

- What are
DIAGNOSTIC Studies?

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Diagnostic studies do not utilize experimental medications. At the Penn Memory Center, diagnostic studies employ technologies such as brain imaging, and examination of samples of blood and cerebrospinal fluid. The aim of these diagnostic studies is to identify and better understand changes occurring over time in the brain that cause problems with memory and thinking. The tell-tale chemical and physical indicators of these changes are known as “biomarkers.”



- What is the CERND Biomarkers Study?

The CERND (Center for Excellence in Research on Neurodegenerative Diseases) Study, being conducted at the Penn Memory Center, uses and compares different diagnostic technologies to detect these “biomarkers” of changes in the brain.

- Who Can Participate?

Eligible persons age 60 and older in any of the following categories

- **Cognitively Normal:** Individuals with no significant memory problems
- **Mild Cognitive Impairment: (MCI):** Individuals with mild problems with memory or thinking
- **Mild Alzheimer’s disease**
- **Parkinson disease without cognitive impairment**
- **Parkinson disease with cognitive impairment**

Each study participant must have a family member or close friend who can come with them to selected study visits, and serve as their “study partner.”

- What is Involved?

Eligibility for this study will be determined using a basic neuro-physical exam and health history, paper and pencil cognitive testing, and blood and urine samples.

Individuals accepted for participation in the study will, yearly, over a period of 2-3 years, receive a variety of clinical assessments.

These include:

- A Magnetic Resonance Imaging Study (MRI)
- An auditory evoked-potentials Electroencephalogram (EEG) exam, known as P300. This records patterns of specific brain waves while the participant listens to a series of computer-generated sounds.
- Laboratory testing of blood and urine
- Paper and pencil tests of memory and thinking
- An optional aspect of the study includes cerebrospinal fluid sampling, and a Positron Emission Tomography (PET) scan of the brain. PET scanning is similar to a MRI procedure but includes the intravenous injection of a standard radioactive imaging tracer called FDG.
- *Participants receive payment for study-related time and travel.*
- *Sponsored through a grant from the State of Pennsylvania Department of Health.*

For information on this study,
contact Marianne Watson, R.N.,
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or by phone at 215-662-4373

A Research PARTNERSHIP



Over 4.5 million Americans have Alzheimer's disease. Alzheimer's costs the US economy over 100 billion dollars a year in lost productivity, nursing care, etc. The human cost is incalculable.

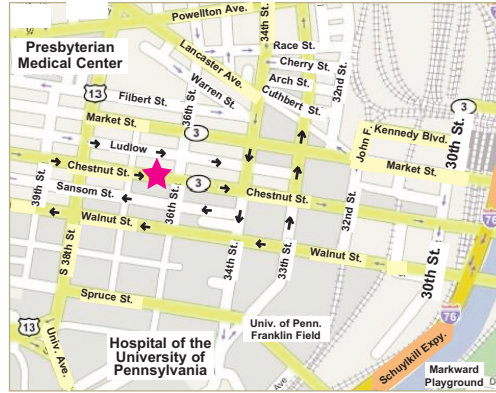
Parkinson disease is the nation's second most common neurodegenerative disorder. Today, 1.5 million Americans are affected. Many develop problems with memory and thinking in the latter stages of the illness.

Now, the largest segment of our population — the baby-boomers — enter their sixties and soon, beyond — the period of greatest risk for Alzheimer's and Parkinson disease.

Understanding these diseases is key to finding effective disease-halting treatments. Achieving that understanding requires real working partnerships, between clinical investigators, and dedicated research participants — without whom, there is no research.



We appreciate your interest in Alzheimer's and Parkinson disease research through the Center for Excellence in Research on Neurodegenerative Diseases.



● Location

Research of the Center for Excellence in Neurodegenerative Diseases (CERN) takes place within the University of Pennsylvania Alzheimer's Disease Center and Penn Memory Center, located at Ralston House, on the PENN Campus.

Ralston House is convenient to bus and subway lines that serve the 36th and Chestnut St. area, and to major area roadways.

Study participants may park for free, on a space-available basis, in a lot immediately adjacent to the building, entered from Ludlow Street.

visit www.penadc.org for directions

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an opportunity in

• DIAGNOSTIC
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• the CERND
biomarkers
study



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The Center for Excellence in Research on
Neurodegenerative Diseases