

CALL FOR PAPERS

Infants born with congenital brain lesions are at high risk of abnormal neurodevelopmental outcomes. Neuronal damage triggers complex processes of adaptive neuroplasticity, which involve various functional systems and are highly influenced by the environment. Understanding the complex process of reorganization of neural functions through adaptive plasticity is a fast-growing field of interest, as it may lead to more targeted and evidence-based interventions to promote neurodevelopment.

Congenital brain lesions present a compelling model for studying early brain plasticity. The potential of the neuroplastic mechanisms is thought to be stronger in the developing brain of children compared to adults. By means of noninvasive neuroimaging and electrophysiological techniques, as well as animal models, it is now possible to describe the specificity of early mechanisms of brain plasticity.

The goal of this special issue is to focus on early neuroplasticity following congenital brain lesions to identify specific mechanisms (including neural, molecular, or clinical signatures) and to identify novel targeted or synergetic early intervention strategies.

The topics may include reports of plasticity in all functions, including motor, language, visual, auditory, and somatosensory functions, and their possible interaction. All models of congenital brain injury will be considered, including global or focal injury.

Prospective and retrospective studies of neuroimaging and electrophysiological nature are especially welcome. Behavioral research submissions and review articles describing the current state of the art are also encouraged.

Potential topics include but are not limited to the following:

- ▶ Contribution of any sensory or functional system to the clinical recovery after early injury
- ▶ Evidence of early sensory-motor system neuroplasticity in neonates or infants
- ▶ Plasticity in older individuals with congenital brain damage
- ▶ Animal model brain plasticity research mimicking early brain injury
- ▶ Spontaneous or treatment induced outcomes including (but not limited to) physical treatment, TMS, tDCS, and pharmacological or surgical interventions following early brain injury
- ▶ Advanced techniques for the study of plasticity during early phases of brain development

Authors can submit their manuscripts through the Manuscript Tracking System at <https://mts.hindawi.com/submit/journals/np/pscb/>.

Papers are published upon acceptance, regardless of the Special Issue publication date.

Lead Guest Editor

Simona Fiori, Stella Maris Infant Lab for Early Intervention and Infant Neurology Section, Pisa, Italy
s.fiori@fsm.unipi.it

Guest Editors

Andrea Guzzetta, University of Pisa, Pisa, Italy
a.guzzetta@fsm.unipi.it

Martin Staudt, University Children's Hospital, Tübingen, Germany
mstaudt@schoen-kliniken.de

Roslyn N. Boyd, University of Queensland, Brisbane, Australia
r.boyd@uq.edu.au

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