Dr. Masoud Alebouyeh,

- Research Assistant Professor of Medical Bacteriology,
- Research Center for Pediatric Infections, Research Institute for Children's Health
- Shahid Beheshti University of Medical Sciences, Tehran, Iran
- Age: 45; Birth date: 7 August 1978,
- Married,
- Nationality: Iranian
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Education:

Dates		Name of School/College/University	Qualifications
From To			
2023	2023	IPC program, Infection control, Charite University, Germany, WHO	
2023	2023	GIARP project- Germany, Robert Koch Institute	
2018	2018	Field Epidemiology, training course (Iran-Germany)	TUMS- Bernhard Nocht Institute for Tropical Medicine, Germany
2005	2010	Medical School No.2/Tarbiat Modares University	PhD, Medical Bacteriology, Iran
2006	2006	Molecular Microbiology, training course (IAESTE)	University of Greifswald, Germany
2001	2004	Medical School/Iran University of Medical Sciences	MSc, Medical Microbiology, Iran
1996	2000	Gorgan Branch	BSc, Microbiology, Iran

Main experiences:

- 1. Direction of Research Center for Foodborne and Waterborne Diseases, Research Institute for Gastroenterology and Liver Diseases (RIGLD), SBMU, Iran (10-years)
- 2. Consultant of Clinical Laboratory for Infectious Diseases, Pediatric Infections Research Center, Research institute for Children's Health, SBMU, Iran (3- years, ongoing)

Technical experiences:

Conventional microbiology (traditional methods) and automated systems (BACTEC), molecular microbiology (Different PCR methods, real time PCR, and typing methods), different antimicrobial

susceptibility testing methods, enzymology and proteomics methods of microbial enzymes, point of care testing, anaerobic microbiology, SOP and scientific writing, statistical analysis, bioinformatics and micrbiome/resistome analysis, sequencing and mutation analysis, ELISA, Serotyping and serogrouping (Traditional and molecular methods), and general methods for validation and verification of diagnostic tests.

Main Research interests

- 1. Molecular epidemiology of hospital and community acquired infections and antimicrobial resistance
- 2. Molecular biology of chronic infections

Main experiences:

- 1. Direction of Research Center for Foodborne and Waterborne Diseases, Research Institute for Gastroenterology and Liver Diseases (RIGLD), SBMU, Iran (10-years)
- 2. Supervision of Clinical Laboratory for Infectious Diseases, Pediatric Infections Research Center, Research institute for Children's Health, SBMU, Iran (3- years, ongoing)
- 3. Supervision of more than 75 MSc and PhD thesis in Biology and Clinical Microbiology majors.
- 4. Design and implementation of national and international research projects on cellular and molecular microbiology (Host-pathogen interaction), epidemiology of infectious diseases, antimicrobial resistance, and hospital or community acquired infections
- 5. Cooperation with Global Foodborne Network (GFN) for proficiency tests of intestinal pathogens
- 6. Collaboration with Denmark Technical University (DTU) for doing "Global monitoring of antimicrobial resistance based on metagenomics analyses of urban sewage"
- 7. Collaboration and joint supervision of research projects with Robert Koch Institute (RKI, Germany) and Acibadem University, Turkey
- 8. Holding three national and regional workshops on "Integrated surveillance of antimicrobial resistance and foodborne diseases" in collaboration with WHO
- 9. Design and implementation of microbiome and resistome studies among different populations of patients with common bile duct stone, IBD, IBS, and gastritis
- 10. Study on recurrence and relapse (Clostridioides difficile, H. pylori, SARS-CoV-2)
- 11. Source tracking and molecular epidemiology of human pathogens
- 12. Microbiome analysis in IBD patients, role of their crude metabolites in induction of proinflammatory cytokines
- 13. Microbiome analysis in IBS patients, role of CDT-encoding bacteria in induction of TLRs, IL-8, serotonin, and apoptosis
- 14. One year follow up for study of changes in Microbiome of infants (breast feeding *vs* infant formula feeding neonates)
- 15. Cell culture analysis on fecal microbiota of IBD patients for study of their roles in induction of inflammatory response

- 16. Study of culture filtrates of anaerobic bacteria from patients with CRC and analysis of their influence on gene expression profiles of HT-29 cell line.
- 17. The prevalence of CMV infection and its contribution in the occurrence or exacerbation of IBD (using real time PCR, ELISA, and conventional methods on colon biopsy samples)
- 18. *H. pylori* infection (its interaction with host tissue, pathological changes, virulence diversity, diversity of pathogenicity islands, function of their genes in the gastric tissue, carcinogenesis, antimicrobial resistance, microevolution during chronic infection, recurrence and reinfection)
- 19. *C. difficile* (prevalence, genetic diversity, clonality, antimicrobial resistance, recurrence/relapse, toxin profiles, recurrence and reinfection)
- 20. Bacteroidetes (epidemiology and antimicrobial resistance)
- 21. Fecal microbial transplantation and its effect on dysbiosis
- 22. Interaction of bacterial genotoxins (e.g. cytolethal distending toxin-encoding) with TLRs and their effects on inflammation
- 23. Interaction of bacteria with the biliary tract, formation of gall stone, and chronic inflammatory diseases in this tissue.
- 24. Microbiome analysis of the biliary tract in patients subjected to ERCP.
- 25. Virulence entity of bacterial isolates from the biliary tract, resistance to bile components, and pathogenesis
- 26. Spore surface display for study of the interaction of *B. subtilis* spores with intestinal epithelial cells.