

## LANGUAGE IN PRIMARY PROGRESSIVE APHASIA

### Research Study

Funded by the National Institute on Deafness and Other Communication Disorders  
and the National Institute on Aging

### INFORMATION ABOUT THE STUDY

The study lasts three days total, about seven hours each day including breaks and lunch. On days one and two, you will be in Chicago where you will participate in a battery of neuropsychological tests. Neuropsychological tests are paper and pencil tasks that evaluate your language, memory and other areas of cognition. Also during the first two days, you will have a magnetic resonance imaging (MRI) scan and participate in an event related potentials (ERP) task. On the third day, you will travel to Northwestern's main campus in Evanston, IL (about 15 miles north) and participate in a variety of language and naming experiments, some that involve voice recording and another that includes ERP testing.

Over 100 people with PPA and age-matched controls will participate in this study. Participants will be asked to return two years later to compare changes between the two visits.

Participants must be:

- + Right-handed
- + Not claustrophobic
- + Safe for an MRI
- + Free of any illness or condition other than PPA that would affect their ability to participate now or in the future.

Individuals not seen at the Northwestern Cognitive Neurology and Alzheimer's Disease Center will need to send records (neurology, neuropsychology, and imaging reports) and have a phone interview before being approved by the study director to participate.

### GOALS OF THE STUDY

The materials collected from your participation in the research study will be used to investigate a variety of topics. The information that we obtain in three days from you and other participants could lead to exciting developments in the knowledge and treatment of Primary Progressive Aphasia (PPA).

Specifically, the goals of this study are:

- + To characterize individuals with PPA using neuropsychological testing and brain imaging.
- + To investigate naming and word processing problems in PPA and see how it relates to brain changes.
- + To increase awareness of PPA, educate others about this unique disorder and encourage more research to eventually develop a treatment.



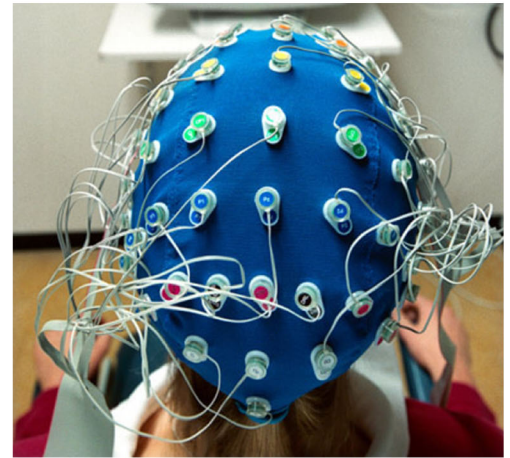
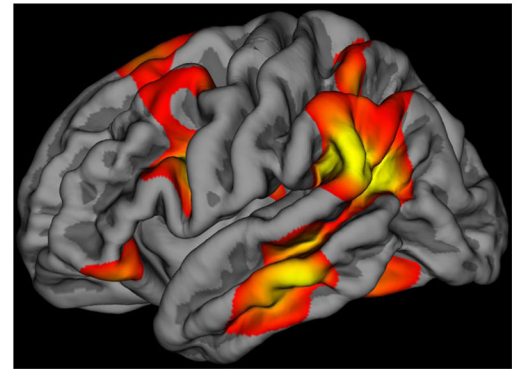
## ABOUT MRI

MRI, or magnetic resonance imaging, is a special technique that researchers and clinicians use to see the tissues inside the body. For this study, we will be looking at the brain.

The MRI portion of the study takes about forty-five minutes. You will change into a hospital gown and remove all metallic objects (jewelry, hearing aids, etc.). You will be asked to lie still on your back on a table with a specifically designed headrest. This will help keep you from moving your head. After you are positioned, the table will slide into the enclosed portion of the scanner.

The MRI scanner is loud and you may feel a small vibration, but this is normal. To communicate with the staff through an intercom system and to protect you from the noise, you will be wearing headphones specifically designed for MRI scanners. You will have constant contact with the researchers while you are in the scanner.

The images obtained will be used to compare with other participants, learn more about the brains of people with PPA, and examine the relationship between brain changes and test performance.



## ABOUT ERP

ERP stands for event related potentials. This is technique used to analyze electroencephalogram (EEG) results and to learn about specific functions of the brain. In this type of study, the electric activity of the brain is recorded through electrodes placed on the scalp.

To prepare for this experiment, you will sit down while research assistants place an elastic EEG cap with small holes over your scalp. After the cap has been put on your head, a small amount of water-based gel is put into each hole. Sensors are then placed on top of each gel spot. You will be asked to perform a variety of cognitive tasks while the sensors record the signals that your brain emits. This will last about an hour.

After the experiment is finished, the researchers will take off the cap. You may have some gel remaining in your hair. We will have shampoo, towels and a hair dryer available for you if you prefer. Please bring a comb or brush if you require one.

## COMPENSATION

**Travel** | Out of town participants and study partners will have air travel and accommodations paid for and booked in advance by the research study. Local participants will have travel expenses reimbursed.

**Meals** | Participants and study partners who are from out of town will be reimbursed for three meals a day; local participants will be reimbursed for lunches.

**Other Compensation** | In addition to travel and meal costs, participants will be paid \$100 per day up to \$300.

**Payment** | Participation compensation and meal and travel reimbursement will be paid in the form of a check. The check should arrive to the subject's home 30-60 days after the receipts are received.

For more information, please contact:

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