



VANDERBILT CUTTING-EDGE DISCOVERY

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**CARRIE K. JONES, Ph.D.**

**DEVELOPMENT OF M5 MUSCARINIC ACETYLCHOLINE  
RECEPTOR NEGATIVE ALLOSTERIC MODULATORS FOR  
THE TREATMENT OF OPIOID USE DISORDER**

**STEPHEN W. PATRICK, M.D., M.P.H., M.S.**

**THE OPIOID EPIDEMIC AND NEONATAL  
ABSTINENCE SYNDROME**

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SEPTEMBER 13, 2018

4:00 P.M.

208 LIGHT HALL



**JEFFREY KAHN, Ph.D., M.P.H.**

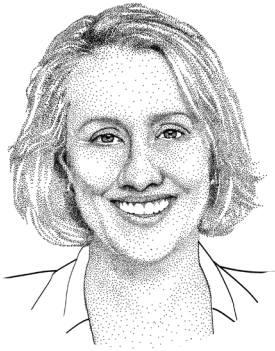
*Andreas C. Dracopoulos Director and Levi Professor of Bioethics and Public Policy,  
Johns Hopkins Berman Institute of Bioethics; Professor of Health Policy and Management,  
Johns Hopkins University Bloomberg School of Public Health*

*September 27, 2018*

*208 Light Hall / 4:00 P.M.*

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VANDERBILT  UNIVERSITY  
MEDICAL CENTER



**CARRIE K. JONES, Ph.D.**

ASSISTANT PROFESSOR OF PHARMACOLOGY  
DIRECTOR, *IN VIVO* AND TRANSLATIONAL  
PHARMACOLOGY, VANDERBILT CENTER FOR  
NEUROSCIENCE DRUG DISCOVERY

Carrie K. Jones, Ph.D., is currently Director of *In Vivo* and Translational Pharmacology for the Vanderbilt Center for Neuroscience Drug Discovery and an Assistant Professor in the Department of Pharmacology at Vanderbilt University Medical Center. She received a B.S. in Biology from Indiana University followed by a Ph.D. degree in the Program in Medical Neurobiology at the Indiana University School of Medicine in Indianapolis, IN. Dr. Jones has been involved in small molecule discovery both in industry and academia for more than two decades. Prior to joining the faculty at Vanderbilt, she served as an *in vivo* pharmacologist at Eli Lilly and Company on several scientific teams focused on the development of novel therapeutics for schizophrenia and chronic pain. Her efforts contributed to four clinical candidates, including the M1/M4 preferring muscarinic receptor agonist xanomenline for schizophrenia, the balanced serotonergic and noradrenergic reuptake inhibitor duloxetine, the mixed AMPA/kainate receptor antagonist LY293558, and an iGluR5 antagonist for chronic pain. Her characterization of duloxetine in several preclinical models of inflammatory and persistent pain directly contributed to the ongoing drug discovery effort for this molecule that culminated with the approval of Cymbalta® (duloxetine HCl) for the treatment of chronic pain and depression associated with painful diabetic neuropathy and fibromyalgia.

As Director of *In Vivo* and Translational Pharmacology for the Vanderbilt Center for Neuroscience Drug Discovery, Dr. Jones' group provides the *in vivo* characterization of novel mGluR and mAChR subtype-specific ligands for the ongoing development of novel hit and lead molecules as well as preclinical efficacy for potential clinical candidates for psychiatric and neurologic disorders; several preclinical drug candidates have advanced from these efforts to clinical collaborations with pharmaceutical companies, including Johnson and Johnson, Bristol Myers Squibb, AstraZeneca, and others. She has received funding from the Barrus Foundation, Autism Speaks Foundation, NIMH, NIDA, and NIA. She has published > 90 peer-reviewed manuscripts and served as mentor and/or co-mentor to over 10 graduate students and 15 postdoctoral fellows that have advanced to leadership positions in both academia and industry.



**STEPHEN W. PATRICK,  
M.D., M.P.H., M.S.**

ASSISTANT PROFESSOR OF PEDIATRICS,  
AND OF HEALTH POLICY  
DIRECTOR, VANDERBILT CENTER  
FOR CHILD HEALTH POLICY

Stephen W. Patrick, M.D., M.P.H., M.S., is the Director of the Vanderbilt Center for Child Health Policy, an Assistant Professor of Pediatrics and Health Policy at Vanderbilt University School of Medicine and an attending neonatologist at Monroe Carell Jr. Children's Hospital at Vanderbilt. He is a graduate of the University of Florida, Florida State University College of Medicine and Harvard School of Public Health. Dr. Patrick completed his training in pediatrics, neonatology and health services research as a Robert Wood Johnson Foundation Clinical Scholar at the University of Michigan.

Dr. Patrick's National Institute on Drug Abuse-funded research focuses on improving outcomes for opioid-exposed infants and women with substance-use disorder and evaluating state and federal drug control policies. He previously served as Senior Science Policy Advisor to the White House Office of National Drug Control Policy. Dr. Patrick is a member of the American Academy of Pediatrics Committee on Substance Use and Prevention and has been a voting member on several US Food and Drug Administration Advisory Boards focused on opioid use in children. He has testified about the impact of the opioid epidemic on pregnant women and infants before committees in both the US House of Representatives and the US Senate. Dr. Patrick's awards include the American Medical Association Foundation Excellence in Medicine Leadership Award, the Academic Pediatric Association Fellow Research Award Tennessee Chapter of the American Academy of Pediatrics Early Career Physician of the Year and the Nemours Child Health Services Research Award. His research has been published in leading scientific journals including the *New England Journal of Medicine*, *JAMA*, *Pediatrics* and *Health Affairs*.