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"Large-scale white matter assessment to understand neurodegeneration in Alzheimer's disease"

Abstract:

Diffusion MRI is a tool which allows for the in vivo assessment of white matter microstructure. Recently, diffusion MRI harmonization techniques have allowed for multi-site studies to be collated into large-scale databases. These databases serve as invaluable resources, allowing researchers like Dr. Archer to conduct large-scale analyses to determine the intricate associations between white matter microstructure and various outcomes. Dr. Archer's research specifically focuses on the pivotal role of white matter in aging and Alzheimer's disease (AD). Throughout this presentation, he will show how the microstructure of white matter tracts is associated with cognitive impairment and decline, shedding light into the neurodegenerative process in aging and AD.