Biographical Information

Matthew W. State, MD, PhD, received his undergraduate and medical degrees from Stanford University, and completed his residency in psychiatry and fellowship in child psychiatry at the UCLA Neuropsychiatric Institute. He received his PhD in Genetics from Yale University and joined the Yale University faculty from 2001-2013. He is currently Professor and Chair of the Department of Psychiatry at the University of California, San Francisco. Dr. State's lab has long standing interest in the contribution of rare genetic mutations to childhood neuropsychiatric disorders including autism and Tourette syndrome. Dr. State is currently leading a large multi-site genome wide study of Autism Spectrum Disorder funded by the Simons Foundation and is playing a leadership role in the Tourette International Consortium for Genetics and the Autism Sequencing Consortium. Among many professional honors, this past year, he was awarded the Ruane Prize for Outstanding Research in Child and Adolescent Psychiatry by the Brain and Behavior Research Foundation.

Presentation Abstract (4:30 pm presentation)
From Genes to Biology in Autism Spectrum Disorder

The last several years have ushered in a new era in the genetics of autism spectrum disorder (ASD). The combination of new genomic technologies, shared resources across laboratories, and the participation of an increasingly large number of families in research have led to a series of seminal discoveries. Dozens of areas of the human genome and specific genes have so far been identified as strong risk factors in ASD, the role of new (or de novo) mutation has been confirmed in multiple studies, and a surprising relationship between genetic risk factors for autism and a range of other neurodevelopment disorders has been uncovered. This lecture will review this recent progress and address the next steps in moving from the systematic discovery of ASD genes to a fuller understanding of the neurodevelopment processes that underlie social disability.