Behavioral and Neuroanatomical Predictors of Long-Term Aphasia Outcomes

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Recovery from aphasia is a dynamic process, even years after stroke onset. Recent studies have shown that clinically relevant improvements and declines in language abilities are possible in the chronic stage, and that these changes may be driven by neuroplastic changes in specific grey matter regions in the contralesional right hemisphere (Holland et al., 2017; Hope et al., 2017). The integrity of left hemisphere perilesional tissue is also important for recovery (Fridriksson, 2006), but the effects of longitudinal perilesional changes have not been systematically investigated in a large sample of individuals with aphasia. Accordingly, this lecture presents preliminary results from ongoing work investigating how demographic factors, health variables, and structural changes in the left and right hemispheres may mediate changes in language abilities in chronic aphasia. Retrospective analyses of behavioral and neuroimaging data from forty-one participants will be presented. Our results confirm prior studies that refute the notion of a recovery plateau in aphasia. Critically, our findings emphasize the importance of continued aphasia therapy and suggest the importance of exercise in long-term outcomes. Additionally, although changes in perilesional grey and white matter volumes correlate with language changes, the structural integrity of the right hemisphere also appears to be important. Discussion will focus on how these findings inform the study of plasticity in aphasia, as well as implications for the clinical management of chronic aphasia.

This lecture will be held at the University of South Carolina:
Room #140, Discovery I, 915 Greene Street, Columbia, SC 29208
Date: Thursday, March 8th, Time: 2pm – 3pm EDT
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):
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