

OSU COGNITIVE NEUROLOGY RESEARCH NEWSLETTER

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IDENTIFICATION OF GENETIC VARIABILITY IN ALZHEIMER'S DISEASE

COLUMBUS – Dr. Katakai in the OSU Division of Cognitive Neurology and Dr. Sadeé in the Department of Pharmacology have identified variations in important regulation genes and their products that might influence the risk and severity of Alzheimer's disease. The analysis used a novel, very promising approach for identifying these variants. This early data showing imbalance in gene expression was made possible by the use of the OSU Buckeye Brain Bank and those Alzheimer's patients that gratefully donated their brain to help dementia research.

ALZHEIMER'S DISEASE NEUROMAGING INITIATIVE (ADNI)

SAN DIEGO - The ADNI, a \$60 million NIH study has completed nearly 75% of recruitment goals. OSU (Dr. Scharre, site Principal Investigator) is still accepting volunteers, who are normal, have mild cognitive impairment, or early Alzheimer's disease. This landmark study is investigating changes in chemical biomarkers, neuroimaging, and cognitive abilities over 2 to 3 years. Results could dramatically speed new drug development for Alzheimer's disease.

NEW TREATMENTS BEING STUDIED AT OSU FOR ALZHEIMER'S DISEASE

COLUMBUS- The Memory Disorders Clinic at OSU is currently testing rosiglitazone (a drug for diabetes) designed to enhance glucose uptake and provide anti-inflammatory effects. DHA (omega-3 fish oil) is being studied to enhance brain structure and signaling function. A novel patch formulation of Exelon and an extended release high dose Aricept pill are also being investigated. Alzheimer's patients with significant sleep disturbances are being evaluated with the new drug Rozerem.

SAGE SCREENING TEST VALIDITY STUDY

COLUMBUS – Dr. Scharre developed a practical screening tool for detection of mild cognitive impairment and dementia called the Self-Administered Gerocognitive Examination (SAGE). Validity testing using standard neuropsychological testing has shown very high correlations with a specificity of 90% and a sensitivity of 77% suggesting this practical test is a valid predictor of cognitive dysfunction. Eisai and Pfizer fund this study.

FUNCTIONAL MRI STUDIES CONTINUE IN MILD COGNITIVE IMPAIRMENT

BOSTON- The functional MRI (fMRI) imaging group led by Dr. Beversdorf is examining the effects of donepezil on brain activation in mild cognitive impairment. By examining blood flow changes in the brain, fMRI testing examines how the brain's information processing changes with treatment. Preliminary data presented suggests that Aricept increased activity for memory tasks with improved memory performance but showed more efficient patterns (decreased activation) for language and attention tasks which were unimpaired at the start.

FOR FURTHER INFORMATION CALL

(614) 293-6882

OR

(614) 293-6761.

THANK YOU!!

The Memory Disorders Clinic at OSU would like to extend our thanks to all of the families who have made donations to help fund our research. It is through your generosity, that new advances in treatments are made.

To make a gift please call (614) 293-3736 for the Alzheimer's disease research fund in Neurology (account # 302185).