

Special Issue

Regulation and Function of Neural Attributes: From Gene to Behavior

Message from the Guest Editor

Neural circuits governing inherent behaviors must orchestrate social and environmental cues and prompt these behaviors. However, there are a few adequate functional analyses of cellular and molecular genetic approaches defining the relationship between each brain area and its corresponding neural circuit. Recent innovative analyses of direct neuronal manipulation, e.g., optogenetics and chemogenetics, have forged a new path for neuroscience, which facilitates the observation of neurons directed toward a particular target gene. These techniques can artificially manipulate specific brain areas and neurons to define the physiological roles and interactions between the organizational elements of concomitant neurons and behaviors. Neuronal manipulation using these techniques has been accomplished, including sexual behavior, aggressive behavior, parental behavior, anxiolytic behavior, and various other behaviors, which denote integral functions for living organisms. This Special Issue focuses on these pivotal techniques that have opened up a new field of neuroscience and on the extent to which this field has been explored by researchers.

Guest Editor

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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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