Special Issue

Molecular and Cellular Foundations of the Brain–Mind Connection

Message from the Guest Editor

A need to understand the mind at the molecular and cellular level in the brain has been a long-standing goal of neuroscience research. In a way, single-neuron recording directly approaches the cell biology functions of individual neurons, whereas molecular biology has provided tools to address their biochemical underpinnings. Discovery of a gene expression in learning (late eighties) and then use of genetically modified mice in learning and memory (early nineties) were the major pillars of modern neurobiology aiming at elucidating healthy and then diseased minds. Recent progress in high-throughput studies based on genomics, epigenomics, proteomics, etc., has markedly advanced our knowledge on humans and animal models, implicating a myriad of genes, RNAs and proteins in mind physiology (e.g., learning and memory) and pathology (especially major neuropsychiatric disorders, such as schizophrenia, autism spectrum, addiction, etc.). This research area has expanded so dramatically that there is no way to capture its entirety. Nevertheless, it appears worthy to review some aspects, even if very limited, of these rapid developments.

Guest Editor

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You are invited to contribute a research article or a comprehensive review for consideration and publication in *Brain Sciences* (ISSN 2076-3425). *Brain Sciences* is an open access, peer-reviewed scientific journal that publishes original articles, critical reviews, research notes, and short communications on neuroscience. The scientific community and the general public can access the content free of charge as soon as it is published.

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