

**Thursday, March 22<sup>nd</sup>, 2pm ET**

<https://global.gotomeeting.com/join/667426173>

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

**Network correlates of aphasia recovery**

Susan Duncan, PhD, CCC-SLP

Louisiana State University

Resting state functional magnetic resonance imaging (rsfMRI) permits observation of intrinsic neural networks produced by task-independent correlations in low frequency brain activity. These resting state networks (RSNs) consist of spatially distinct regions sharing functional connectivity, typically believed to reflect mutual engagement in common tasks. Previous studies have suggested that disruption of functional connectivity is associated with degree of language impairment in aphasia, and also that RSNs can change with aphasia therapy.

This talk will present changes occurring in resting state functional connectivity following an aphasia therapy program. We discovered two inter-related functional predictors of improvement in narrative production. Through the use of a sliding window approach, we investigated the dynamic nature of RSNs as they changed over the course of therapy. An increase in the amount of time spent in one of the states – a state characterized by minimal correlation among the identified RSNs – predicted improvement on the narrative task. We interpreted this finding as evidence for adaptive segregation among the RSNs, which was supported by a second analysis using a graph theoretical approach. Such findings inform mechanistic aspects of aphasia therapy response and may ultimately influence our interventions.

---

This lecture will be held at the University of South Carolina:  
**Room #140, Discovery I, 915 Greene Street, Columbia, SC 29208**  
Date: Thursday, March 22<sup>nd</sup>, Time: **2pm – 3pm** Eastern Time  
**The event will be catered!**

The lecture can also be followed online from your computer, tablet or smartphone, via the following GoToMeeting address (no password required):

<https://global.gotomeeting.com/join/667426173>

You can also dial in using your phone.

United States : +1 (872) 240-3412

Access Code: 667-426-173

First GoToMeeting? Try a test session: <http://help.citrix.com/getready>