

Special Issue

Neurodevelopmental Correlates of Substance Use and Abuse in Adolescence

Message from the Guest Editors

Neurodevelopmental trajectories across adolescence contribute to a heightened risk for substance use. Specifically, limbic circuits appear to mature earlier and may, by mediating “bottom-up” affective processes, drive risky behavior. Conversely, prefrontal cortical systems contributing to executive control processes and “top-down” behavioral regulation of risky and reward-seeking behaviors show a more protracted developmental course. Substance use in adolescence has been associated with detrimental alterations of brain structure, function, and connectivity. Investigations of neural precursors and consequences of substance use focus on cross-sectional and retrospective studies, recent advances include prospective longitudinal investigations which include a true substance use naïve baseline sample. This Special Issue will address these issues through a selection of papers representing methodological advances in the field, novel perspectives, and reviews of the extant literature. Manuscripts that focus on following cutting-edge research approaches are especially encouraged.

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You are invited to contribute a research article or a comprehensive review for consideration and publication in *Brain Sciences* (ISSN 2076-3425). *Brain Sciences* is an open access, peer-reviewed scientific journal that publishes original articles, critical reviews, research notes, and short communications on neuroscience. The scientific community and the general public can access the content free of charge as soon as it is published.

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