

Special Issue

Cortical Development and Neurotransmission

Message from the Guest Editors

In 1997, Joanne Berger Sweeney and I published a widely cited review on the effects of modulatory neurotransmitters on cerebral cortical development. In this review, we focused on animal models that had helped to inform the understanding of developmental disorders in the human brain. The models we investigated centered on experimental manipulations of the neurotransmitters acetylcholine, dopamine, norepinephrine and serotonin and their impact on cortical morphogenesis and behavior. Back then, most studies relied on anatomical and neurochemical/neuropharmacological approaches.

Now, nearly a quarter century later, we would like to re-examine how knowledge has evolved concerning the role of modulatory neurotransmitters on cortical development and function. This volume aims at re-examining the current understanding of the role that modulatory neurotransmitters play in the functional morphogenesis of cerebral cortex through the lens of experimental models and studies of human brain and behavior.

Guest Editors

Prof. Dr. Christine Hohmann

Department of Biology, School of Computer, Mathematical, and Natural Sciences, Morgan State University, Baltimore, MD 21251, USA

Prof. Dr. Joanne Berger-Sweeney

Trinity College, Hartford, CT 06106, USA

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Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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Editor-in-Chief

Prof. Dr. Lluís Ribas de Pouplana

Institute for Research in Biomedicine (IRB Barcelona), The Barcelona
Institute of Science and Technology, 08028 Barcelona, Spain

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