

Madhu Sudhana Saddala PhD**Current Address:**

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**Biography**

Dr. Madhu Sudhana Saddala is a distinguished Bioinformatician at the Institute for Memory Impairments and Neurological Disorders (UCI MIND) at the University of California, Irvine (2024), Irvine, CA, USA. He has an extensive background in bioinformatics, with a strong focus on neurodegenerative diseases.

Dr. Saddala's notable postdoctoral experience includes two years as a Postdoctoral Research Associate at the Wilmer Bioinformatics Center, Johns Hopkins University School of Medicine, Baltimore, MD, USA (2021-2023). He also worked as a Postdoctoral Fellow at the Mason Eye Institute, University of Missouri School of Medicine, Columbia, MO, USA, for three years (2018-2021). Dr. Saddala holds a postgraduate degree in Bioinformatics from Sri Venkateswara University, Tirupati, Andhra Pradesh, India (2008). He earned his Ph.D. in Bioinformatics from the same institution (2017). He has qualified for several prestigious state and national life science exams, including APSET-2013 and CSIR-NET-2011. He was selected as a UGC-BSR Meritorious Fellow and served as both a Junior and Senior Research Fellow at Sri Venkateswara University (2013-2016), India. Dr. Saddala's professional experience also includes a position as a Research Associate at the Centre for Agricultural Bioinformatics (CABin) in ICAR-IASRI (Indian Agricultural Statistics Research Institute), New Delhi, India (2017). He then transitioned to the Johns Hopkins University School of Medicine as a Postdoctoral Fellow (2018-2022). Throughout his career, Dr. Saddala has published over 45 research papers in significant peer-reviewed journals, authored three book chapters, and presented more than 37 abstracts at national and international conferences. He serves on the editorial boards of several internationally recognized academic journals and holds two American patents for methods treating inflammation and angiogenesis and small-molecule activators for Glucose-6-Phosphate Dehydrogenase (G6PD).

Currently, Dr. Saddala is focused on investigating multi-omic approaches to understand the molecular mechanisms of neurodegenerative diseases, such as Alzheimer's disease and frontotemporal dementia (FTD). His research aims to provide a comprehensive data-science approach, generating and analyzing multi-scale big data to uncover novel biological insights. This work includes pioneering techniques such as single-nuclei RNA- and ATAC-seq in human samples and mouse models, advancing the understanding of Alzheimer's disease biology and aging.