Stanford

Mohsen Fathzadeh

Genomic Scientist, Institute For International Studies, Loyalka, Prashant's Program

Bio

BIO

Mohsen Fathzadeh is a medical geneticist with 20+ years of experience bridging science, care, and innovation.

His academic journey began at Yale University, where he completed his Ph.D. thesis under Prof. Arya Mani, focusing on a genetic form of familial Metabolic Syndrome. From 2015 to 2021, he served as a Postdoctoral Fellow at Stanford University, specializing in Cardiovascular Medicine, Psychiatry, and Public Health Sciences. During this tenure, he conducted comprehensive functional genomic analyses under the mentorship of esteemed professors.

Mohsen's collaborative efforts with Merck & Co., Inc. led to the identification of a gene regulator associated with body fat distribution. His research scope also includes the characterization of genes linked to insulin resistance and obesity. Recently, he explored the (epi)genetic link between newborn body fat distribution and high maternal gestational glucose levels, focusing on mother-child cohorts from diverse and underserved communities.

His primary goal is to utilize his findings to enhance our understanding of the genes and evolutionary pathways influencing healthspan and age-related diseases, thereby improving patient lives.

After completing his postdoctoral research in 2021, Mohsen spent two years in the biotech industry, specializing in genetic testing and variant assessment. He has an ongoing research project with Stanford's Population Health Center, studying epigenetic disease mechanisms in mother-child cohorts.

Mohsen recently joined Stanford's Graduate School of Education and the Freeman Spogli Institute for International Studies to work with Prof. Prashant Loyalka on a pioneering study that explores how educational interventions in genetic counseling can empower families—particularly in the context of autism spectrum disorders. This new chapter reflects his deepening commitment to integrating genomic science with public health education, leveraging AI and evidence-based learning to promote equity, early intervention, and informed decision-making across diverse populations. As the field of genetic counseling evolves, Mohsen envisions a future where accessible education and responsible innovation in educational AI can help every individual—and every story—be seen, heard, and supported.

Outside his professional life, Mohsen leads an active lifestyle and enjoys learning about diverse cultures.

INSTITUTE AFFILIATIONS

- Member, Cardiovascular Institute
- Member, Maternal & Child Health Research Institute (MCHRI)