

Dr. Casaccia received her medical degree with Honors from the University of Rome, and a PhD degree in Neurobiology from State University of New York (SUNY) Health and Science Center Brooklyn. She trained at Cornell Weill Medical Center in New York and at the Skirball Institute for Molecular Medicine at NYU. She is currently the Director of the Neuroscience Initiative at the Advanced Science Research Center of the Graduate Center of CUNY in New York City, the Co-Director of the Inter-Institutional Mount Sinai-CUNY Glial Center and Professor of Neuroscience, Genetics and Genomics, and Neurology at Icahn School of Medicine at Mount Sinai, in New York City. Dr. Casaccia's work adopts molecular and cellular techniques to find modifiers of disease course in Multiple sclerosis. Her work includes translational research in regenerative and personalized medicine. The laboratory focuses on three main topics: (i.) How new myelin is formed in the developing and adult brain (ii.) how neurons are damaged in MS and (iii.) what is the effect of the environment (including diet and gut microbiome) on myelin and neurons. The overall goal is to protect the neurons and replace damaged myelin. The new methodologies leading to personalized medicine include the analysis of epigenome in immune and neural cells, lipidomics and metabolomics in spinal fluid and plasma and analysis of the microbiome in multiple sclerosis patients. Dr. Casaccia is part of the International MS Microbiome Consortium, and her work is funded by grants from the National Institute for Neurological Disorders and Stroke, the Department of the Army and by the National Multiple Sclerosis Society. Dr. Casaccia is also the recipient of an investigator-initiated award by Biogen. Dr. Casaccia has been recognized as one of the distinguished MS researchers in the United States and has been on numerous panels across the country discussing advances in MS research.