

Special Issue

Fetal Nutrition and Neuro-Development

Message from the Guest Editor

Neurodevelopment during embryo and fetal development relies on a precise control of proliferation, differentiation and migration of the several types of neural cells that constitute the different brain areas. These processes are determined by internal programs but they are also responsive to external cues, among which nutrient availability. Cellular differentiation of neural stem/progenitor cells relies on the expression of lineage specific genes. This process is strictly regulated at the pre- and post-transcriptional level but the influence of environmental cues, especially nutrients, on these regulatory systems is still very poorly characterized.

The purpose of this special issue is to investigate the impact of maternal nutrition or metabolic status (including obesity and special diets such as vegetarian or vegan) on fetal neurodevelopment. Emphasis will be placed on the cellular and molecular mechanisms, including cellular energy metabolism, epigenetics or epitranscriptomics, by which nutrients reaching the fetus may influence key neurodevelopmental milestones and affect brain function.

Guest Editor

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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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