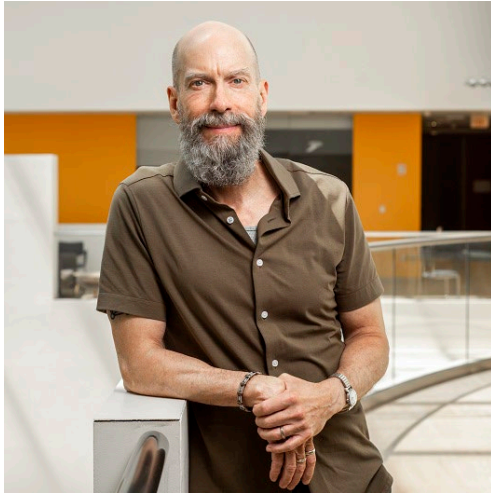## Short Biography – Earl K. Miller

Earl K. Miller is the Picower Professor of Neuroscience at MIT. He has faculty positions in The Picower Institute for Learning and Memory and the Department of Brain and Cognitive Sciences. He holds degrees from Kent State University (B.A.) and Princeton University (M.A., Ph.D.). He received an honorary Doctor of Science from Kent State University in 2020.

Professor Miller's work centers on neural mechanisms of cognition, particularly working memory, attention, and executive control. His notable contributions include a theory on the prefrontal cortex's role in rule learning and goal maintenance, pioneering work on multifunctional 'mixed selectivity' neurons, and research on neural dynamics and brain wave frequencies in cognitive processes. Miller's research integrates experimental and computational methods, advancing understanding of cognition and related disorders like autism and schizophrenia.

Professor Miller has received numerous accolades and serves on advisory boards as well as editorial boards for major neuroscience journals. His 2001 paper with Jonathan Cohen is one of the most cited in the history of neuroscience. Professor Miller has funded the *Earl K. Miller First Generation Scholarship* at Kent State University to support disadvantaged first-generation college students.

Selected Honors and Awards:

- Doctor of Science (honoris causa), Kent State University, 2020
- George A. Miller Prize in Cognitive Neuroscience, 2019
- Elected to the American Academy of Arts and Sciences, 2017
- Goldman-Rakic Prize for Outstanding Achievement in Cognitive Neuroscience, 2016
- MERIT Award, National Institute of Mental Health, 2010.
- Elected Fellow, American Association for the Advancement of Science, 2005
- Picower Professorship at MIT (endowed chair), 2003
- Society for Neuroscience Young Investigator Award, 2000
- National Academy of Sciences Troland Research Award, 2000
- Tenured at MIT two years ahead of schedule (1999)
- Phi Beta Kappa, 1985