

## Special Issue

# Astrocyte–Neuron Communication in Neurological Disorders

### Message from the Guest Editor

Dear Colleagues, Astrocytes are electrically non-excitabile members of the central nervous system. Despite this, they can effectively contribute to regulating neuronal activity in a complex manner: by regulating excitability of single neurons; cleaving excitatory neurotransmitters from the synaptic and extrasynaptic spaces; and by regulating synaptic strength. With these functions, they can influence neuronal network activity. Via this action on network activity, astrocyte–neuron communications are involved in several physiological processes such as learning or regulation of sleep–wakefulness. Astrocytes are also involved in the pathogenesis of various neurological, neuropsychiatric diseases by alterations of their actions on neurons. In this Special Issue, submissions on a wide range of topics are invited, including research articles, reviews or mini-reviews of in vitro, ex vivo/in vivo or clinical observations. Submissions of manuscripts regarding age dependence of astrocyte–neuron communication or dementias, as well as studies synthesizing clinical observations with basic research, are particularly welcomed.

### Guest Editor

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### Deadline for manuscript submissions

closed (10 December 2022)



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### Message from the Editor-in-Chief

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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### Editor-in-Chief

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