To All My Friends in Cache Valley,

As all things change, I am moving on to other interests with my retirement as Dean of the College of Family Life and Director of the Cache County Memory Study at Utah State University. I want to sincerely thank the citizens of Cache Valley, particularly our senior population, for making the Memory Study not only possible, but also highly successful.

With the development of the new Center for Epidemiologic Studies at Utah State University under the directorship of Dr. Ron Munger, my dream of a center for family and aging research at Utah State University has now been realized. The USU team is a group of dedicated scientists with shared interests in studies of family and healthy aging and our new name, *The Cache County Study on Memory, Health and Aging*, reflects the broadening of the scope of our studies. With your continued help and support, the Cache County study will have important new discoveries and I look forward to reading about its many future findings.

Without doubt, none of this would have been possible without your help. I am pleased to be a member of this wonderful community.

Warmest Wishes to All,

Bonita W. Wyse, PhD
Emeritus Dean, College of Family Life
• **Occurrence of dementia and Alzheimer’s disease in Cache County**

Over 5,000 senior Cache Valley residents have participated in the study and we found that nearly 10% of them suffered from some form of dementia, a rate higher than found in many previous studies. Dementia is a condition in which a person suffers from severe memory loss and other problems related to thinking and memory. The most common form of dementia is Alzheimer’s disease.

The risk for Alzheimer’s disease typically increases with age and we generally found this to be true in the Cache County study. Among Cache County residents who survive into their 90’s, however, the occurrence of Alzheimer’s disease appears to decline with increasing age.

• **Emotional and behavioral changes with dementia**

Striking emotional and behavioral symptoms may develop as a complication of dementia. In the Cache County study, the most common were loss of emotions and feelings (apathy), depression, and a combination of anxiety, restlessness and aggression. These were present in about one-fourth of the participants with dementia. Because of their frequency and the problems they cause for both patients and caregivers, these symptoms should be looked for and treated when someone has a diagnosis of dementia.

• **Brain scans reveal brain changes with dementia**

Changes in the brains of people with dementia can be seen on brain scans (MRIs) that produce an image of the living brain. We found that our participants with dementia showed evidence of a shrinkage of brain tissue. Those with mild thinking and memory problems, but no dementia, also showed signs of brain tissue loss, but to a lesser degree.

• **Common medications affect risk of Alzheimer’s disease**

It appears that some common anti-inflammatory medications may influence the risk of developing Alzheimer’s disease and the course of the illness. Before these medications can be recommended for prevention or treatment of Alzheimer’s disease, a number of carefully designed studies (clinical trials) must be completed to examine the effectiveness and safety of these substances. Several clinical trials are underway, but not in Cache Valley.

• **Depression rates among seniors slightly higher in Cache County**

Clinical depression was found in about 4% of our participants, a rate slightly higher than reported in other studies. Senior women in Cache County reported clinical depression more often than men, which is similar to the gender differences found in other studies. In contrast, “minor” depression rates for both men and women were much lower in the Cache County study than in studies of seniors elsewhere. Future studies will investigate factors that may explain the above differences in the occurrence of depression.
Inherited genetic factors and Alzheimer’s disease
We looked at some inherited traits related to Alzheimer’s disease and found that a variant in the *APOE* (apolipoprotein E) gene appeared to increase the risk of Alzheimer’s disease in some people. For some, the *APOE* gene was related to earlier onset of Alzheimer’s disease but others with the same gene did not develop the disease. Thus other characteristics, perhaps environmental or behavioral factors that can be changed, may interact with genetic factors to cause Alzheimer’s disease. Many of these factors are the subjects of our new studies.

Setting the Stage for New Directions in Aging Research

New studies have shown that common health events and diseases such as stroke, heart attack and diabetes may increase the risk of Alzheimer’s disease. This is important because control of these common problems may help protect people from Alzheimer’s disease. In addition to our continued study of the long-term course of Alzheimer’s disease, we will be studying high blood pressure, high cholesterol, smoking, nutrition and physical activity because these factors are related to stroke, heart attack and diabetes and may help us to learn more about the prevention of Alzheimer’s disease.

New Studies and New Partners

The Cache County study now begins its 9th year and has received funding for five more years. With this renewed commitment come a few changes. A new name for the study, *The Cache County Study on Memory, Health and Aging*, reflects our wider focus on healthy aging. Our study staff will soon be inviting you to participate as we continue to explore the role of illness, medications, nutrition and lifestyle habits on memory and health in later life.

We are joined by new colleagues in this broader study. Dr. Kathleen Welsh-Bohmer of the Bryan Alzheimer’s Disease Research Center at Duke University Medical Center now leads the study on memory impairment. Dr. John Breitner, now Head of the Department of Geriatric Psychiatry at the University of Washington, continues to work with us. Maria Norton recently earned her doctoral degree at USU based on her work with the Cache County study, joined the USU faculty, and now serves as one of the local study directors. Dr. Ronald Munger of the USU Department of Nutrition and Food Sciences and Dr. Jo Ann Tschanz of the USU Department of Psychology, will be heading two new related projects. Dr. Heidi Wengreen of the USU Department of Nutrition and Food Sciences is developing new studies of nutrition and aging. The rest of the team includes a large group of investigators from Utah State University, the University of Utah, Brigham Young University, Johns Hopkins University, Duke University and the University of Washington.

We are excited about the possibilities ahead as we strive to unlock the mysteries of aging. We are confident that with your help we will define ways to combat Alzheimer’s disease and other disorders of aging in the future.
**Sources of Information on Research in Alzheimer's Disease and Aging**

- [www.alzheimer’s.org](http://www.alzheimer’s.org) The Alzheimer’s Association.
- [aagpgpa.org](http://aagpgpa.org) American Association of Geriatric Psychiatry, Information for both caregivers and care recipients.