

## Special Issue

# The Neurobiology of Substance Addiction

### Message from the Guest Editors

Drugs of abuse modify synaptic transmission and synaptic plasticity mechanisms in important brain reward circuits. Different classes of abused drugs have divergent actions due to distinct mechanisms of action at the molecular level, but converge on many of the same neurotransmitter and neuromodulator systems including glutamatergic, monoaminergic, and peptidergic systems. These peptidergic systems include, but are not limited to, hypocretin/orexin, neuropeptide Y, oxytocin, neuropeptide S, galanin, corticotropin-releasing factor, dynorphin, and nociceptin/orphanin FQ. Importantly, individual differences in drug response can be observed, reflecting gene–environment interactions that also influence physiological response. The goal of this Special Issue is to recognize and celebrate the contributions of a diverse cross-section of individuals making substantive contributions to the field of drug abuse. There is an ongoing need to identify and better understand the cellular, molecular, and neurochemical mechanisms that contribute to the pathophysiology of substance use disorder and related neuropsychiatric conditions.

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### Guest Editors

Prof. Dr. Robert L. Meisel

Prof. Dr. Sade Spencer

Prof. Dr. Julia Lemos

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### Deadline for manuscript submissions

closed (31 May 2022)



## International Journal of Molecular Sciences

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Tel: +41 61 683 77 34  
[ijms@mdpi.com](mailto:ijms@mdpi.com)

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The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

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### Editor-in-Chief

Prof. Dr. Maurizio Battino

Department of Odontostomatologic and Specialized Clinical Sciences,  
Sez-Biochimica, Faculty of Medicine, Università Politecnica delle  
Marche, Via Ranieri 65, 60100 Ancona, Italy

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