We Are Pleased to Announce a Seminar Presented by:

Thomas Prisinzano, Ph.D.
Professor and Chair of Medicinal Chemistry
University of Kansas

“Salvia divinorum: A Unique CNS Active Plant”

Thursday, March 2, 2017 at 9:00 AM
Astellas Conference Room, SLSRC 3410/3430
Refreshments will be served at 8:45 AM

The neoclerodane diterpene salvinorin A is the major active component of the hallucinogenic mint plant *Salvia divinorum* Epling & Játiva (Lamiaceae). Since the finding that salvinorin A exerts its potent psychotropic actions through the activation of opioid receptors, the site of action of morphine and related analogues, there has been much interest in elucidating the underlying mechanisms behind its effects. These effects are particularly remarkable, because (1) salvinorin A is the first reported non-nitrogenous opioid receptor agonist, and (2) its effects are not mediated by 5-HT$_{3A}$ receptors, the classical target of hallucinogens such as LSD and mescaline. This talk will outline our research program, illustrating a new direction to the development of tools to further elucidate the biological mechanisms of drug tolerance and dependence. Our multidisciplinary approach combines natural product isolation, synthetic medicinal chemistry, and behavioral pharmacology to better understand the actions of salvinorin A at opioid receptors with the goal of designing novel agents to treat pain, drug abuse, and other CNS disorders.

**Bio:** Dr. Thomas E. Prisinzano is Chair of the Department of Medicinal Chemistry, Co-Director of the Graduate Certificate Program in Chemical Biology, and Director of the Chemical Biology of Infectious Disease COBRE at the University of Kansas. He graduated from the University of Delaware (1995) and received a doctorate in Pharmaceutical Sciences from the School of Pharmacy at Virginia Commonwealth University (2000). From 2000 – 2003, he was an Intramural Research Training Award Fellow in the National Institute of Diabetes and Digestive and Kidney Diseases in Bethesda, MD. His research interests are the design, synthesis, and isolation of chemical probes to help human health. He has received a number of awards including the D. John Faulkner Travel Award from the American Society of Pharmacognosy (2005), the Jack L. Beal Award from the *Journal of Natural Products* (2006), the Matt Suffness Award from the American Society of Pharmacognosy (2008), the Joseph Cochin Young Investigator Award from the College on Problems of Drug Dependence (2011), and the David W. Robertson Award for Excellence in Medicinal Chemistry from the American Chemical Society (2012).