



Benjamin F. Cravatt

Biosketch

Dr. Cravatt is a Professor in the Skaggs Institute for Chemical Biology and Chair of the Department of Chemical Physiology at Scripps Research. Dr. Cravatt obtained his undergraduate education at Stanford University, receiving a BS in the Biological Sciences and a BA in History. He then trained with Drs. Dale Boger and Richard Lerner and received a PhD in Macromolecular and Cellular Structure and Chemistry from The Scripps Research Institute (TSRI) in 1996. Professor Cravatt joined the faculty at TSRI in 1997 as a member of the Skaggs Institute for Chemical Biology and the Departments of Cell Biology and Chemistry and became Chair of the Department of Chemical Physiology in 2007.

Research Interests

Our research group is interested in mapping biochemical pathways that play fundamental roles in mammalian physiology and disease and to use this knowledge to identify novel therapeutic targets for the treatment of human disorders. To achieve these goals, we develop and apply new technologies that bridge the fields of chemistry and biology, such as the chemical proteomic method activity-based protein profiling, which utilizes active site-directed small-molecule probes for the global analysis of enzyme function in native biological systems. We complement these efforts in technology development with focused studies on individual enzymes, in particular, enzymes that regulate chemical transmission in the nervous system, cancer, and metabolism. Notably, our enzyme characterization projects both benefit from and provide a fertile testing ground for technological innovations. Thus, through the integration of two complementary research programs, one dedicated to methods development for functional proteomics, and the other to the in-depth analysis of key signaling enzymes, our group achieves a unique balance that cultivates the creation and rapid implementation of cutting-edge technologies that address unmet needs in biomedical research.