

# Study Overview

The Cleveland Alzheimer's Disease Research Center (CADRC) aims to study the different forms of dementia in the hope that learning more about the disease can lead to new forms of treating, and eventually curing, Alzheimer's Disease and related disorders.

The CADRC follows individuals over time, collecting clinical information, specimens, and imaging data for research. We not only enroll individuals with memory problems, such as those diagnosed with Alzheimer's Disease or Lewy body dementia, but we also follow healthy individuals over time.

Compensation for completed study visits is provided.

## Contact us

Interested patients at Cleveland Clinic should contact the CADRC Outreach, Recruitment and Engagement Core (OREC) at 1-833-311-2372 or email to [contact@clevelandADRC.org](mailto:contact@clevelandADRC.org) and ask to participate in the CADRC at Cleveland Clinic.



## Interested in Brain Imaging Research?



# Study Imaging

The CADRC Neuroimaging Core conducts research on neurodegenerative disorders such as mild cognitive impairment (MCI) and Alzheimer's disease.

Our research study is an observational study for Alzheimer's disease and related dementias.

If you are at risk or have been diagnosed with Mild Cognitive Impairment (MCI), Alzheimer's Dementia, or another dementia, we hope you would consider participating in this important research to help find answers.

Participation in this study will be for as long as you are willing to participate. We would like to see you yearly as you age to assess your aging process because everyone ages differently.

This study seeks to acquire MRI, PET and SPECT scans. All scans are optional but essential for our goal to gain crucial data for this neurodegenerative disorder study. In some situations, a trio of scans (amyloid PET, tau PET, and MRI) provides a more comprehensive evaluation. Motivated participants are encouraged to enroll and complete all three scans.

The initial visit procedures will be scheduled over two to three days, each day lasting approximately 5 hours long.

## MRI

MRI has been a diagnostic clinical tool in Alzheimer's Disease (AD) for decades. Methods are continually developed to improve the diagnostic capabilities of MRI, specifically the neurodegenerative features of the disease.

- **MRI Scan Session 1** seeks to acquire MRI data similar to the data acquired over many years in other larger studies, such as the Alzheimer's Disease Neuroimaging Initiative (ADNI). The MRI Images will complement those data and allow our MRI data from that session to be compared to the larger dataset.
- **MRI Scan Session 2** seeks to advance the understanding of newer techniques as to their diagnostic value in AD and AD-related research.

**We encourage CADRC participants to elect to have both scan sessions as they are complementary in nature, and both add significantly to the existing knowledge base regarding MRI in AD.**

## PET Scan

PET scans are valuable for early detection and differentiation of Alzheimer's disease. The Positron Emission Tomography (PET) scan takes pictures of cells and how they function in the body. The information revealed in the PET scan depends on which tracer is used.

- **Amyloid PET** scan reveals the presence and location of amyloid protein plaques in the brain, which can accumulate years before symptoms of Alzheimer's Disease.
- **Tau PET** scan reveals the presence and location of tau protein tangles accumulating within brain cells, which correlates with Alzheimer's Disease symptoms.
- **FDG PET** scan reveals deficiencies in brain metabolism associated with neurodegeneration.

## SPECT Scan

A dopamine transporter (DaT) **SPECT Imaging** Scan is for Lewy Body dementia cohort. This imaging procedure measures the ability of cells in your brain to process dopamine.



**MRI Scans**



**PET Scans**



**SPECT Scans**

Participating in multiple imaging scans offers a more comprehensive perspective.