



The University of Utah
Center for Alzheimer's Care,
Imaging and Research

2006 Annual Report

Department of Neurology,
School of Medicine



The University of Utah

Center for Alzheimer's Care, Imaging & Research

This Annual Report illustrates the substantial growth and achievements of the University of Utah Center for Alzheimer's Care, Imaging and Research (CACIR) during 2006 and our shared vision for 2007. To an amazing degree, we have attained and often exceeded the goals we outlined for ourselves in our last annual report. We now look forward to the new challenges and opportunities the coming year offers.

The major highlight of 2006 was our Commemoration of 100 Years of Alzheimer's Research and Grand Opening held in November. The timing of the event was coordinated with the Alzheimer's Association Annual Remembrance Ceremony and Association volunteers helped direct visitors. Over the course of two days, we hosted more than 200 Utah leaders and members of the public at our academic offices and Clinic. We had the opportunity to describe our model for clinical care, teaching, research, and collaborations with investigators and organizations throughout the country. This event brought together every member of our Center as a unified team. All contributed to the success of the Commemoration, creating more than 25 informational and research posters in the process. These posters are now part of our website at www.utahmemory.org.

We gratefully acknowledge the continuing support we receive from John E. Greenlee, M.D. and our colleagues in the Department of Neurology. The Center exists due to a generous gift from an anonymous donor, who graciously extended additional support during 2006. We also received donations from numerous other individuals, who are listed on the back cover of this report. We continue to have significant University support and the interest and assistance of many individuals. This encouraging environment and these collaborations have made the Center's progress possible.

Norman P. Foster MD
Director, CACIR

For clinical appointments or services, please contact:

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Pictured (from left): Carolyn Knudsen, Gordon Chelune, Angela Wang, Rebecca Mesley, Edward Zamrini, Tandy Jensen, Norman Foster, Karen Mara, Troy Andersen, James Levy, Kathy Moran, Stephanie Card (not shown: Camille Gleave). Photo by Chris Pearson.



During the past year, the Center recruited several new faculty and staff members, establishing a strong foundation for our future development and success.

Continuing Faculty and Staff

- **NORMAN L. FOSTER, MD**, Director
- **KAREN MARA**, Administrative Manager
- **TANDY JENSEN**, Executive Secretary

Additions and Transitions in 2006

- **EDWARD ZAMRINI, MD**, joined the Center faculty in February 2006 as Director of Clinical Trials and Associate Professor of Neurology. He has gained a broad expertise in his work with over 40 clinical Alzheimer's trials. Before coming to Utah, he was Director of the Clinical and Information Transfer Cores of the Alzheimer's Disease Research Center at the University of Alabama at Birmingham.
- **JAMES A. LEVY, PHD**, joined the Center faculty in February 2006 as Neuropsychologist and Assistant Professor of Neurology. He has nearly 20 years of Alzheimer's-related care and research experience, most recently as director of clinical and cognitive neuropsychology at the former intramural Geriatric Psychiatry Branch of the National Institute of Mental Health. His research seeks to understand the mechanics of memory loss during the early stages of Alzheimer's and how the caregiving process may improve health outcomes in dementia care recipients.
- **GORDON J. CHELUNE, PHD, ABPP(CN)**, joined the Center faculty in May 2006 as Senior Neuropsychologist and Professor of Neurology. He has over 30 years experience as a clinical neuropsychologist and was recruited from the Cleveland Clinic Foundation, where he was founder and Head of the Section of Neuropsychology and Director of Neuropsychological Services at the Mellen Center for Multiple Sclerosis Treatment and Research. His research interests include memory disorders, test development, outcomes research, and longitudinal cognitive trajectories.
- **CAROLYN KNUDSEN** joined the Center as Office Assistant in January 2006. She has proven instrumental in many ways, including coordination of insurance appeals as our Appeals Advocate and the development and maintenance of our administrative, patient, research and publication databases.
- **LINDSEY HEALY**, who joined us in July 2005 as a Research Assistant, left to pursue her PhD in Biomedical Engineering at the University of Utah. While with us, she established PET image analysis procedures, developed new image display methods, and began development of our database. We appreciate her contributions and wish her well as she furthers her training.

- **STEPHANIE CARD** joined the Center as Neuropsychology Technician in July 2006. Before joining the Center, her work in the mental health field helped hone her communication and problem-solving skills, which have proven useful in her current role. A recent graduate from the University of Utah, she hopes to obtain a Master's degree in marriage and family therapy.
- **CAMILLE GLEAVE** joined the Center as Neuropsychology Technician in July 2006. She has 18 years experience as a Senior Certified Child Life Specialist for University of Utah Healthcare, and was the founder of a grief program for children of adult patients at Heritage Hospice for 4 years. She enjoys art and working closely with colleagues and patients.
- **KATHY MORAN, MBA**, joined the Center as Health Educator in July 2006, after serving nine years as an administrator in the School of Medicine. This career shift was inspired by graduate course work in Health Promotion and Education, as well as her early volunteer and work experience in a long term care facility. She is an amateur ceramicist and shares a studio with her husband.
- **REBECCA MESLEY** joined the Center as Clinical Study Coordinator in July 2006. She moved to Utah from Seattle, where she was a consultant for Merck's clinical trial division. She has a degree in biochemistry and seven years of research experience. Her goals are to continue developing the faculty's research efforts and to promote the Center's growth through clinical research and outreach in the Salt Lake community.
- **ANGELA Y. WANG, PhD**, joined the Center as Research Analyst in August 2006. Her background in Electrical Engineering and Biophysics came from Cornell University and the University of California, Berkeley. Previously, she worked on visualization and data processing of multi-channel neural signals. Currently, she utilizes stereotactic surface projection (SSP) analysis to process PET images of the brain.
- This imaging method has proven to be a significant aid in the diagnosis of Alzheimer's disease in our clinic.
- **TROY C. ANDERSEN, LCSW**, joined the Center as its Social Worker in September 2006. A native of Utah, he received his Bachelor's in Psychology from the University of Utah and Master's in Social Work from Brigham Young University. He has extensive experience with chronic mental illness, crisis intervention, trauma and grief issues. He is interested in Gerontology and currently enrolled in graduate studies. His research interests include caregiving and issues related to Alzheimer's, other medical problems, chronic mental illnesses, and homelessness.
- **KAYCIE KUSS** volunteered at the Center during Fall Semester 2006. During that time, she assisted with neuropsychology training and building the Center's publication database. She graduated from the University of Utah in December 2006 and is now pursuing a PhD in neuropsychology.

Adjunct Faculty

During 2006, three University investigators joined the Center through adjunct appointments. These adjunct appointments, renewed annually, formally recognize ongoing collaborations.

- **JOHN M. HOFFMAN, MD**, is Professor of Radiology and Neurology, Director of Nuclear Medicine in the Department of Radiology, Director of the Molecular Imaging Program at the Huntsman Cancer Institute, Medical Director of the Utah Center for Advanced Imaging Research (UCAIR), and Senior Investigator in The Brain Institute at the University of Utah. He was recruited from the National Cancer Institute in August 2005 and has extensive experience using positron emission tomography (PET) in the study of dementing disorders. He collaborates on several Center research projects, including the development of amyloid imaging.
- **STEVEN S. CHIN, MD, PhD**, is Associate Professor of Pathology and Director of Neuropathology at the University of Utah. He was recruited from Columbia University, where he was Associate Director of the Neuropathology Core of the Alzheimer's Disease Research Center. His academic interests have focused on neurodegenerative diseases and he performs pathologic examinations for our Gift to Life Autopsy Program.
- **TOLGA TASDIZEN, PhD**, is Assistant Research Professor in the School of Computing and a Research Scientist at the Scientific Computing and Imaging (SCI) Institute. He joined the University of Utah in 2001 after completing his doctorate in Engineering at Brown University. His research interests include medical image processing, particularly segmenting brain images to distinguish different tissue types. He participates in several Center studies, including PET image analysis as part of the NIH-funded Alzheimer's Disease Neuroimaging Initiative (ADNI).

Who Receives Care in Our Clinic?

In 2006, we evaluated 339 patients for memory disturbances and dementia. There were 196 women and 143 men, with an average age of 69. The oldest was 93 years old and the youngest was 34. Although the prevalence of dementia increases with increasing age, nearly 30% of our patients were under age 65, underlining the increasing national concern about early-onset dementia and the need to make appropriate services available to this important, but often overlooked group.

Our patients came from a wide geographic area. 92% of our patients were from Utah and 5% were from Idaho, but we also evaluated patients from Wyoming, Louisiana, Georgia, Alabama, Alaska, and Hawaii.

We extend our condolences to the caregivers and families of the 8 patients who passed away last year, including 3 who participated in our Gift to Life program.



In 2006, we developed several of the unique, innovative aspects of our clinical program. As the year progressed, the scope and extent of our clinical services expanded significantly.

In March, Dr. Zamrini began seeing patients in clinic, tripling our clinical capacity. That same month, Dr. Levy began providing specialized neuropsychological evaluations as part of our comprehensive patient evaluation. He was joined by Dr. Chelune in May. With the addition of neuropsychological technicians Stephanie Card and Camille Gleave in July, the capacity for neuropsychological testing in the Department of Neurology more than tripled, allowing us to satisfy some of Utah's unmet needs for high quality dementia care.

Memory Loss & Caregiving Resource Center

In July 2006, Kathy Moran joined us as Cognitive Disorders Health Educator. Kathy provides patients and their families with essential information and skills for living with memory loss and Alzheimer's disease. We also opened the Memory Loss and Caregiving Resource Center in a temporary space at the CAMT Building near our clinic.

Last year, the Center made a goal to provide health education as part of every visit to our clinic. Research has shown that continuing personal education, not simply reading brochures, is crucial for effective change because it empowers patients and families to improve their own care. By the end of the year, we had achieved this objective and education has become an integral part of each visit to the Cognitive Disorders Clinic.



Care without Compromise

Gift to Life Autopsy Program

It is important to family members to confirm the cause of serious neurological diseases. An autopsy offers peace of mind to family members by pinpointing the cause of a loved one's illness. It also provides tissue for future analysis as dementing diseases become better understood. As a consequence, an autopsy examination is truly a gift to life--bettering the health of future generations.

The Center began the Gift to Life and Gift to Life Plus autopsy programs in late 2006 to make it possible for families to obtain these services. Since advance planning is essential, we educate patients and their families about the benefits of postmortem examinations and help make necessary arrangements. Because this program contributes to research and furthers our understanding of disease, we owe a debt of gratitude to patients and their families who participated in these programs during the past year.

For more information about these programs, contact us at (801) 585-6546 or visit www.utahmemory.org.

Ensuring Access to Dementia Care

The Center provides the highest quality dementia care following current professional guidelines. We utilize

cutting-edge technology and diagnostic methods that have been proven to be effective. Medicare and most insurance providers cover the costs of such medical evaluations. However, in the Intermountain West, insurance providers have had little experience with these services and have not traditionally reimbursed some of the testing that is a standard part of dementia evaluations elsewhere in the United States.

To enhance the availability and affordability of needed testing, the Center has been working closely with health insurance providers. With the assistance of our Appeals Advocate, Carolyn Knudsen, 19 patients successfully appealed denials by their insurance companies for reimbursement of diagnostic services. A great deal of time and effort was required to guide patients and their families through the appeal process and attend appeal hearings, but as a result there will be fewer barriers to dementia care in the future.

Through all of these critical components, our subspecialty Cognitive Disorders Clinic continues to focus on definitive diagnosis, early interventions, and prevention of complications through personalized care management.

Research Collaborations at the University of Utah

The Brain Institute at the University of Utah
Center on Aging
College of Behavioral and Social Sciences
Department of Psychology
College of Education
Department of Educational Psychology
College of Nursing
College of Pharmacy
Department of Pharmacology & Toxicology
College of Social Work
The Huntsman Cancer Institute
Nuclear Medicine
School of Medicine
Department of Psychiatry
Department of Radiology
Geriatric Internal Medicine
Pharmacy Outcomes Research Collaboration
Scientific Computing & Imaging (SCI) Institute
University of Utah Magnetic Source Imaging
Utah Addiction Center
Utah Population Data Bank

Research Collaborations with Other Institutions

Cache County Study on Memory in Aging
Centers for Medicare and Medicaid Services
Cleveland Clinic
Department of Anesthesiology
Department of Psychiatry & Psychology
Department of Restorative Neurosurgery
Duke University
Harcourt Assessment
Indiana University
University of Arizona
University of British Columbia
Department of Psychiatry
University of California, Berkeley
University of California, Davis
University of California, Irving
University of California, San Diego
University of Michigan
University of Pennsylvania
University of Pittsburgh
University of Texas Southwestern
University of Washington
Utah State University
VA Salt Lake City Health Care System
Department of Psychiatry
Mental Illness Research, Education and
Clinical Center (MIRECC)
Washington State University

Industry Funding

Merck & Co., Inc.
Myriad Genetics, Inc.

We aggressively seek external funding for our research. However, successfully competing for funding requires substantial infrastructure, scientific expertise and demonstrated accomplishment.

The Center provides an incubator for new research ideas and proposals. Several times a week, our faculty and staff meet in interdisciplinary groups with other researchers to discuss ongoing and planned research. This unique, collaborative environment is one of the most exciting aspects of the Center.

The Center also provides initial limited support for pilot projects by our faculty members and their collaborators to collect preliminary data for external funding requests. Over the past year, some of these projects have successfully competed for funding and others still are seeking financial support.

Total External
Research Funding:
\$1,616,896

External Funding
Awarded in 2006:
\$487,450

Ongoing Research Projects

Pilot Collaborative PET Imaging Trial

Study Period: 9/30/2003 - 7/31/2007

This NIA-funded trial evaluates the value of adding FDG-PET to the evaluation of patients with suspected but uncertain FTD. It involves nine study sites and consultants from 10 different universities.

PET Imaging Core, Alzheimer's Disease Neuroimaging Initiative (ADNI)

Study Period: 9/1/2004 - 8/31/2009

Funded by the NIA, this broad study evaluates the use of brain imaging and other biomarkers to evaluate new treatments for AD. Our Center processes and analyzes FDG-PET images using SSP maps, which are shared with AD investigators worldwide. We hope to determine which imaging methods are best suited to clinical trials of new drug treatments.

Early Detection of Alzheimer's Disease in a Community Population Using Longitudinal Cognitive Assessment

Study Period: 11/1/2006 - 10/30/2007

Funded by an anonymous foundation, this study seeks to validate with neuroimaging a new approach of using repeated neuropsychological measures to identify AD during its early stages.

Comprehensive Programs to Strengthen Physicians' Training in Geriatrics

Study Period: 7/1/2006 - 6/30/2010

This project, funded by the Reynolds Foundation, seeks to provide additional training in geriatric topics to medical students at the University of Utah, in an effort to address the impending need for physicians trained and experienced in the care of older patients.

Merck MK-0249 Protocol 011

Study Period: 11/1/2006 - 10/30/2007

Funded by Merck Pharmaceuticals, this is a phase III clinical drug trial to determine the efficacy of a new drug (MK-0249) for treating Alzheimer's. MK-0249 is an H3 receptor antagonist, which may help regulate chemicals related to thinking and reasoning.

Myriad MPC-7869 Protocol 05-010

Study Period: 11/1/2006 - 6/1/2008

Funded by Myriad Pharmaceuticals, this is a phase III clinical drug trial to determine the efficacy of a new drug (MPC-7869) for treating Alzheimer's. An ingredient of the FDA-approved, anti-inflammatory drug called flurbiprofen, MPC-7869 is being studied as a possible treatment for AD, as it is thought that anti-inflammatory drugs may alter a basic mechanism of AD.

Medical and Health Professions Students

Through academic lectures and clinical teaching, the Alzheimer's Center is committed to increasing the amount of training in Geriatrics offered to tomorrow's physicians and health professionals. During 2006, our faculty members played an active role in education at the University of Utah, sharing their specialty knowledge with medical and health professions students.

Our faculty gave a series of lectures to Neurology and Family Medicine residents in the School of Medicine, surveying major topics in Alzheimer's disease and related disorders. Lecture topics included recognition, evaluation, diagnosis and management of dementia, as well as reviews of the latest dementia research and methods.

We developed a curriculum for a new, one-month elective in Cognitive Disorders, which was completed by two neurology residents in 2006. In addition, we began a Clinic rotation for geriatric medicine fellows and one fellow evaluated patients under the supervision of Dr. Foster. Several fourth-year medical students, Family Medicine residents, and Psychology trainees also observed evaluations in the Clinic. We were especially pleased that a neurology resident helped in the conduct and analysis of one of our dementia research studies. Our faculty also spoke to students at Brigham Young University as part of their Neuroscience Seminar.

Continuing Medical Education

The Center has been active in the professional community, sharing their expertise in an effort to improve the region-wide quality of dementia care. Our faculty provided continuing education on dementia and related topics to practicing physicians and

health care professionals, both informally and for CME credit.

During the past year, our faculty members spoke to their peers and to multidisciplinary audiences through Neurology, Psychiatry and Geriatrics Grand Rounds at the University of Utah, Grand Rounds at Logan Regional Hospital, and in-service presentations at ARUP, Greenwood Medical Clinic and Salt Lake Regional Medical Center. We participated in meetings of the Utah Gerontological Society, the Utah Psychological Association, and provided a seminar at Generations, an annual meeting of Utah mental health professionals.

Our faculty members were involved in regional and national professional meetings. Drs. Foster, Chelune and Zamrini were invited to speak at the Rocky Mountain Geriatric Conference held in Park City. Additionally, Dr. Chelune made presentations at the American Academy of Clinical Neuropsychology and the National Academy of Neuropsychology.

Our Center also had the opportunity to reach international audiences. In July 2006, all of our faculty members presented their research at the 10th International Conference on Alzheimer's Disease and Related Disorders (ICAD) in Spain. In April, Dr. Foster was invited to speak at the 1st Annual King Faisal Hospital & Research Centre Geriatrics Symposium in Saudi Arabia, and Dr. Chelune presented his research at the International Neuropsychological Meeting in Switzerland in July.

Leadership

In 2006, Center faculty members served on many academic committees and professional advisory boards. In Utah, these included the Governor's Commission on Aging and the Education Committee of the Utah Psychological Association. At the University of Utah, in addition to

departmental committees, our faculty were on the Center on Aging Steering Committee, the Psychiatry Chair Search Committee, the Geriatric Research, Education and Clinical Center (GRECC) Advisory Committee and the School of Medicine Research Strategic Planning Committee.

On a national level, our faculty members served on the Steering Committee for the Alzheimer's Disease Neuroimaging Initiative (ADNI), the Nominations Committee for the American Psychological Association's Division of Clinical Neuropsychology, and scientific advisory boards for Myriad Pharmaceuticals, GE Healthcare, and the Kessler Medical Research, Rehabilitation and Education Corporation. Dr. Foster also was session chair at the 5th International Conference on FTD, and on the Steering and Awards Committees of the Alzheimer's Imaging Consortium.

Meetings

In addition to the numerous conferences they attended, our faculty members organized and hosted several meetings for their academic peers during 2006.

Drs. Foster and Wang organize and moderate a monthly Neuroimaging Symposium Series sponsored by The Brain Institute. These symposia are presented by University faculty and visiting professors and have attracted participants from many disciplines, spurring new research collaborations. Monthly video conferences with investigators from the Cache County Memory Study at Utah State University were begun and have resulted in new collaborative proposals. We also developed a case conference in collaboration with speech pathologists.

Editorial Experience

Our faculty reviewed articles for many scientific journals, including *Archives of Neurology*, *American Journal of*

General Psychiatry, Brain, The Lancet, American Journal of Managed Care, Journal of Mental Health, Journal of the International Neuropsychological Society, Neuropsychology, Psychological Methods, and The Clinical Neuropsychologist. Dr. Chelune served on the Editorial Board for *The Clinical Neuropsychologist*.

In addition, our faculty were reviewers for the 2006 grant cycle of the Alzheimer's Association, the National Institutes of Health (NIH), and the University of Alabama Alzheimer's Disease Research Center.

Visitors

During the past year, our Center was honored to host several visiting scholars and dignitaries, including visitors from:

- Doshisha University (Japan)
- eCognition Centre for Neuroscience at the University of Melbourne (Australia)
- University of Washington
- University of Michigan
- Duke University
- University of Rochester

We also hosted Princess Yasmin Aga Khan and Lonnie Wollin, Honorary National Board Members of the Alzheimer's Association.



Erik Stern's Repertory Dance, "Demolition Derby: When a Mind Loses Its License to Drive." Photo by Scott Halford.



2006 Memory Walk. Photo courtesy of the Utah Chapter of the Alzheimer's Association.

We are committed to increasing public understanding of Alzheimer's disease and related disorders that cause memory loss and dementia. Throughout 2006, our faculty members spoke to many community groups, including the Alzheimer's Association, AARP, the Traumatic Brain Injury Support Group, the University Hospital Foundation, and the Osher Institute for Lifelong Learning at the University of Utah. They also spoke at community conferences, including the Salt Lake City Brain Injury Conference, the Annual Generations Conference, Senator Orrin and Mrs. Elaine Hatch's Annual Conference for Seniors, the 7th Annual KUED Women's Conference, and the Brain Injury Association's Family and Professionals Conference. Drs. Chelune, Levy and Zamrini also participated in post-show panel discussions following Erik Stern's successful repertory dance performance, "Demolition Derby," which explored the challenges faced by a son coping with his parent's diagnosis of AD.

The Center continued to work closely with the Utah Chapter of the Alzheimer's Association, signing a Memorandum of Understanding in 2006. Through this agreement, we have agreed to collaborate on our shared goals, including expanded health education for patients and their caregivers. We participated with the Association in several local health fairs and expos, and members of the Center participated in the Association's Annual Memory Walk, a key annual public awareness and fundraising event.

Additionally, our Center was featured by regional news agencies, radio programs, and television shows. Our faculty members were interviewed for or contributed to articles that appeared in *The Salt Lake Tribune*, *The Deseret News*, *Utah Health Magazine*, *MD News Magazine: Utah Edition*, and even in the *Jackson Hole News & Guide*. Faculty members were guests on KUER FM90's RadioWest show, KCPW's Mid-Day Metro radio show, and ABC Channel 4's Good Things Utah. In addition, Dr. Foster recorded a podcast about Alzheimer's that can be downloaded at www.utah.edu.

Peer-Reviewed Articles

1. Cohen RM, Szczepanik J, McManus M, Mirza N, Putnam K, **Levy J**. Hippocampal atrophy in the healthy is initially linear and independent of age. *Neurobiol Aging* 2006;27:1385-1394.
2. Farag E, **Chelune GJ**, Schubert A, Mascha EJ. Is depth of anesthesia, as assessed by the bispectral index, related to postoperative cognitive dysfunction and recovery? *Anesth Analg* 2006;103:633-640.
3. Huey ED, Mirza N, Putnam KT, Soares H, Csako G, **Levy JA**, Copenhaver B, Cohen RM, Sunderland T. Stability of CSF beta-amyloid (1-42) and tau levels by APOE genotype in Alzheimer patients. *Dement Geriatr Cogn Disord* 2006;22:48-53.
4. Lange RT, **Chelune GJ**. Application of new WAIS-III/WMS-III discrepancy scores for evaluating memory functioning: relationship between intellectual and memory ability. *J Clin Exp Neuropsychol* 2006;28:592-604.
5. Lange RT, **Chelune GJ**, Taylor MJ, Woodward TS, Heaton RK. Development of demographic norms for four new WAIS-III/WMS-III indexes. *Psychol Assess* 2006;18:174-181.
6. Lange RT, **Chelune GJ**, Tulsy DS. Development of WAIS-III General Ability Index minus WMS-III memory discrepancy scores. *Clin Neuropsychol* 2006;20:382-395.
7. Morris JC, Weintraub S, Chui HC, Cummings J, Decarli C, Ferris S, **Foster NL**, et al. The Uniform Data Set (UDS): Clinical and Cognitive Variables and Descriptive Data From Alzheimer Disease Centers. *Alzheimer Dis Assoc Disord* 2006;20:210-216.
8. Schoenberg MR, Lange RT, Iverson GL, **Chelune GJ**, Scott JG, Adams RL. Clinical validation of the General Ability Index-Estimate (GAI-E): estimating premorbid GAI. *Clin Neuropsychol* 2006;20:365-381.
3. **Chelune GJ**, Lange R. Memory profiles among patients with relapsing-remitting multiple sclerosis. *J Int Neuropsychol Soc* 2006;12:14.
4. **Chelune GJ**, Suchy Y. Effects of intervention for incomplete effort on subsequent memory testing among patients with multiple sclerosis. *J Int Neuropsychol Soc* 2006;12:101.
5. **Foster NL**, Koeppel RA, Heidebrink JL, Stevenson V, VanHuysen C, for the Pilot Collaborative PET Imaging Trial. Quality assurance in a multi-center PET imaging trial. *Alzheimers Dement* 2006;2:S322.
6. **Foster NL**, Plassman B, Langa K, Fisher GG, Giordani B, Wallace R. Factors influencing the frequency of dementia evaluations in a population-representative sample in the United States. *Alzheimers Dement* 2006;2:S262.
7. Griffith HR, Netson KL, Harrell LE, **Zamrini EY**, Brockington JC, Marson DC. Amnesic mild cognitive impairment: diagnostic outcomes and clinical prediction over a two-year time period. *J Int Neuropsychol Soc* 2006;12:166-75.
8. Hamilton L, Suchy Y, **Chelune GJ**. The association between depression and executive functioning in a group of patients with multiple sclerosis, relapsing remitting type. *J Int Neuropsychol Soc* 2006;12:15.
9. Heidebrink JL, Gabel MJ, Higdon R, **Foster NL**, for the Pilot Collaborative PET Imaging Trial. Validation of a consensus panel approach to dementia diagnosis. *Alzheimers Dement* 2006;2:S259.
10. Holdnack J, Drozdick L, Sichi M, **Chelune GJ**. Sensitivity of D-KEFS design and figural fluency measures in pediatric TBI versus ability and demographically matched controls. *Arch Clin Neuropsychol* 2006;21:531.
11. Holdnack J, Drozdick L, Sichi M, Lane A, **Chelune GJ**. Sensitivity of D-KEFS sorting, trail-making and color-word interference measures in pediatric TBI versus ability and demographically matched controls. *Arch Clin Neuropsychol* 2006;21:531.

Book Chapters

1. **Foster NL**. The Clinical Issues. In: Herholz K, Perani D, Morris C, editors. *The Dementias: Early Diagnosis and Evaluation*. New York: Taylor & Francis; 2006: 1-31.

Abstracts

1. **Chelune GJ**, Holdnack J, **Levy J**. Education effects and base-rate information for the Delis-Kaplan Executive Function Systems (D-KEFS) fluency measures. *Arch Clin Neuropsychol* 2006;21:535.
2. **Chelune GJ**, Ivnik R, Smith G. Application of reliable change methods for identifying abnormal rates of cognitive decline in dementia. *Alzheimers Dement* 2006;2:S374.
12. **Levy JA**, **Foster NL**, Putnam KT, Seichepine DR, McGee L, Grimley M, Plumb T, Hammond CJ, Sunderland T. Altered semantic processing in healthy older adults at risk for Alzheimer's Disease. *Alzheimers Dement* 2006;2:S224.
13. Marson DC, Martin R, Wadley V, Griffith HR, Anderson B, Goode P, Kinney C, Nicholas A, Steele T, **Zamrini E**, Harrell L. Clinical assessment of financial capacity in Alzheimer's disease. *Alzheimers Dement* 2006;2:S567.
14. Salmon DP, Cummings JL, Jin S, Sano M, Sperling RA, **Zamrini E**, et al. ADCS Prevention Instrument Project: Development of a Brief Verbal Memory Test for Primary Prevention Clinical Trials. *Alzheimer Dis Assoc Disord* 2006;20:S139-S146.

Plans for the Upcoming Year

Center Faculty & Staff

- Recruit University faculty as research collaborators and adjunct faculty members.
- Begin social work outpatient consultation service for memory loss and dementia.

Patient Care

- Recruit another neurologist specializing in Alzheimer's and related disorders.
- Begin construction of Memory Loss and Caregiving Resource Center, an expansion of the Neurology Clinic.
- Continue working with health insurers to obtain appropriate coverage for dementia services.
- Refine our innovative, multidisciplinary care model to improve patient and caregiver knowledge and support.
- Expand availability of neuropsychological evaluations for memory loss and dementia.
- Develop new materials that will guide patients through the clinic process.
- Streamline procedures for referring physicians.
- Increase awareness of Gift to Life program and facilitate the process for families.

Research

- Hire an informatics research assistant.
- Develop protocol for synthesis of ¹¹C-PIB, an amyloid PET agent, and initiate human studies.
- Establish pilot research project program.
- Develop and evaluate novel image analysis methods.
- Expand research collaborations with the Cache County Study of Memory and Healthy Aging and other research teams.
- Develop a cognitive disorders research lab adjacent to CAMT clinic, in conjunction with the Brain Institute and the University of Utah Departments of Psychology and Educational Psychology.

- Become a clinical trial site for the Alzheimer's Disease Cooperative Study.
- Enhance research collaborations with UHC primary care network.
- Initiate caregiver studies, studies with magnetoencephalography, and neurocognitive studies.
- Initiate and expand clinical drug trial program.
- Continue building our research registry and Center database, and establish web-based enrollment.
- Establish DNA repository for dementing diseases.
- Enhance minority awareness regarding dementia research.

Education

- Increase professional education on dementia care among Utah physicians.
- Present spring and fall courses on memory loss and dementia at the University of Utah's Osher Lifelong Learning Institute.
- Continue to present public education programs with AARP, the Alzheimer's Association, the Brain Institute, Senator Hatch's Conference for Seniors, and others.
- Continue our clinical dementia elective for residents and fellows.
- Participate in medical education programs supported by the Reynolds Foundation and University of Utah Center on Aging.
- Develop a geriatric neuropsychology fellowship, to begin in July 2008.
- Continue lecture series to U of U medical students, primary care and medical specialty trainees.
- Speak at Continuing Education conferences for health professionals.
- Present a course at the American Academy of Neurology 2007 Annual Meeting.
- Present at Neurology / Neurosurgery Grand Rounds.

We have set ambitious but achievable goals for the Center in 2007. With our broad base of institutional and community support, we hope to continue our work and accomplish our objectives.



Architectural renderings of proposed, permanent Memory Loss and Caregiving Resource Center at the CAMT Building.

Your Gifts

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The University of Utah Center for Alzheimer's Care, Imaging and Research was established in 2005 through a generous gift from an anonymous, private donor. The Center's continued operation is dependent on private and public resources, and has been complemented by competitive grant funding and by generous donations from individuals. These gifts allow us to sustain our Center's innovative design, and to pursue new clinical and research goals. If you would like to give, please call Karen Mara at (801) 585-6546.



Photo by Kianee, Courtesy of stock.adobe.



We gratefully acknowledge the generosity of these donors:

Barbara Freeman
Robert P. and Dixie S. Huefner
Harold & Katherine Liddle
Jayanne Sindt
Jessica Snyder
Jan Wilking

In Memory of Osbie J. "Hot" Linville

Charles C. Anderson
William Armfield
Orville & Willie Mae Bailey
Ray & Geraldine Billingsley

Mr. & Mrs. Joe Breyer
Myra Campbell
Barbara A. Carbine
Gilbert R. Cleveland
Rebecca & William Fesmire
Glenn French
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In Memory of Dr. Frank Cohen

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