

Developmental Cognitive Neuroscience: The developing human visual brain

Initiative: Lichtenberg - Professuren

Bewilligung: 22.02.2018

Laufzeit: 5 Jahre

Projekt-Website: <http://www.sehen.reha.tu-dortmund.de>

Vision depends on intricate processes of the eye and the brain. Although extensive research is devoted to the study of the adult brain and adult vision, brain development and its impact on the development of vision in children is far less studied. Disturbances of brain development during infancy or childhood, however, have a life-long impact on the affected person. At the intersection of neuroscience, vision science and rehabilitation sciences this project aims at providing an urgently needed comprehensive understanding of visual development. In a series of behavioral as well as neuroimaging experiments, the understanding of the developmental trajectories of "How do children see the world?" will be explored, serving as stepping stones towards clinical and applied research.

Projektbeteiligte

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Open Access-Publikationen

Prolonged functional development of the parahippocampal place area and occipital place area.

Head motion during fMRI tasks is reduced in children and adults if participants take breaks.

Myelin development in visual scene-network tracts beyond late childhood: A multimethod neuroimaging study

Memory specificity is linked to repetition effects in event-related potentials across the lifespan