



Anesthetic and Sedative Actions on Nervous System Development

Guest Editor:

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Deadline for manuscript
submissions:

closed (29 February 2024)

Message from the Guest Editor

Dear Colleagues,

Studies from animal models including rodents and nonhuman primates have demonstrated that early developmental exposure to general anesthetic and sedative agents alters the development of the nervous system, and that these changes may have lasting, harmful effects. Investigators have demonstrated deficits in learning and memory as well as in affective behaviors, and a wide array of pathologic consequences including cell death, impaired neurogenesis, disruptions in axon and dendrite formation, loss of synapses, and aberrations in glial cell development, has been documented. The clinical significance of these findings in human pediatric patients remains unclear and thus an area of concern that requires further research.

In this Special Edition, we are soliciting manuscripts ranging from original research to review articles that provide novel and timely insights into how anesthetics and sedatives act on nervous system development. Investigations that range from basic science to translation or clinical topics will be considered, with particular interest in newly discovered targets, novel phenotypes, and risk factors for vulnerability.





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Message from the Editor-in-Chief

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