Special Issue

Fragile X Syndrome: From Molecular Mechanisms to Therapeutic Approaches

Message from the Guest Editors

This Special Issue will cover all aspects of the molecular and cellular mechanisms leading to neuropathology in fragile X syndrome. Since the discovery of the *FMR1* gene more than 30 years ago and the establishment of different research models from knockout mice to induced pluripotent stem cells derived from patients, the understanding of FXS has advanced remarkably. However, critical questions about the role of FMRP in neural tissue remain unanswered: what are the most important targets of FMRP that react to its disappearance and are responsible to downstream detrimental effects? What aspects of neuronal plasticity are most affected by lack of FMRP and how are they manifested during embryonic development and adult life? What type of neuronal and synaptic deficits caused by absence of FMRP are reversible and what strategies could be used to promote reversibility? We invite authors to submit details of their research focused on these and other open questions as original research articles or literature reviews.

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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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