Dr. Usha Rajamma is a Senior Scientist & Head of the Centre for Development & Aging Research (CDAR) at Inter University Centre for Biomedical Research & Super Speciality Hospital. She received M.Sc. degree of the University of Kerala from Fatima Mata National College, Kollam. In 1993, she received Ph.D. degree in Science from Jadavpur University, Kolkata for her research in Protein Chemistry conducted at CSIR-Indian Institute of Chemical Biology (CSIR-IICB), Kolkata. Subsequently she worked for 5 years as Post Doctoral Fellow and then as Senior Research Associate for two years under CSIR-Scientist Pool Scheme at CSIR-IICB. She joined Manovikas Kendra, Kolkata as Scientist in 2001 and initiated genetic research on autism spectrum disorders for the first time in India. She has qualified CSIR-NET in 1985. She is a recipient of the DST-Fast track Proposal for Young Scientist (DST-FTP) scheme for her research proposal on Huntington's disease. She has published 36 research papers in peer-reviewed indexed international journals.

Dr. Usha joined the IUCBR&SSH on 5th January 2017 and she will be conducting biomedical research on various Developmental Disabilities such as Autism Spectrum Disorder (ASD), Attention Deficit Hyperactivity Disorder (ADHD), Specific Learning Disabilities (SLD), etc. Causative factors and molecular mechanisms underlying pathophysiology of these disorders are currently unknown, causing biomarker identification and drug development difficult. She will investigate the molecular basis of the pathology of these disorders and her research will be oriented to explore possible avenues for early detection, diagnosis and treatment of these disabilities. Currently she has two research grants on autism genetics from ICMR, which is being carried out under cooperation and collaboration with Manovikas Kendra, Kolkata.

The research interests of her team include: (i) Epidemiological survey of developmental disabilities in a South Indian population (Kottayam District, Kerala) through population screening using door-to-door survey for finding its prevalence, and to predict causative factors and at-risk population, (ii) Discovery of causative genes/variants, which are rare/common or *de novo* mutations for each of the disorders through whole exome sequencing (WES), (iii) Detection of differentially expressed proteins or mRNA in the saliva, hair or blood samples of each of the above mentioned disabilities for biomarker identification, (iv) Investigation of molecular, neurochemical, neuroanatomical pathology associated with the disorder using animal and cellular (cybrid & iPSC cell lines) models of these disorders, and (v) Strategies for design of diagnosis and drug development based on the information gathered from the above studies using these models.

Citations 628; H-index - 16, i-10 20; Cumulative IF of published work - ~110.