



香港中文大學

CUHK

語言學及現代語言系

Department of Linguistics and
Modern Languages

Using ML/AI to Predict Recovery in Post-stroke Aphasia: Moving Towards Precision Rehabilitation

Professor Swathi KIRAN

Boston University

Date: April 21, 2026 (Tuesday)

Time: 10:30 a.m. - 12:00 noon (Hong Kong Time, UTC +8)

Venue: Room 101, Leung Kau Kui Building,
The Chinese University of Hong Kong



Abstract

In this talk, I will talk about our recent work to predict individualized/personalized recovery trajectories in stroke aphasia based on algorithms from brain markers, big data and computational modeling. I will present work that covers our current understanding of the neural factors that determine the degree of language recovery after post-stroke aphasia and after rehabilitation. I will talk about our work involving recent machine learning methods to predict aphasia impairment using brain imaging data. I will then present our work on developing computer simulations to predict aphasia recovery in both monolingual and bilingual adults with aphasia. This work includes predicting treatment induced recovery and big data to develop therapy outcome calculators. This recent work has potential to provide personalized recommendations for rehabilitation trajectories for individual patients who have suffered from acquired brain injury.

Speaker

Swathi Kiran is the James and Cecelia Ying Professor of Neurorehabilitation in the Department of Speech and Hearing Sciences and the Founding Director for the Center for Brain Recovery at Boston University. The mission of the Center for Brain Recovery is to study neurological disorders in the brain while focusing on real outcomes for the patient. She has over 190 peer-reviewed papers in these fields and has been funded by NIH and the ASH Foundation. She currently serves on the NIDCD Advisory Council. She is current Editor-in-Chief for Journal Of Speech Language and Hearing Research-Language. She is the past-Board Chair for the Academy of Aphasia, and Board Member for the National Aphasia Association, Board Trustee for the American Speech Language Hearing Foundation. She is the co-founder and scientific advisor for Constant Therapy Health, a software platform for rehabilitation tools after brain injury. Dr. Kiran is also the past Director for Strategic Planning Implementation at the Office of the Provost at Boston University.

All Are Welcome

Enquiries

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