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Advances in the Neurodevelopment of Newborn Infants

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Message from the Guest Editors

During pregnancy, the cerebral cortex becomes innervated, beginning with the subplate. In the case of the visual system retinal waves prime the visual cortex. During the latter part of pregnancy, the sensory systems prepare to functionally evaluate incoming information, allowing for the motor system to prepare to act. As all of the senses, including vision, function at birth, sensorimotor capabilities such as reaching and looking will be adjusted to the outside world. Moreover, newborns are sensitive to visual and auditory social stimuli. As such, it is from birth that infants explore objects and activity in their surroundings and reflect on them.

This Special Issue seek articles related to the following topics:

An overview of the important neural events during late fetal development and the neurodevelopment of newborns up to 3 months of age.

Early perceptual capabilities, including those for smell, taste, hearing, vision, and proprioception and sensorimotor capabilities such as reaching and looking.

The neurodevelopmental problems that arise in connection with premature birth;

Basic methods for evaluating brain functioning in the fetus and in newborn children













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Message from the Editor-in-Chief

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Rapid Publication: manuscripts are peer-reviewed and a first decision is provided to authors approximately 15.6 days after submission; acceptance to publication is undertaken in 2.5 days (median values for papers published in this journal in the second half of 2023).

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