Dr. Mateen A. Khan obtained his PhD degree in the field of Biotechnology from the Aligarh Muslim University, India, and later completed a postdoctoral fellowship in the Department of Biochemistry and Chemistry, Hunter College of the City University of New York, and School of Medicine, Stanford University, California, USA. Dr. Khan has published over 30 journal articles, review article, book and book chapter, and has been invited/attended over 30 national and international conferences. Dr. Khan is an active and productive member of the scientific community, serving as a reviewer for multiple scholarly journals including *Biochimica et Biophysica Acta-BBA, PLOS ONE, Current Chemical Biology, Journal of Biochemistry and Modern Application, and the International Journal of Biochemistry, Biophysics & Molecular Biology*. He is the recipient of Outstanding Faculty Research Award in 2019 by the Alfaisal University. He has been identified as one of the best young scientist at the City University of New York by Gene Centre foundation and his name has been published by News Review. Dr. Khan's research achievements have been identified by the faculty of 1000 biology scientist. He has supervised or mentored over 15 undergraduate and graduate students, and has served on over 20 committees.

Dr. Khan research interests are directed toward understanding the mechanism of gene regulation of iron metabolism and how it impacts on disease process. Mis-regulation of brain iron leads to several brain disorders including Alzheimer's, and Parkinson's disease. He is specifically interested in the translational studies on identification of novel key molecular and therapeutic targets by targeting the iron response elements (IREs) of the mRNAs for the Alzheimer's Amyloid Precursor Protein (APP) and the Iron Regulatory Protein (IRP). The common iron responsive element motif in the 5' untranslated regions of the Alzheimer's associated, APP, offers a novel approach to targeting these diseases. His major focus over the past several years has been involved the binding characterization of IRP/IRE and eIF4F/IRE RNA and elucidation of how these complexes response to changing iron levels in regulation of protein synthesis. IRP bind to iron responsive elements (IREs) RNA stem loops structure (~28-nt). IREs have been found in several other mRNAs, and it is now known that IRE/IRP interactions mediate regulation of the several protein synthesis involved with iron metabolism. Thus, IRPs are central regulators of iron in the cells. He is evaluating to identify the stable complex formation of the biological relevant APP/IRE, IRP/IRE and eIF4F/IRE, and that can account for their competitive advantage in translation. And the role of iron in the folding and unfolding pattern of APP in IRE signaling pathway. IRE/IRP signaling pathway has been implicated in the modulation of APP, which is important to neurodegeneration in Alzheimer's disease. Therefore, the identification of small molecular IRE chemical inhibitors to reduce APP protein aggregation can have therapeutic significance to neurodegenerative diseases.