

Key:

**R: Senior Judge Jed S. Rakoff**

R: For centuries, scientists, philosophers and legal scholars have been fascinated by the mind. Our brains govern virtually all the actions we take, the thoughts and ideas we develop, and the ways in which we perceived ourselves and the world around us. Understanding how our brains work is key to understanding why we do the things we do, and how we should be judged for our actions. In law, we consider both a person's actions and the person's mental state in judging the responsibility on an individual. The law may develop an elaborate framework to judge the actions of individuals, yet it struggles to assess the distinct mental states that align with levels of responsibility. Neuroscience is increasingly offering evidence that may inform such assessments. Advances in neuroscience research and technology are providing new insights that help us understand how the brain works. Some of these technologies allow us to understand the roles of certain brain areas in decision making, and how these systems can be disrupted. Other research has yielded insights related to the young adult brain and the mechanisms of drug addiction. These findings are already being introduced into US courtrooms. The growing imbalance and sophistication of neuroscientific evidence means that it is imperative that judges understand the nature of neuroscience evidence that may enter into the courtroom. Specific areas of interest include brain imaging, particularly for lie or recognition detection, pain detection, substance abuse disorders, and impulse control by young adult offenders. At the same time, not all neuroscience is sufficiently developed that can satisfy Rule 702 of the Federal Rules of Evidence, and judges need to consider its limitations, as well as its strengths. This program seeks to assist judges by describing the current state of neurotechnologies and providing an overview of neuroscientific topics relevant to the legal system, including how neuroscience evidence may or may not assist in rendering judgement in individual cases. I hope you will enjoy this discussion and find it beneficial.