



# UConn BIRC Speaker Series

Friday, January 21st from 1:30-2:45 pm ET

## Stimulating Conversations: Employing Noninvasive Brain Stimulation Technologies to Characterize and Enhance Language Processing in Persons with Aphasia

Dr. Roy Hamilton, MD, MS



**Abstract:** Aphasia is the most common focal deficit of cognition associated with stroke, and language deficits are also common in patients with neurodegenerative disorders of cognition. While behavioral speech and language interventions provide some benefit, targeted, neurally-focused interventions for aphasia remain lacking. In this presentation, Dr. Hamilton will give an overview of over a decade of work done by members of his laboratory and by others which employ noninvasive neuromodulation techniques like transcranial magnetic stimulation (TMS) and transcranial direct current stimulation (tDCS), both to characterize the language system and to enhance the potential for recovery in persons with aphasia due to either stroke or neurodegenerative disorders. Finally, Dr. Hamilton will identify current gaps in the field of neuromodulation as it pertains to aphasia, and he will suggest future steps to advance neuromodulation in language research and to move noninvasive brain stimulation technologies toward widespread clinical use.

*Bio: Dr. Roy Hamilton is a tenured Associate Professor of Neurology at the University of Pennsylvania with a secondary appointment in Physical Medicine and Rehabilitation. He is the Director of Penn's Laboratory for Cognition and Neural Stimulation (LCNS), and is also the Director of the Penn Brain Science, Translation, Innovation and Modulation Center (brainSTIM). The central thrust of his research is to use noninvasive electrical and magnetic brain stimulation to explore the characteristics and limits of functional plasticity in the intact and injured human brain. He is the Assistant Dean for Cultural Affairs and Diversity at the Perelman School of Medicine of the University of Pennsylvania, serves as the inaugural Vice Chair for Diversity and Inclusion for Penn Neurology, and in an Associate Editor for Equity, Diversity, and Inclusion for the journal Neurology.*

Remote access Registration: <https://bit.ly/3qZGOEX>

**\*Please note: You *must* register in advance via Zoom\***

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