Professor Susruta Majumdar

*Center for Clinical Pharmacology, Washington University in St. Louis*

**Design of ligands which enable opioid functional selectivity**

America is currently going through an opioid epidemic, which on an average claims 115 American lives each day due to overdoses. We will discuss structure based drug design coupled with natural products based approaches enabling development of non-addictive but pain relieving opioid modulators.

**Brief bio:** Sush Majumdar received his PhD in Medicinal Chemistry from University of Florida and a Post-doc in Neuropharmacology from Sloan Kettering Cancer Center. He started his independent career as an Assistant Attending Chemist at Sloan Kettering. Presently, he is an Associate Professor of Medicinal Chemistry and Anesthesiology at St Louis College of Pharmacy and Washington University, St Louis. Research in the Majumdar laboratory is aimed at attaining functional selectivity of opioid agonist action from its on target adverse effects while integrating chemical synthesis with biochemical, genetic and pharmacological approaches. Work from the laboratory has led to probes which display G-protein biased signaling, transmembrane splice variants of mu opioid receptor agonists and aided the crystallization of kappa opioid receptor in its active form and cryo-EM structures of natural product bound mu opioid modulators.

Hosted by Professor Vsevolod Katritch

*The scientific community is invited*

** USC Department of Chemistry **

chem.usc.edu