Northeastern University
College of Science

You are cordially invited to attend a presentation by Dr. Elvisha Dhamala on
Thursday, October 17th at 4:00 PM

Dr. Elvisha Dhamala, Feinstein Institutes for Medical Research and the Zucker Hillside Hospital

"Leveraging Brain-Based Predictive Models to Establish Neuroimaging Signatures of Behavior Across Populations"

Thursday, October 17, 2024

Shillman Hall, 325
4:00 – 5:00 PM

https://northeastern.zoom.us/j/99050020627?pwd=pnZJaEkwDEe8gMdNrdOqGtaDqaugeq.1

A fundamental challenge in neuroscience is understanding how brain structure and function contribute to individual differences in complex behaviors across both healthy and clinical populations. Recent advances have introduced brain-based predictive models as a promising approach for revealing neuroimaging signatures of behavior at the individual level. However, it is increasingly evident that these models, and our understanding of brain-behavior relationships, can be biased across different populations.

In this talk, I will first address research practices—encompassing participant recruitment, data acquisition, and data analysis—that can unintentionally exclude certain individuals and lead to findings that lack generalizability. I will then explore how brain-based predictive models can be tailored to uncover brain-behavior relationships specific to different populations. Finally, I will present results from recent studies that used these models to elucidate population-specific brain-behavior relationships.