Special Issue

Protein Kinases and Phosphatases in Neurodevelopmental Disorders

Message from the Guest Editor

Protein kinases and phosphatases are two key enzymes that phosphorylate and dephosphorylate proteins, respectively. In general, a suitable balance between the actions of protein kinases and phosphatases is essential in regulating a multitude of cellular signaling processes in neuronal development. As a result, an imbalance between the actions of kinases and phosphatases may lead to hyper- or hypophosphorylation of proteins and alter the downstream cellular signaling cascades that regulate neuronal development critical for learning, memory. behavior, and social interaction. Neurodevelopmental disorders such as autism spectrum disorder (ASD), intellectual disability, Rett syndrome, and Angelman syndrome have been associated with deregulation of cellular signaling caused by impaired activity of kinases and/or phosphatases. This Special Issue will cover a selection of original articles and reviews focusing on several key neurodevelopmental disorders mediated by deregulation of the activity of kinases or phosphatases, where the underlying mechanisms of dysregulation will be discussed.

Guest Editor

Dr. Chian Ju Jong

Department of Neuroscience and Pharmacology, Carver College of Medicine, University of Iowa, Iowa City, IA 52240, USA

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Message from the Editor-in-Chief

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Editor-in-Chief

Prof. Dr. Maurizio Battino

Department of Odontostomatologic and Specialized Clinical Sciences, Sez-Biochimica, Faculty of Medicine, Università Politecnica delle Marche, Via Ranieri 65, 60100 Ancona, Italy

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