehran Medical Branch
Position: Adjunct Lecturer
Duties: Taught courses such as General Microbiology and Medical Bacteriology at both Undergraduate and medical levels.

- **July 2014- April 2018**

Employer: Pediatric Infections Research Center, Mofid Children's Hospital, Shahid Beheshti University of Medical Sciences

Position: Research assistant; (Mentors: Prof. Fatemeh Fallah and Dr. Sedigheh Rafiei Tabatabaei.

Duties: conducting literature searches, collecting data and samples, setting up, operating, and maintaining laboratory instruments and equipment, performing experiments, making observations, calculating and recording results, data management, maintaining data collection files, assisting with data analysis, and generating reports and graphics, and writing manuscripts.

PUBLICATIONS

Peer-Reviewed Articles

- Ayda Afshari Kharaghani, Naser Harzandi, Babak Khorsand, Mohsen Rajabnia, Azin Afshari Kharaghani, and **Hamidreza Houri***. High prevalence of Mucosa-Associated extended-spectrum β -Lactamase-producing Escherichia coli and Klebsiella pneumoniae among Iranian patients with inflammatory bowel disease (IBD). Annals of Clinical Microbiology and Antimicrobials. 2023. <https://link.springer.com/article/10.1186/s12941-023-00630-x> (*Corresponding author).
- Yasaman Azizimoghaddam, Sadaf Kermanpour, Nasrin Mirzaei, **Hamidreza Houri**, Ali Nabavi-Rad, Hamid Asadzadeh Aghdaei, Abbas Yadegar, and Mohammad Reza Zali. Genetic diversity of Helicobacter pylori type IV secretion system cagI and cagN genes and their association with clinical diseases. Scientific Reports. 2023. <https://www.nature.com/articles/s41598-023-37392-7>
- **Hamidreza Houri**, Hamid Asadzadeh Aghdaei, Sepideh Firuzabadi, Babak Khorsand, Fatemeh Soltanpoor, et al. High Prevalence Rate of Microbial Contamination in PatientReady Gastrointestinal Endoscopes in Tehran, Iran: an Alarming Sign for the Occurrence of Severe Outbreaks. Microbiology Spectrum. 2022. <https://journals.asm.org/doi/abs/10.1128/spectrum.01897-22?af=R>

Foodborne and Waterborne Diseases Research Center, Research Institute for Gastroenterology and Liver Diseases, Shahid Beheshti University of Medical Sciences, Shahid Arabi Ave., Yemen St., Velenjak, Tehran, Iran.

Office: +98-21-22432518 | hr.houri@sbm.ac.ir; hr.houri@gmail.com

- Babak Khorsand, Hamid Asadzadeh Aghdai, Ehsan Nazemalhosseini-Mojarad, Bahareh Nadalian, Banafsheh Nadalian. and **Hamidreza Houri***. Overrepresentation of Enterobacteriaceae and Escherichia coli Is the Major Gut Microbiome Signature in Crohn's Disease and Ulcerative Colitis; A Comprehensive Metagenomic Analysis of IBDMDB Datasets. *Frontiers in Cellular and Infection Microbiology*. <https://www.frontiersin.org/articles/10.3389/fcimb.2022.1015890/abstract> (*Corresponding author).
- Banafsheh Nadalian, Bahareh Nadalian, **Hamidreza Houri**, Shabnam Shahrokh, Mohammad Abdehagh, Abbas Yadegar and Gholamhossein Ebrahimipour. Phylogrouping and characterization of Escherichia coli isolated from colonic biopsies and fecal samples of patients with flare of inflammatory bowel disease in Iran. *Frontiers in Medicine*. <https://doi.org/10.3389/fmed.2022.985300>
- Rostami-Nejad M, Asri N, Olfatifar M, Khorsand B, **Houri H**, Rostami K. Systematic Review and Dose-Response Meta-Analysis on the Relationship between Different Gluten Doses and Risk of Coeliac Disease Relapse. *Nutrients*. 2023. <https://www.mdpi.com/2072-6643/15/6/1390>
- **Houri H**, Ghalavand Z, Faghihloo E, Fallah F, Mohammadi-Yeganeh S. Exploiting yoeB-yefM toxin-antitoxin system of *Streptococcus pneumoniae* on the selective killing of miR-21 overexpressing breast cancer cell line (MCF-7). *J Cell Physiol*. 2020 Mar;235(3):2925-2936. <https://doi.org/10.1002/jcp.29198> (My PhD Thesis).
- Naseri M, Palizban F, Yadegar A, Khodarahmi M, Asadzadeh Aghdai H, **Houri H***, Zahiri J. Investigation and characterization of human gut phageome in advanced liver cirrhosis of defined etiologies. *Gut Pathogens*. 2022 Dec;14(1):1-2. <https://gutpathogens.biomedcentral.com/articles/10.1186/s13099-022-00482-4> (*Co-Corresponding author).
- Naseri M, **Houri H***, Yadegar A, Asadzadeh Aghdai H, Zahiri J. Investigation of etiology-specific alterations in the gut microbiota in liver cirrhosis. *Expert Rev Gastroenterol Hepatol*. 2021 Oct 22:1-7. <https://doi.org/10.1080/17474124.2021.1991312> (*Co-Corresponding author).
- Nadalian B, Yadegar A, **Houri H***, Olfatifar M, Shahrokh S, Asadzadeh Aghdai H, Suzuki H, Zali MR. Prevalence of the pathobiont adherent-invasive Escherichia coli and inflammatory bowel

disease: a systematic review and meta-analysis. *J Gastroenterol Hepatol.* 2021 Apr;36(4):852-863. <https://doi.org/10.1111/jgh.15260> (*Co-Corresponding author).

- **Houri H**, Yadegar A, Zali MR. How Infection with *C. difficile* Infection Aggravates Inflammatory Bowel Disease: Is It CDI or the CDAI? *Dig Dis Sci.* 2021 Sep;66(9):2849-2850. <https://doi.org/10.1007/s10620-020-06667-8>
- Abdehagh M, Azimirad M, **Houri H**, Nadalian B, Azimirad F, Olfatifar M, Nasir Shoeibi OK, Yadegar A, Shahrokh S, Mahdavi Roshan M, Asadzadeh Aghdai H, Zali MR. Serum procalcitonin levels associate with *Clostridioides difficile* infection in patients with inflammatory bowel disease. *BMC Infect Dis.* 2021 Oct 26;21(1):1103. <https://doi.org/10.1186/s12879-021-06804-2>
- **Houri H**, Tabatabaei SR, Saei Y, Fallah F, Rahbar M, Karimi A. Distribution of capsular types and drug resistance patterns of invasive pediatric *Streptococcus pneumoniae* isolates in Teheran, Iran. *Int J Infect Dis.* 2017 Apr;57:21-26. <https://doi.org/10.1016/j.ijid.2017.01.020> (My Master Thesis).
- Maryam Soltanyzadeh, Babak Khorsand, Alireza Ahmadi Baneh, **Hamidreza Houri**. Clarifying differences in gene expression profile of umbilical cord vein and bone marrow-derived mesenchymal stem cells; a comparative in silico study. *Informatics in Medicine Unlocked.* 2022. <https://www.sciencedirect.com/science/article/pii/S2352914822002088>
- **Houri H**, Pormohammad A, Riahi SM, Nasiri MJ, Fallah F, Dabiri H, Pouriran R. Acute bacterial meningitis in Iran: Systematic review and meta-analysis. *PLoS One.* 2017 Feb 7;12(2):e0169617. <https://doi.org/10.1371/journal.pone.0169617>
- **Houri H**, Kazemian H, Sedigh Ebrahim-Saraie H, Tajji A, Tayebi Z, Heidari H. Linezolid activity against clinical Gram-positive cocci with advanced antimicrobial drug resistance in Iran. *J Glob Antimicrob Resist.* 2017 Sep;10:200-203. <https://doi.org/10.1016/j.jgar.2017.06.002>
- Karimi-Yazdi M, Ghalavand Z, Shabani M, **Houri H**, Sadredinamin M, Taheri M, Eslami G. High Rates of Antimicrobial Resistance and Virulence Gene Distribution Among *Shigella* spp. Isolated from Pediatric Patients in Tehran, Iran. *Infect Drug Resist.* 2020 Feb 13;13:485-492. <https://doi.org/10.2147/IDR.S238559>

- Naseri K, Dabiri H, Rostami-Nejad M, Yadegar A, **Houri H**, Olfatifar M, Sadeghi A, Saadati S, Ciacci C, Iovino P, Zali MR. Influence of low FODMAP-gluten free diet on gut microbiota alterations and symptom severity in Iranian patients with irritable bowel syndrome. *BMC Gastroenterol.* 2021 Jul 14;21(1):292. <https://doi.org/10.1186/s12876-021-01868-5>
- Ostadmohammadi S, Azimirad M, **Houri H**, Naseri K, Javanmard E, Mirjalali H, Yadegar A, Sadeghi A, Asadzadeh Aghdaei H, Zali MR. Characterization of the gut microbiota in patients with primary sclerosing cholangitis compared to inflammatory bowel disease and healthy controls. *Mol Biol Rep.* 2021 Jul;48(7):5519-5529. <https://doi.org/10.1007/s11033-021-06567-8>
- Maleki DT, Ghalavand Z, Laabei M, Nikmanesh B, **Houri H**, Kodori M, Hashemi A, Kadkhoda H, Eslami G. Molecular analysis of accessory gene regulator functionality and virulence genes in *Staphylococcus aureus* derived from pediatric wound infections. *Infect Genet Evol.* 2019 Sep;73:255-260. <https://doi.org/10.1016/j.meegid.2019.05.013>
- Salehi B, Goudarzi H, Nikmanesh B, **Houri H**, Alavi-Moghaddam M, Ghalavand Z. Emergence and characterization of nosocomial multidrug-resistant and extensively drug-resistant *Acinetobacter baumannii* isolates in Tehran, Iran. *J Infect Chemother.* 2018 Jul;24(7):515-523. <https://doi.org/10.1016/j.jiac.2018.02.009>
- Kadkhoda H, Ghalavand Z, Nikmanesh B, Kodori M, **Houri H**, Taghizadeh Maleki D, Karimi Bavandpour A, Eslami G. Characterization of biofilm formation and virulence factors of *Staphylococcus aureus* isolates from paediatric patients in Tehran, Iran. *Iran J Basic Med Sci.* 2020 May;23(5):691-698. <https://doi.org/10.22038/ijbms.2020.36299.8644>
- **Houri H**, Samadpanah M, Tayebi Z, Norouzzadeh R, Malekabad ES, Dadashi AR. Investigating the toxin profiles and clinically relevant antibiotic resistance genes among *Staphylococcus aureus* isolates using multiplex-PCR assay in Tehran, Iran. *Gene Reports.* 2020 Jun 1;19:100660. <https://doi.org/10.1016/j.genrep.2020.100660>
- Shabani Azim F, **Houri H**, Ghalavand Z, Nikmanesh B. Next Generation Sequencing in Clinical Oncology: Applications, Challenges and Promises: A Review Article. *Iran J Public Health.* 2018 Oct;47(10):1453-1457. <https://www.ncbi.nlm.nih.gov/pubmed/30524974>
- Esmaeili Benvidi M, **Houri H**, Ghalavand Z, Nikmanesh B, Azimi H, Samadi R, Nodeh Farahani N, Eslami G. Toxin production and drug resistance profiles of pediatric methicillin-resistant

Staphylococcus aureus isolates in Tehran. J Infect Dev Ctries. 2017 Oct 31;11(10):759-765. <https://doi.org/10.3855/jidc.9360>

- Seifi K, Kazemian H, Heidari H, Rezagholizadeh F, Saeed Y, Shirvani F, **Houri H***. Evaluation of Biofilm Formation Among Klebsiella pneumoniae Isolates and Molecular Characterization by ERIC-PCR. Jundishapur J Microbiol. 2016 Jan 2;9(1):e30682. <https://www.ncbi.nlm.nih.gov/pubmed/27099694>
- Kazemian H, Ghafourian S, Sadeghifard N, Houshmandfar R, Badakhsh B, Taji A, Shavalipour A, Mohebi R, Ebrahim-Saraie HS, **Houri H**, Heidari H. In vivo Antibacterial and Wound Healing Activities of Roman Chamomile (Chamaemelum nobile). Infect Disord Drug Targets. 2018;18(1):41-45. <https://pubmed.ncbi.nlm.nih.gov/28034365/>
- Olfatifar M, Alali WQ, **Houri H**, Pourhoseingholi MA, Babae E, Seifollahi R, Sharifian A, Zali MR. Early estimation of the epidemiological parameters of novel coronavirus disease (COVID-2019) outbreak in Iran: 19 Feb-15 March, 2020. Gastroenterol Hepatol Bed Bench. 2020 Winter;13(Suppl1):S134-S138. <https://www.ncbi.nlm.nih.gov/pubmed/33585015>
- Zafarane S, **Houri H**, Kazemian H, Heidari H, Amiri P, Tabarraei B. Characterization of virulence genes, serogroups and antimicrobial susceptibility of Shiga toxin producing Escherichia coli isolated from bovine mastitic milk in Tehran, Iran. Trop Biomed. 2017 Jun 1;34(2):295-304. <https://pubmed.ncbi.nlm.nih.gov/33593009/>
- Mahdiyoun SM, Kazemian H, Ahanjan M, **Houri H**, Goudarzi M. Frequency of Aminoglycoside-Resistance Genes in Methicillin-Resistant Staphylococcus aureus (MRSA) Isolates from Hospitalized Patients. Jundishapur J Microbiol. 2016 Jul 26;9(8):e35052. <https://www.ncbi.nlm.nih.gov/pubmed/27800135>
- Kazemian H, Ghafourian S, Heidari H, Amiri P, Yamchi JK, Shavalipour A, **Houri H**, Maleki A, Sadeghifard N. Antibacterial, anti-swarming and anti-biofilm formation activities of Chamaemelum nobile against Pseudomonas aeruginosa. Rev Soc Bras Med Trop. 2015 Jul-Aug;48(4):432-6. <https://doi.org/10.1590/0037-8682-0065-2015>
- Rafiei Tabatabaei S, Rahbar M, Nazari Alam A, Fallah F, Hashemi A, Yousefi M, **Houri H**, Karimi A. Detection of pbp2b gene and antimicrobial susceptibility pattern of Streptococcus

pneumoniae isolates in Tehran hospitals, Iran. Archives of Pediatric Infectious Diseases. 2017 Jan 1;5(1). <https://dx.doi.org/10.5812/pedinflect.38891>

- Tayebi Z, Heidari H, Kazemian H, Ghafoori SM, Boroumandi S, **Houri H**. Comparison of quinolone and beta-lactam resistance among Escherichia coli strains isolated from urinary tract infections. Infez Med. 2016 Dec 1;24(4):326-330. <https://pubmed.ncbi.nlm.nih.gov/28011969/>

- Kazemian H, Heidari H, Ghanavati R, Mohebi R, Ghafourian S, Shavalipour A, Taji A, **Houri H**. Characterization of antimicrobial resistance pattern and molecular analysis among extended spectrum β -Lactamase-producing Escherichia coli. Pharmaceutical Sciences. 2016 Jul 23;22(4):279-84. <https://doi.org/10.15171/PS.2016.43>

- Amini V, Kazemian H, Yamchi JK, Feyisa SG, Aslani S, Shavalipour A, **Houri H**, Hoorijani M, Halaji M, Heidari H. Evaluation of the Immunogenicity of Diphtheria Toxoid Conjugated to Salmonella Typhimurium-Derived OPS in a Mouse Model: A Potential Vaccine Candidate Against Salmonellosis. Iran Red Crescent Med J. 2016 May 30;18(7):e34135. <https://www.ncbi.nlm.nih.gov/pubmed/27660722>

- Nasiri MJ, Imani Fooladi AA, Dabiri H, Pormohammad A, Salimi Chirani A, Dadashi M, **Houri H**, Heidary M, Feizabadi MM. Primary ethambutol resistance among Iranian pulmonary tuberculosis patients: a systematic review. Therapeutic advances in infectious disease. 2016 Oct;3(5):133-8. <https://doi.org/10.1177%2F2049936116661962>

- Goodarzi H, Goodarzi M, Ebrahimi N, Dabiri satri S, Ghafoori SM, **Houri H**. Comparison of culture and multiplex PCR in detection of fastidious bacteria associated with otitis media among suspected patient admitted to Amir-Alam Hospital. Research in Medicine. 2017 Jan 10;40(4):192-6. http://pejouhesh.sbmu.ac.ir/browse.php?a_code=A-10-865-1&slc_lang=en&sid=1

Book

Zohreh Ghalavand, Hamidreza Houri, Mehrzad Sadredin Amin, Ali Haghroosta. "A review on the pathogenesis of bacteria". Tehran: Shahid Beheshti University of Medical Sciences (2018); pp 363 [in Persian].

Publications in Progress

- Characteristics and virulence determinants of adherent-invasive *Escherichia coli* isolates from Iranian patients with inflammatory bowel disease
- Characterization and genetic diversity of *Helicobacter pylori* type IV secretion system components, CagI and CagN and its association with clinical outcomes among Iranian patients. Under review in "Gut Pathogens" Journal (revision submitted).
- Metagenomics analysis of biliary microbiome in patients with primary sclerosing cholangitis; a significant role of gut pathobionts in the immune response of patients.
- Virulence characterization of *Escherichia coli* from fecal samples of irritable bowel syndrome subjects.
- Investigation of virulence characteristics associated with pathogenicity of *Klebsiella pneumoniae* colonized in the colon of IBD patients and effect of probiotic strains on its virulence.
- Prevalence of broad-spectrum beta-lactamases (ESBLs) and carbapenemases in isolates of *Klebsiella pneumoniae* and *Escherichia coli* isolated from colon of patients with Crohn's disease.

ABILITIES

- Knowledgeable and outstanding problem solver, creative, and proactive project manager.
- Accomplished in working effectively independently and in a multidisciplinary team.
- Diligent in managing and prioritizing multiple tasks and remaining focused on personal objectives with minimal direction.
- Proven ability in data management and detailed documentation.
- Positive and flexible attitude concerning work assignments and new learning ability to manage multiple tasks with enthusiasm.
- Excellent interpersonal and communication skills.

- Wonderful and friendly at collaborating on a team.
- Willing and able to travel locally and internationally occasionally as required.

SKILLS AND TECHNICAL PROFICIENCY

- Exceptional and excellent in academic writing and manuscript proofreading and editing.
- Highly experienced and expert in Molecular biology: PCR-based assays; quantitative and semi-quantitative real-time PCR; and gene expression analysis.
- Exceptional in doing Cell and tissue culture.
- In-depth knowledge of Bioinformatics and computing skills, R and Python programming, trimming raw NGC data, taxonomy profiling of microbial communities from metagenomic shotgun sequencing data using MetaPhlan 4, assigning taxonomic labels to short DNA sequences using Kraken 2, evaluating the abundance of species in DNA sequences from a metagenomics sample using Bracken, classification of DNA sequences from microbial samples using Centrifuge, taxonomic profiling of 16s rRNA sequencing data using QIIME, exploring metagenomics classification results using web-based application Pavian, microbial metabolic pathways and other molecular functions analysis from metagenomic or metatranscriptomic sequencing data using HUMAnN3, bacterial strain-level analysis based on SNPs using StrainPhlan, metagenomic assembly by MEGAHIT and CRISPRFinder, phage community analysis and taxonomic profiling, bulk RNA sequencing, single cell sequencing, whole exome sequencing, calculation of gene expression and microarray analysis.
- Knowledgeable and outstanding problem solver in Proteomics: Isolation and estimation of proteins; PAGE-SDS; and western balloting.
- Microbial isolation and identification as well as antibiotic susceptibility testing.
- Cloning and protein expression.

PROFESSIONAL SOCIETY MEMBERSHIP

- Medical Council of Iran (MC. No.: L-4751)
- Iranian Society of Microbiology (ISM)
- Iranian Society of Medical Bacteriology

CERTIFICATES

- Science Secretary of the virtual professional courses of “Clinical Microbiology and Antimicrobial Susceptibility in the 1st International Congress of Laboratory Diagnosis, February 2022, Tehran, Iran.
- Participation as the executive committee in the 5th International Congress of Laboratory and Clinic, January 2013, Tehran, Iran.
- Participation as the executive committee in the 14th International Congress of Microbiology, August 2013, Tehran, Iran.
- Participation as the executive committee in the 6th International Congress of Laboratory and Clinic, February 2014, Tehran, Iran.
- Participation as the executive committee in the 15th International Congress of Microbiology, August 2014, Tehran, Iran.
- Participation as the scientific committee in the 7th International Congress of Laboratory and Clinic, January 2017, Tehran, Iran.
- Participation as the executive committee in the 18th International Congress of Microbiology, August 2017, Tehran, Iran.
- Participation as the executive committee in the 19th International Congress of Microbiology, September 2018, Tehran, Iran.
- Participation as the scientific committee in the 12th International Congress of Laboratory and Clinic, January 2019, Tehran, Iran.

WORKSHOP ORGANIZATION AND THATCHING

- Analysis of microbiome community and metagenomics analysis at Shahid Beheshti University of Medical Sciences.

- Real-time PCR workshop at Shahid Beheshti University of Medical Sciences.
- Primer design workshop at Shahid Beheshti University of Medical Sciences.
- Systematic reviews and meta-analyses workshop at Shahid Beheshti University of Medical Sciences.
- Basic bioinformatics techniques and advanced search strategies in biological and medical databases at Shahid Beheshti University of Medical Sciences.

REFERENCES

- Professor Hamid Asadzadeh Aghdaei, Vice Chancellor in Administration and Resources Development Affairs in Research Institute for Gastroenterology and Liver Diseases, Shahid Beheshti University of Medical Sciences, Tehran, Iran. Email: hamid.asadzadeh@sbmu.ac.ir
- Professor Fatemeh Fallah, Full Professor and Faculty member of the School of Medicine, Shahid Beheshti University of Medical Science; Vice-Chancellor in Research Affairs in Pediatric Infections Research Center, Research Institute for Children Health, Shahid Beheshti University of Medical Sciences. Email: fafallah@sbmu.ac.ir
- Professor Samira Mohammadi-Yeganeh, Associate Professor and Faculty member of the Department of Biotechnology, School of Advanced Technologies in Medicine, Shahid Beheshti University of Medical Sciences, Tehran, Iran. Email: s.mohammadiyeganeh@sbmu.ac.ir
- Dr. Javad Zahiri, Postdoctoral Scholar Employee, Department of Neuroscience, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0662. E-mail: jzahiri@health.ucsd.edu