

Invited Presenter

BPN;

Using Behavioral Pharmacology to Improve Opioid Use Disorder Treatment

KELLY DUNN (Johns Hopkins University School of Medicine)



Kelly Dunn is an Associate Professor in the Department of Psychiatry and Behavioral Sciences at Johns Hopkins University School of Medicine. Dr. Dunn has an MS in Applied Biopsychology and a Ph.D. in Human Behavioral Pharmacology. She has been involved with numerous studies related to substance abuse disorder, including clinical trial evaluations of novel medications for opioid and alcohol use disorders, as well as cigarette smoking. She has served as the site manager for several industry-sponsored trials of novel opioid products and behavioral treatments. Dr. Dunn is the principle

investigator on four NIDA-funded studies that evaluate different aspects of opioid use disorder. She has published more than 40 articles in peer-reviewed journals, has editorial board appointments on the *Journal of Substance Abuse Treatment* and *Experimental and Clinical Psychopharmacology*, has received numerous honors in recognition of her research from national organizations, and regularly presents data at national meetings. She is an active member of several national organizations, provides regular media interviews and talks to local and national press on the topic of opioid use disorder, and is a member of several regional substance use-related advisory boards. Dr. Dunn is committed to improving access and quality of treatment for opioid use disorder.

Abstract: The United States is in the midst of an opioid epidemic. Opioid use disorder is largely maintained through positive reinforcing mechanisms (a euphoric high following use of opioid agonists like heroin and OxyContin), and negative reinforcement (relief from the prominent withdrawal syndrome following removal of the drug in persons with opioid physical dependence). Opioid use disorder is distinct from other forms of drug use disorder in that numerous FDA-approved medications are available to address the positive and negative reinforcing aspects of opioid use disorder, including provision of opioid agonists for an extended period (maintenance) or reductions in doses over time (detoxification) to enable relapse prevention treatment. Yet, despite these resources a large number of patients do not succeed in treatment. Our research is using behavioral pharmacological paradigms to better understand mechanisms underlying individual differences in opioid response. The overall goal of this research is to inform development of new medications and methods to more effectively tailor treatment regimens to individuals. This talk will provide an overview of some human laboratory studies being conducted to inform clinical treatment of opioid use disorder and will present the results from some ongoing behavioral pharmacological efforts to examine mechanisms underlying individual response to opioids.