Alzheimer’s Disease Neuroimaging Initiative
Utah Component, PET Imaging Core

Type of Project: Multi-center Clinical Imaging Research
Methods: Image Analysis
Status: Funding secured from the National Institute on Aging; $86,500 annually to the University of Utah
Study Period: September 1, 2004 – August 31, 2009
In Collaboration With: The University of California at San Francisco, the University of California at Berkeley, the University of Michigan, the University of Arizona, and Dementia Clinics at 50 Major Academic Medical Centers and Private Practices Across the U.S.

University of Utah Collaborative Units:

Investigators: Norman L. Foster, M.D. (Site Principal Investigator), Angela Y. Wang, Ph.D., Tolga Tasdizen, Ph.D., William Jagust, M.D. (UC Berkeley; Core Principal Investigator), Robert Koepppe, Ph.D. (University of Michigan), Eric Reiman, M.D. (University of Arizona), Michael Weiner, M.D. (UC San Francisco; Project Principal Investigator)

Project Summary:
This is a collaborative, multi-center study to evaluate the use of brain imaging and other biomarkers to evaluate the effectiveness of new treatments for Alzheimer’s disease. Currently, testing the effectiveness of new drugs for Alzheimer’s disease requires 300-500 patients to be examined with cognitive tests on multiple occasions over two or more years. Because of the huge costs and the limited number of patients and investigators, this means that only a few studies a year can be completed and many promising treatments cannot be tested. We hope to identify more objective disease markers that show less variation than the usual cognitive tests.

The Center for Alzheimer’s Care, Imaging and Research is focusing its attention on a small component of this very large project. We will process and analyze FDG-PET images obtained in this study using stereotactic surface projection maps. We will post metabolic and statistical maps similar to those we produce in our clinical studies at a data depository at the University of California at Los Angeles. Then, through a web site, the results of our analyses are shared with AD investigators throughout the world. In collaboration with other members of ADNI, we will determine what imaging methods are best suited to clinical trials of new drug treatments.

Potential Benefits:
If we succeed in identifying objective imaging and biomarker measures of disease progression that improve upon cognitive testing, the pace of developing new drug treatments will be significantly accelerated.