

Tentative Outline

Special Thematic Issue for the journal *Current Neuropharmacology*

Current Frontiers in Methamphetamine Use Disorder: Are We Prepared for New Methamphetamine Epidemic?

Guest Editor: Anna Moszczynska

Scope of the Thematic Issue: Almost two decades have passed since the last methamphetamine abuse epidemic. In recent years, methamphetamine abuse in the United States has been increasing, together with the deaths from methamphetamine overdose. Among all 2017 drug overdose deaths in the United States 14.7% involved psychostimulants, with 85% of such deaths involving methamphetamine. From 2012 through 2018, the rate of drug overdose deaths involving psychostimulants increased nearly 5-fold. This data indicates re-emergence of methamphetamine popularity and suggest upcoming methamphetamine abuse epidemic. As there is no FDA-approved pharmacotherapy for methamphetamine use disorder, it is time to review our knowledge on methamphetamine abuse and its consequences, molecular mechanisms underlying them, and introduce new research findings that offer hope for development of effective pharmacotherapy for methamphetamine use disorder.

Keywords: Methamphetamine use disorder, therapies, vasculature/blood-brain barrier, dopamine, dopamine transporter, epigenetics, proteomics, metabolomics.

Sub-topics:

The sub-topics to be covered within the issue should be provided:

- Development of new therapies for methamphetamine use disorder
- Vascular effects of methamphetamine
- Central and peripheral dysregulation in methamphetamine use disorder
- Epigenetics of methamphetamine use disorder
- Inflammatory responses to methamphetamine
- Methamphetamine proteomics and metabolomics

Tentative titles of the articles and list of contributors:

Title: "Current and Emerging Treatments for Methamphetamine Use Disorder"

Anna Moszczynska, Associate Professor, Department of Pharmaceutical Sciences, Wayne State University College of Pharmacy and Health Sciences, Detroit, MI, USA, amosz@wayne.edu

Title: "Toxic Effects of Methamphetamine on Perivascular Health: Co-morbid Effects of Stress and Alcohol Use Disorders"

Bryan K. Yamamoto, Professor and Chair, Department of Pharmacology & Toxicology, Indiana University School of Medicine, Indianapolis, IN, USA, brkyama@iu.edu

Title: "Central and Peripheral Dysregulation in Methamphetamine Use Disorder"

Habibeh Khoshbouei, Professor, Department of Neuroscience, University of Florida College of Medicine, Gainesville, FL, USA, habibeh@ufl.edu

Title: "Epigenetics of Methamphetamine Use Disorders"

Jean Lud Cadet, Senior Investigator, NIH/NIDA IRP, Baltimore, MD, USA, jcadet@intra.nida.nih.gov

Title: "The crossroads of methamphetamine, immune system and proteomics/metabolomics"

Professor, Department of Pharmacology and Experimental Neuroscience, University of Nebraska Medical Center, Omaha, NE, USA, pciborowski@unmc.edu

Schedule:

Thematic issue submission deadline: February, 2021

Contact:

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