

## Special Issue

# Advances in Neonatal Hypoxic–Ischemic Brain Injury

### Message from the Guest Editor

Death and disability in children worldwide have their origin predominantly in the neonatal period and mainly arise from perinatal asphyxia and preterm birth. Birth asphyxia, leading to the clinical presentation of hypoxic–ischemic encephalopathy (HIE), affects to a large extent the term-born population, but preterm infants can also be affected. Prognosis following HIE and other types of neonatal brain injury including stroke is particularly poor. Despite remarkable advances in perinatal care, diagnosis and therapy of neonatal brain injury remain a challenge, and therapies are largely supportive. The only established clinical intervention for HIE is therapeutic hypothermia demonstrating reductions in risk of death or impairment. However, 40–50% of cooled infants still suffer from major neurological problems, and in preterm infants, therapeutic hypothermia cannot be applied due to side effects. In recent years, established and new preclinical models have elucidated mechanisms promoting our understanding of neonatal brain injury, but unanswered questions remain.

### Guest Editor

Prof. Dr. Mark Dzietko

Division of Neonatology, Department of General Pediatrics,  
Neonatology and Pediatric Cardiology, Heinrich-Heine University,  
40225 Düsseldorf, Germany

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*Children*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[children@mdpi.com](mailto:children@mdpi.com)

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You are invited to contribute a research article or comprehensive review for consideration and publication in *Children* (ISSN 2227-9067). *Children* is an open access journal—research articles, reviews, and other content are published online immediately after acceptance. The scientific community and the general public have unlimited free access to the content as soon as it is published. The journal focuses on sharing clinical, epidemiological, and translational science relevant to children's health. We would be pleased to welcome you as one of our authors.

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### Editor-in-Chief

Prof. Dr. Paul R. Carney  
Departments of Child Health and Neurology, University of Missouri, 400  
Keene Street, Columbia, MO 65211, USA

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