Schahram Akbarian, M.D., Ph.D., is Professor of Psychiatry and Neuroscience at the Icahn School of Medicine at Mount Sinai in New York, where he is Chief of the Division of Psychiatric Epigenomics. He studies genome organization and genome function, including gene expression, in brain cells. His laboratory is exploring epigenetic regulation of gene expression in order to identify epigenetic drug targets and novel treatment avenues for psychosis, depression and other psychiatric disease.

Dr. Akbarian is an authority on gene expression and epigenetic mechanisms in the context of major brain and behavior disorders. He has studied chemical modifications of histones, small proteins that are involved in packaging the DNA of our genome. Epigenetic modifications of histones have an impact on gene expression. By joining the PsychENCODE consortium sponsored by the National Institute of Mental Health, his team is now mapping on a genome-wide scale the epigenetic profiles of prefrontal cortex neurons in brain specimens from several hundred subjects diagnosed with schizophrenia, which will be compared with those from specimens from controls.

Dr. Akbarian studied medicine and conducted his thesis work at the Freie Universität Berlin, Germany. He is a board certified psychiatrist and molecular neuroscientist who trained at the Massachusetts General Hospital in Boston, the Whitehead Institute for Biomedical Research in Cambridge, and the University of California at Irvine. In 2002, he joined the University of Massachusetts Medical School in Worcester where he established a research program in psychiatric epigenetics and served as the Director of the Brudnick Neuropsychiatric Research Institute. Presently, he heads the Division of Psychiatric Epigenetics in the Departments of Psychiatry and Neuroscience at Mount Sinai School of Medicine.

“Dr. Schahram Akbarian has led the field nationally and internationally in applying the most advanced state-of-the-art molecular tools to understanding abnormalities in the brains of schizophrenic patients. He has discovered dysregulated GABAergic gene expression, specific epigenetic marks, and developed cell type-specific higher order chromatin and spatial 3D genome mapping in schizophrenia. Dr. Akbarian’s major innovative investigations continue to advance research in schizophrenia.”

—William E. Bunney, Jr., M.D., Chair of the Lieber Prize Selection Committee