

Investigating the Role of TMED Cargo Receptors in Brain Health and Disease

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Public-facing abstract

Alzheimer disease is often discussed through plaques, but this project looks upstream at how proteins are trafficked inside brain cells. TMED cargo receptors help move proteins through the early secretory pathway, and misrouting may contribute to amyloid beta buildup. The team is using brain-tissue imaging and a TMED-targeting compound to compare where amyloid beta and TMED markers appear in healthy and Alzheimer model brains. The broader goal is to reveal whether cellular logistics, not just plaque cleanup, can become a new therapeutic angle for neurodegenerative disease.