Special Issue

Gut–Brain Axis in Neurodevelopment: Microbial Metabolites and Neurological Function

Message from the Guest Editors

The gut–brain axis is an emerging interdisciplinary field that connects microbiology, neuroscience, immunology, and developmental biology. This Joint Special Issue, a collaboration between Pathogens and NeuroSci, seeks to highlight cutting-edge research on the molecular and cellular mechanisms through which gut microbes and their bioactive compounds influence brain development and function. In this Special Issue, original research articles and comprehensive reviews are welcome. Research areas may include (but are not limited to) the following:

- Microbial-derived metabolites with neuroactive or neuroimmunomodulatory functions;
- Interactions between gut microbiota and the central/peripheral nervous and immune systems;
- Host genetic or environmental factors shaping the gut–brain axis;
- The impact of antibiotics, diet, or probiotics on neurodevelopment via microbiome modulation;
- Animal and human studies exploring microbiota–neurodevelopment links;
- Neuroinflammation and microbial pathogenesis.

You may choose our Joint Special Issue in *NeuroSci*. We look forward to receiving your contributions.

Guest Editors

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Message from the Editor-in-Chief

The worldwide impact of infectious disease is incalculable. The consequences for human health in terms of morbidity and mortality are obvious and vast but, when infections of animals and plants are also taken into account, it is hard to imagine any other disease that has such a significant impact on our lives—on healthcare systems, on agriculture and on world economics. *Pathogens* is proud to continue to serve the international community by publishing high quality studies that further our understanding of infection and have meaningful consequences for disease intervention.

Editor-in-Chief

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