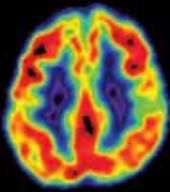
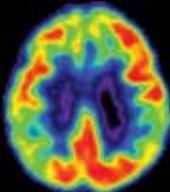


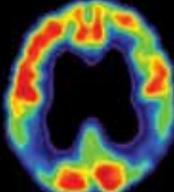
## EXAMPLES OF BRAIN IMAGES ACQUIRED WITH PET:



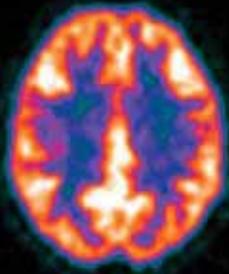
NORMAL



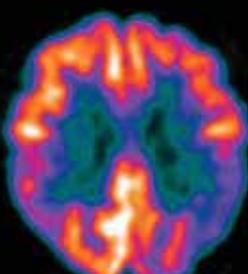
MILD COGNITIVE IMPAIRMENT



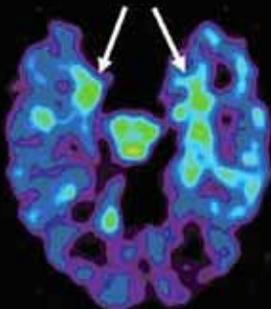
ALZHEIMER'S DISEASE



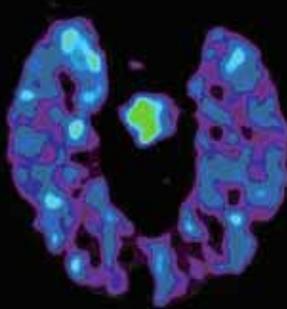
NORMAL



MILD A.D.



APOE-4 POSITIVE



APOE-4 NEGATIVE

## APPOINTMENT

Name:

Day:

Date:

Time:

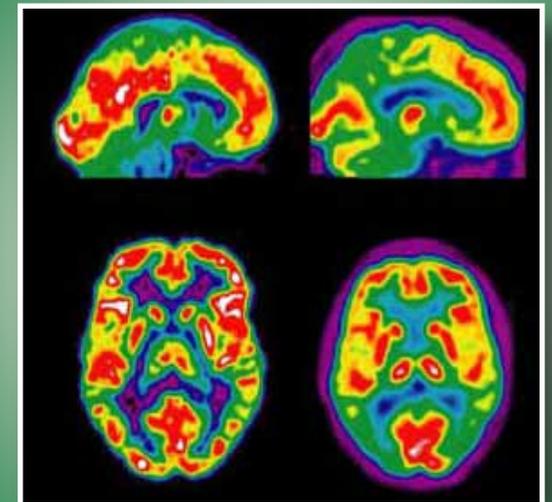
Place:

### NOTE TO CERTIFIED NUCLEAR MEDICINE TECHNOLOGIST:

*If you have any questions or concerns about this scanning protocol please contact the appropriate referral site.*

ALZHEIMER'S DISEASE  
**ADCS**  
COOPERATIVE STUDY

## PET IMAGING INFORMATION



## Thank you for your interest in participating in this study.

PET stands for Positron Emission Tomography. This brochure will provide some basic information on how the scan is performed and what information is obtained. On the day of your visit, the PET will be carefully explained to you and any questions you have will be answered.

PET scanning can produce high quality pictures of different processes in your body. For this research study, we are using PET to take pictures of how your brain uses glucose, or sugar. Glucose is the source of energy for your brain. Scientists have learned that there are abnormal patterns of glucose use in the brains of patients with Alzheimer's disease, and in some older people.

How does PET work? Scientists at your PET center make a special form of glucose that is labeled with radioactivity. This is called fluoro-deoxyglucose, or FDG. The FDG is injected through a small needle into a vein in your arm, and the PET scanner will take pictures of the glucose use by your brain. The information in these scans will be analyzed to see how glucose use is different in people with memory problems, and to see how scans change over time. The entire PET scan will take about an hour.

## BEFORE THE SCAN:

You should use the restroom before the scan begins. A small needle will be inserted in a vein in your arm. A blood sample will be taken to check your blood sugar level and make sure it is in range. The FDG also will be injected into this needle.

After the FDG is injected, you will sit in a quiet room for 30 minutes. You will be placed in the scanner and pictures will be taken for the next 30 minutes.

Some people will have a slightly different PET scan, called a quantitative PET scan. In this scan, you will be placed in the scanner before injection of the FDG and pictures will be taken for one hour. 5 small blood samples will be taken from your arm during the scan.

### IMPORTANT NOTE:

*If you have an appointment in the morning, please do not eat or drink anything but water until the scan.  
If your appointment is in the afternoon, please do not eat or drink for 4 hours before your scan.*

## DURING THE SCAN:

The technologist will ask you to lie down on a cushioned table. This table will be moved into the scanner after you have been comfortably positioned for scanning. The technologist will leave the room but you will be in constant contact with him or her throughout the exam. The PET scan is quiet and does not make any noise. Most people do not find the scanner to be constricting or claustrophobic. It is very important to hold as still as possible during the scan and that you do not talk during the scan.

When scanning is complete, the technologist will return to assist you off the table and ask you to go to the restroom.