



## Trace Amine-Associated Receptors in Neuropsychiatric Disorders

Guest Editor:

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### Message from the Guest Editor

TAAR1 is a G protein-coupled receptor, widely expressed across the mammalian brain, mainly in limbic and monoaminergic areas involved in the regulation of emotion, cognition and reward. TAAR1 has a tonic inhibitory control on dopaminergic and serotonergic neurotransmission and influences the composition and function of NMDA glutamatergic receptors. TAAR1-KO mice are characterized by impairment in sensorimotor gating functions, perseverative and impulsive behaviors, and worse learning performances, which represent phenotypes relevant to neurodevelopmental disorders and schizophrenia. TAAR1-KO mice present an enhanced sensitivity to the addictive effects of amphetamine, methamphetamine, MDMA, and ethanol. These observations prompted the development of TAAR1 agonists to be exploited for the treatment of neuropsychiatric disorders. This Special Issue is dedicated to the recent evidence about the pathophysiological role of TAAR1 in the central nervous system and the exploitation of this recently discovered signaling system as a target for the treatment of neuropsychiatric disorders, also in the presence of co-morbid addictive disorders and metabolic disturbances.





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## Message from the Editor-in-Chief

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