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Molecular Mechanisms of Neural Circuit Development and Regeneration

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Deadline for manuscript submissions: closed (31 January 2021)

Message from the Guest Editors

The human brain has one hundred billion neurons, each neuron connected to ten thousand other neurons. Understanding how these neural circuits are formed and what is needed for them to be repaired is one of the biggest challenges in modern science. Studies in different animal models have helped to unravel the principles of neural circuit formation yet have also pointed out striking differences in the regenerative capacity of CNS among species. Further insights into the gene networks, molecular players, and (sub)cellular entities responsible for neural circuit formation are still urgently needed and may propel the search for neuroprotective and -reparative strategies to neurodevelopmental and neurodegenerative treat conditions

We especially encourage submissions that address the common or differential molecular and cellular mechanisms involved in neurodevelopment and -regeneration, as well as other comparative research focusing on, e.g., animal model organisms with different regenerative capacities, CNS versus peripheral nervous system repair.









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Message from the Editor-in-Chief

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