

## Dr. Simone Vossel

Affiliated with the Institute of Neuroscience and Medicine (INM-3)

BMBF Young Investigator Group: How the human brain predicts the future: The neural and neurochemical basis of attentional expectancies in the healthy brain and after stroke



„Finding ways to empirically address research questions, acquiring and analysing data, writing manuscripts... The job of a scientist is full of variety. Heading a team to collaboratively conduct novel experiments adds a new dimension to my work and I am looking forward to this new challenge”

### Research project:

Our perception is not only determined by the physical characteristics of our sensory environment, but is crucially affected by internal processes, such as expectancies about upcoming sensory events encoded by the brain. The projects we are working on shall

lead to novel insights into the generality and specificity of the brain mechanisms underlying the encoding of expectancies in different cognitive systems. The results shall advance our understanding of the neural and neurochemical processes of trial-wise

learning of the environmental statistics that influence our perception and motor responses. Furthermore, studies in stroke patients shall reveal novel pathomechanisms underlying neurological disorders such as the spatial neglect syndrome.

### What is/has been the greatest challenge as head of a young investigators group:

Time management to find a balance between supervision, own research activities, and teaching.

**Start of funding period:** 01.03.2014  
**End of funding period:** 28.02.2019  
**Budget:** ~1.9 Mio € for 5 years  
**Staff:** 2 PhD students, 1 Postdoc, 1 Research Assistant

**University affiliation:** in preparation

**Further information:** [Young Investigator Group Dr. Vossel](#)