



CHEMISTRY & BIOCHEMISTRY

SEMINAR PROGRAM

DEPARTMENT OF CHEMISTRY & BIOCHEMISTRY
UNIVERSITY OF OKLAHOMA

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We Are Pleased to Announce a Seminar
Presented by

Susruta Majumdar

University of Health Sciences and Pharmacy at St. Louis
Washington University School of Medicine

Monday, December 5, 2022
4:00 pm
SLSRC 3410/3430

Synthesis of novel opioid modulators targeting novel allosteric sites

Pain is pervasive across society and treated by antidepressants and GABA analogs whose efficacy in the clinic is limited and opiates whose usage has led to an epidemic. The need for safer analgesics with reduced respiratory depression and addiction potential is greater than ever before. We will discuss two cryo-EM enabled structure-based approaches targeting novel sites distinct from the orthosteric site of opioid receptors using the well-known fentanyl template and a natural product metabolite named mitragynine pseudoindoxyl (Nat Chem Biol 2022 accepted) that have led to safer analgesics when tested in preclinical mice models.

Refreshments will be served