

Thursday, December 17th, 2pm ET

Presentation in Zoom, accessible via the C-STAR website:

<http://cstar.sc.edu/lecture-series/>

Plasticity and short-term reorganization in the language network

Gesa Hartwigsen, Ph.D.

Max Planck Institute for Human Cognitive and Brain Sciences Leipzig, Germany

Language is organized in large-scale networks in the human brain. I will outline how the combination of non-invasive brain stimulation and functional neuroimaging may provide insight into short-term reorganization in the healthy and lesioned language network. Recent work suggests that inhibition of key language areas in the healthy brain triggers different mechanisms of adaptive plasticity which help to compensate for focal perturbation: Compensation may take place within a specialized network via recruitment of other network nodes or homologous regions in the right hemisphere. In case of large network disruption, compensation may also take place across networks, via recruitment of neighbouring networks for other specialized functions or domain-general networks. Such interactions between language-specific and domain-general areas are also relevant during language learning. Recent data on adaptive plasticity in the lesioned language network further suggests that perturbation of the reorganized language network may unmask the contribution of the right hemisphere to language. Finally, I will argue that the contribution of domain-general networks to language may change with age.

The online lecture can be followed online from your computer, tablet or smartphone, in **Zoom**. The zoom link is accessible via the C-STAR website: <http://cstar.sc.edu/lecture-series/>

For more information, or to be added to the C-STAR mailing list, contact Dirk den Ouden: denouden@sc.edu