

USF Health Byrd Alzheimer's Institute



2010 Annual Report

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About the USF Health Byrd Alzheimer’s Institute

The USF Health Byrd Alzheimer's Institute was founded in 2002 on the vision of former Florida Speaker of the House, Johnnie Byrd, Jr. whose father suffered from Alzheimer’s disease and for a number of years was known as the Johnnie B. Byrd, Sr. Alzheimer’s Center and Research Institute.

Today the Institute is a multi-disciplinary Center of Excellence at the University of South Florida that provides compassionate family-centered patient care, performs cutting edge research and delivers quality public and professional education. With a state-of-the-art building and a highly qualified team of researchers, doctors, clinicians and educators, the Institute is at the forefront of Alzheimer's research and care.

Mission Statement

The USF Health Byrd Alzheimer’s Institute is dedicated to the prevention, treatment and cure of Alzheimer’s disease and related disorders.

The key activities of the Institute include:

- To conduct laboratory research to understand the changes in the brain that cause dementia and to develop approaches for the prevention and treatment of Alzheimer's disease.
- To conduct clinical trials to test treatments for individuals with all stages of memory loss.
- Provide state-of-the-art diagnostic evaluations and the highest level of patient care to individuals with Alzheimer's disease and other memory problems.
- Support family caregivers by providing educational programs, support groups, counseling and information.
- Provide education and training for healthcare professionals, service providers and students.

Letter from the Chief Scientific Officer

1 JUL 2010 marks the end of the first year of the USF Health Byrd Alzheimer's Institute as part of the University of South Florida. During the 10 months preceding the formal dissolution of the 501(c)(3) corporation and the permanent affiliation with USF, there was a period of considerable growth as investigators and physicians from USF collocated to Institute. As a result, the 2009-2010 academic year (1 JUL to 30 JUN) serves as the baseline year for our growth and development in the future.

The overall Institute activity totaled \$9.1 million. The largest expenditure is for basic, translational and clinical research, accounting for roughly 2/3rds of the total expenditures in the Discovery Research Laboratories and the Alzheimer's Clinical Center. This is rightfully where our activities should be centered as we find new means of preventing, treating and, one day, curing Alzheimer's and other dementing disorders.

A second, but no less important, activity in benefiting the lives of Alzheimer's patients and their family members is the critical educational activities performed by the staff and faculty of the Institute. This also includes educating the next generation of physicians regarding the diagnosis and treatment of Alzheimer's disease, so that they are prepared for the growing numbers of patients they will see with dementing disorders.

A third significant component of our mission is clinical service. Over 2200 patient visits in 2009-10 is a considerable gain over our prior year's activities and we anticipate this will continue to as the Dementia CRISP becomes a reality. Research, Education and Service will be the mainstays of Institute growth in the coming years.

Other major expenditures included plant operation and maintenance. For 2009-10 these costs were borne from Institute reserves. However, going forward for 2010-11 we have received an allocation from the State of Florida that will cover these expenditures.

Our business operations expenses include finance and accounting plus executive administrative services. At 8% of total expenditures, this remains a minor portion of the overall institute activities, although some of these operations are shared by USF general administration.

Plans for 2010-11 include development of the Dementia CRISP on the second floor and hiring at least one new faculty member. Within the CRISP, the Institute has signed a contract to purchase a PET-CT scanner for measurement of amyloid in human brain. This instrument will aid not only in diagnosis of Alzheimer's disease, but also in determining the efficacy of anti-amyloid treatments, and identifying those with presymptomatic Alzheimer's. It is this earliest stage of the disorder, previously unrecognizable, where the medications are predicted to have the greatest impact and prevent the onset of symptoms.

Thanks to the hard work and dedication of our faculty, students and staff, the Institute has established itself firmly as a critical piece of the USF Health infrastructure. We all look forward to continue the expansion of the Institute to reach its full potential.

Our focus remains unchanged; to diligently continue our efforts until Alzheimer's is a memory.

Dave Morgan, PhD, CSO / Director (CEO / Director since 1 JULY 2010)

The History of Alzheimer's Disease

More than 100 years ago, in 1906, the German physician Alois Alzheimer described the physical brain changes that marked the type of dementia that would come to bear his name.

Twenty years ago the mysteries of Alzheimer's disease were locked tightly inside the brain cells of the millions of people throughout the world who suffered from the slow, debilitating disease. In the last 10 years, science has found several windows into the biological, genetic, chemical, and social factors that affect Alzheimer's disease.

Today, researchers have turned the corner, finding clues that open the door to better diagnoses, treatment, and potential cures. It is an accepted fact that a nationwide Alzheimer's epidemic is imminent:

- age is the greatest risk;
- the largest cohort of aging people is bubbling toward their senior years; therefore
- by the middle of this century, as many as 14 million of today's baby boomers could have Alzheimer's disease.

In Florida, Alzheimer's disease is the 7th leading cause of death. Over 450,000, or 1 in every 45 people, currently suffer with Alzheimer's disease. Studies show that figure will increase statewide to as many as 660,000 in the year 2025. The numbers continue to soar after 2025 as the bulk of the baby boomers age.

A key aspect of Florida's population which is fundamentally different from most states is the number of residents, age 65 and older. Indeed, Florida has the highest percentage of total population age 65 and older (17.6% of the State population) in the country. After age 65, one in every 10 Americans has the disease, and after age 85 half of all American will be diagnosed.

The first Alzheimer's century was dedicated to understanding its impact on individuals and developing a system of care for those living with the disease. The second century of Alzheimer's brings the promise of rapid advancements in better methods of diagnosis, prevention, and cure.

Individuals at the USF Health Byrd Alzheimer's Institute are leading the way in finding answers to the mysteries of Alzheimer's disease. Working across disciplines, from lab bench to bed side, researchers, physicians, and other scientists are working in a synergistic feedback loop.

Faculty Appointed to the USF Health Byrd Alzheimer's Institute

Jill Ardila, M.S.

Assistant Director of Clinical
Research
Instructor
School of Aging Studies

Balaibail Ashok Raj, M.D.

Professor of Neurology
College of Medicine

Jessica L. Banko, Ph.D.

Associate Director
Assistant Professor of
Molecular Medicine
College of Medicine

Chuanhai Cao, Ph.D.

Assistant Professor of
Molecular Pharmacology
& Physiology
College of Medicine

Chad Dickey, Ph.D.

Assistant Professor of
Molecular Medicine
College of Medicine

Kristin Fargher, M.D.

Assistant Professor of
Psychiatry & Neurosciences
College of Medicine

Jean M. Fils, MD.

Assistant Professor of
Psychiatry & Neurosciences
College of Medicine

Marcia Gordon, Ph.D.

Professor of Molecular
Pharmacology & Physiology
College of Medicine

**Michelle L. Mattingly, Ph.D.,
A.B.P.P.-C.N.**

Assistant Professor of
Psychiatry & Neurosciences
College of Medicine

David G. Morgan, Ph.D.

Chief Scientific Officer
Professor of Molecular
Pharmacology & Physiology
College of Medicine

Peter Mouton, Ph.D.

Professor of Pathology & Cell
Biology
College of Medicine

Kevin Nash, Ph.D.

Assistant Professor of
Molecular Medicine
College of Medicine

Jaya Padmanabhan, Ph.D.

Assistant Professor of
Molecular Pharmacology &
Physiology
College of Medicine

Eric Pfeiffer, M.D.

Professor Emeritus of
Psychiatry & Neurosciences
College of Medicine

Eileen Poiley, M.S.

Education Director
Associate, Suncoast
Gerontology
College of Medicine

Huntington Potter, Ph.D.

Eric Pfeiffer Chair for Research
on Alzheimer's Disease
Professor of Molecular
Medicine
College of Medicine

**Michael R. Schoenberg, Ph.D.,
A.B.P.P.-C.N.**

Clinical Director,
Memory Disorders Clinic
Associate Professor of
Psychiatry & Neurosciences
College of Medicine

Amanda G. Smith, M.D.

Medical Director
Assistant Professor of
Psychiatry & Neurosciences
College of Medicine

Nancy Teten, L.C.S.W.

Instructor of Neurology
College of Medicine

Edwin J. Weeber, Ph.D.

Associate Professor of
Molecular Pharmacology &
Physiology
College of Medicine

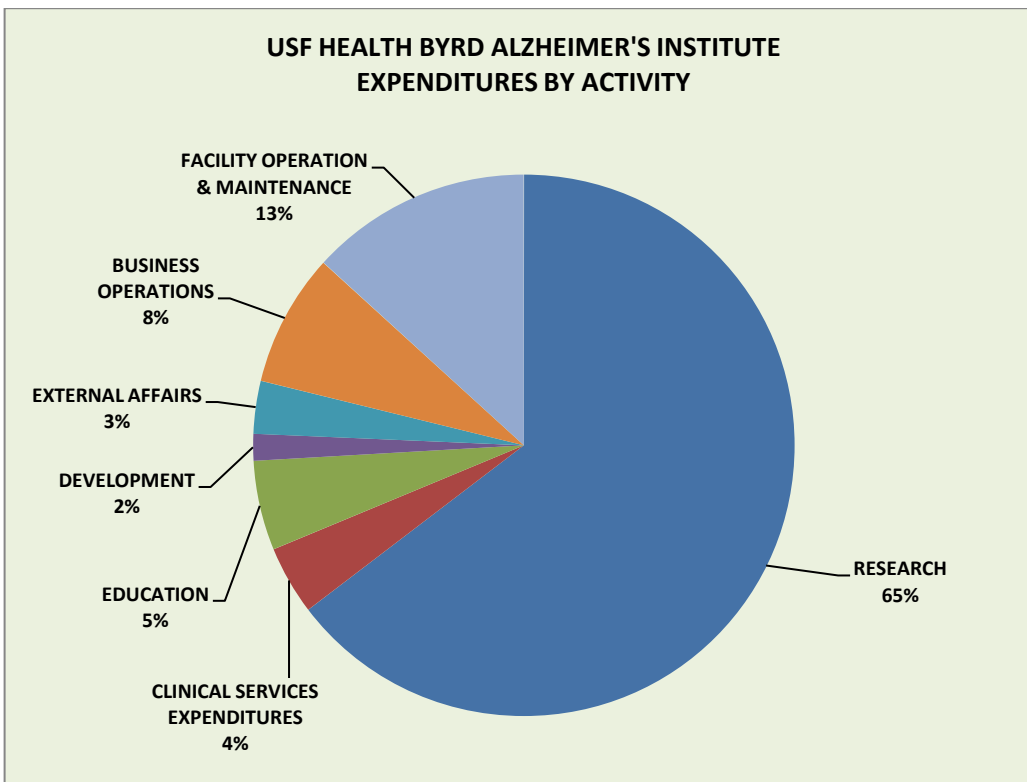
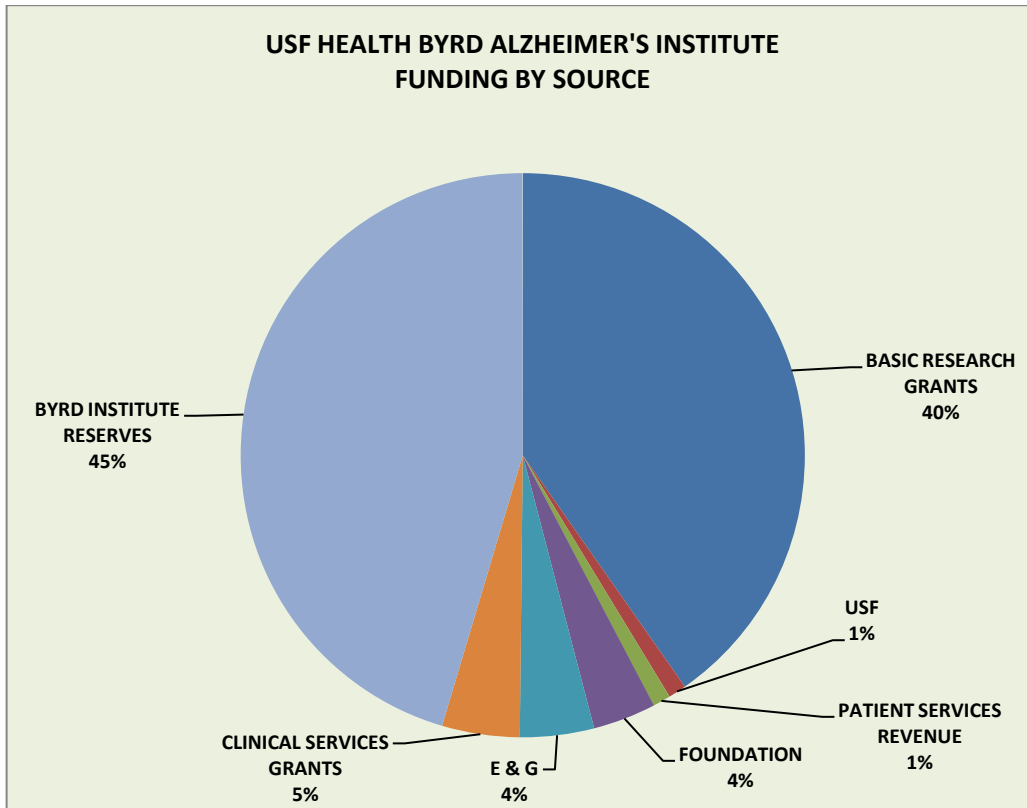
Jiashin Wu, Ph.D.

Assistant Professor of
Molecular Pharmacology &
Physiology
College of Medicine

USF Health Byrd Alzheimer's Institute Statistics

	2009/2010
CLINIC	
New patient visits to Suncoast Alzheimer's Center	389
Follow-up visits Suncoast Alzheimer's Center	640
Clinical trial visits	263
Memory Disorders Clinic visits	951
Total patient visits	2,243
STUDENTS	
Medical degree-seeking	23
Graduate degree-seeking	18
Post-doctoral	12
Undergraduate	10
High School	5
Total Trainees	68
FACULTY AND STAFF	
Clinical Faculty	10
Clinical Staff	9
Research Faculty	11
Research Staff	19
Education Faculty	1
Administrative Staff	6
Plant Operations/Maintenance Staff	1
Part-time/temporary Staff	4
Total Employees	61
RESEARCH	
Active Research Grants	25
Active Clinical Trials	20
Clinical Trial Subject Visits	263
ENDOWMENT	
Market Value	\$ 4,694,120
Endowment return	11.81%
Endowment earnings distributed per agreement	\$ 385,632

2010 Financial Overview



Funding by Source (in thousands)

	2009/2010
	\$
Basic Research Grants	3,671
Clinical Research Grants	406
Foundation	329
E&G	386
Patient Services	93
USF	94
Institute Reserves	4,137
TOTAL INSTITUTE FUNDING	9,116

Expenditures by Activity (in thousands)

	2009/2010 Subtotal	2009/2010 Total
	\$	\$
RESEARCH EXPENDITURES		5,893
Federal Grants	3,107	
Non-Federal Grants	564	
Alzheimer Institute	1,412	
USF	94	
USF Foundation	213	
Clinical Trials	503	
CLINICAL SERVICES EXPENDITURES		373
EDUCATIONAL EXPENDITURES		489
Faculty E&G	364	
Alzheimer Institute	125	
DEVELOPMENT EXPENDITURES		144
EXTERNAL AFFAIRS EXPENDITURES		288
BUSINESS OPERATIONS EXPENDITURES		722
Finance and Accounting	301	
USF Health Governance	173	
Executive Administration	248	
FACILITY OPERATION & MAINTENANCE		1,207
TOTAL INSTITUTE EXPENDITURES		9,116

Research

Clinical Research

We recognize the critical need to research new treatment options. Current medications cannot stop Alzheimer's disease. These medications may help prevent some symptoms from getting worse. Current research is aiming to halt or reduce the progression of Alzheimer's disease itself. Additionally, there is a great need for better ways to diagnosis and treat memory problems earlier.

Our center is involved in a number of research studies for various stages of Alzheimer's disease and mild cognitive impairment. Several of these studies investigate potential treatments that target the plaques and tangles in the brain. Some studies involve pills, while others use intravenous infusions. Other trials study the effect of noninvasive treatments and nutritional supplements on Alzheimer's disease. Some of our studies involve more advanced brain imaging techniques such as PET scans. Many of these trials are part of the Alzheimer's Disease Collaborative Study (ADCS), an NIH funded clinical trials consortium.

Clinical Research Statistics

	2009/2010
New studies awarded	8
Active studies	20
Enrolling studies	4
Total subjects enrolled	44
Subject visits	263
Average enrollment per trial	7
Average enrollment fulfillment (# screened/# contracted)	72%
Average randomized success (# randomized/#screened)	71%
Research study income	\$ 405,598
Research study expenses	\$ 523,749

Studies active during fiscal year 2010 listed by study sponsor

1. **ADCS:** A Randomized, Double-Blind, Placebo-Controlled Trial of the Effects of Docosahexaenoic Acid (DHA) in Slowing the Progression of Alzheimer's Disease [PI: SMITH]
2. **ADCS:** Multicenter Trial to Evaluate Home Based Assessment Methods for Alzheimer's Disease Prevention Research in People Over 75 Years Old [PI: SMITH]
3. **ADCS/Baxter:** A Randomized, Double-Blind, Placebo Controlled, Two Dose Arm, Parallel Study of the SAFETY and Effectiveness of Immune Globulin Intravenous for the Treatment of Mild to Moderate Alzheimer's Disease (160701) [PI: SMITH]
4. **ADCS/Pfizer:** A Double-Blind, Placebo-Controlled, Randomized, Multicenter Study Evaluating the Efficacy and Safety of Eighteen Months Of Treatment With PF-04494700 (TTP488) In Participants With Mild-To-Moderate Alzheimer's Disease [PI: SMITH]

5. **Bayer:** A Phase III open-label, non-randomized study to evaluate the efficacy and safety of BAY 94-9172 (ZK 6013443) positron emission tomography (PET) imaging for detection/exclusion of cerebral B-amyloid when compared to postmortem histopathology [PI: RAJ]
6. **Bristol Myers Squibb:** Multi-Center, Randomized Double-Blind Placebo-Controlled Study of the Safety, Tolerability, Pharmacodynamic and Pharmacokinetic Effects of BMS-708163 in the Treatment of Patients With Mild to Moderate Alzheimer's Disease [PI: SMITH]
7. **Bristol Myers Squibb:** A Multicenter, Randomized, Double-Blind, Placebo-Controlled Study of the Safety, Tolerability, Pharmacodynamic and Pharmacokinetic Effects of BMS-708163 in the Treatment of Patients with Prodromal Alzheimer's Disease [PI: SMITH]
8. **Danone:** A Randomized Controlled Trial to Assess the Efficacy of a Food in Patients with Mild to Moderate Alzheimer's Disease using Alzheimer's disease Medication [PI: RAJ]
9. **Eli Lilly:** Effect of Passive Immunization on the Progression of Alzheimer's Disease: LY2062430 versus Placebo [PI: RAJ]
10. **Eli Lilly:** Open-Label Extension for Alzheimer's Disease Patients Who Complete One of Two Semagacestat Phase 3 Double-Blind Studies (H6L-MC-LFAN or H6L-MC-LFBC) [PI: RAJ]
11. **Eli Lilly:** Effects of γ -Secretase Inhibition on the Progression of Alzheimer's Disease: LY450139 versus Placebo (H6L-MC-LFAN) [PI: RAJ]
12. **Janssen:** A Randomized, Double-Blind, Placebo-Controlled, Dose-Ranging, Safety and Efficacy Study of Oral ELND005 in Alzheimer's Disease (ELN 201) [PI: SMITH]
13. **Janssen:** A Phase III, Multicenter, Randomized, Double-Blind, Placebo-Controlled, Parallel Group, Efficacy and Safety Trial of Bapineuzumab (AAB 001, ELN115727) in Patients with Mild to Moderate Alzheimer's Disease who are Apolipoprotein E ϵ 4 Non-Carriers (301) [PI: SMITH]
14. **Janssen:** A Phase III, Multicenter, Randomized, Double-Blind, Placebo-Controlled, Parallel Group, Efficacy and Safety Trial of Bapineuzumab (AAB 001, ELN115727) in Patients with Mild to Moderate Alzheimer's Disease who are Apolipoprotein E ϵ 4 Non-Carriers (301) [PI: RAJ]
15. **Janssen:** A Phase III, Multicenter, Randomized, Double-Blind, Placebo-Controlled, Parallel Group, Efficacy and Safety Trial of Bapineuzumab (AAB 001, ELN115727) in Patients with Mild to Moderate Alzheimer's Disease who are Apolipoprotein E ϵ 4 Carriers (302) [PI: SMITH]
16. **Janssen:** A Phase III, Multicenter, Randomized, Double-Blind, Placebo-Controlled, Parallel Group, Efficacy and Safety Trial of Bapineuzumab (AAB 001, ELN115727) in Patients with Mild to Moderate Alzheimer's Disease who are Apolipoprotein E ϵ 4 Carriers (302) [PI: RAJ]
17. **Janssen:** A Phase 3 Extension, Multicenter, Double-Blind, Long Term Safety and Tolerability Treatment Trial of Bapineuzumab (AAB-001, ELN115727) in Subjects with Alzheimer's Disease who participated in Study ELN115727-301 or in Study ELN115727-302 [PI: SMITH]
18. **Janssen:** A Phase 3 Extension, Multicenter, Double-Blind, Long Term Safety and Tolerability Treatment Trial of Bapineuzumab (AAB-001, ELN115727) in Subjects with Alzheimer's Disease who participated in Study ELN115727-301 or in Study ELN115727-302 [PI: RAJ]
19. **Toyoma:** A Phase 2a multi-center, randomized, double blind, placebo-controlled study to investigate the efficacy and safety of T-817MAa in patients with mild to moderate Alzheimer's Disease [PI: RAJ]
20. **Wyeth:** A Phase 3, Multicenter, Randomized, Double-Blind, Placebo-Controlled, Parallel-Group Efficacy and Safety Trial of Bapineuzumab (AAB-001, ELN115727) in Subjects With Mild to Moderate Alzheimer Disease Who Are Apolipoprotein E ϵ 4 Carriers [PI: RAJ]

Basic and Translational Research

The Discovery Research Laboratories that make up the USF Health Byrd Alzheimer's Institute are engaged in basic and translational research aimed at understanding the patho-physiology of Alzheimer's disease and developing new therapeutics to treat and cure the disease. In addition to the head of each laboratory, there are graduate students, postdoctoral fellows, technicians, and others who ensure that the research continues to move forward.

Institute researchers have shared their research findings with the academic community at 9 scientific conferences and through 32 peer-reviewed journal articles this past year.

Basic and Translational Sponsored Research Statistics

	2009/2010
New federal grants	4
Continuing federal grants	9
New non-federal grants	8
Continuing non-federal grants	4
Total active grants	25
Research faculty/Principal Investigators	10
Average sponsored activity per research faculty	2.5
New federal grant awards value (annualized)	\$ 1,603,350
New non-federal grant awards value (annualized)	\$ 570,390
Total grant award value	\$ 2,173,740
Federal grant expenditures	\$ 3,106,730
Non-federal grant expenditures	\$ 563,910
Total sponsored research expenditures	\$ 3,670,640

Grants active during fiscal year 2010 listed by sponsor

Federal Sponsors

1. **National Institute of Aging** "ApoE receptor biology and neurodegeneration" [PI: Weeber]
2. **National Institute of Aging** "Mechanisms of reelin signaling in the adult hippocampus" [PI: Weeber]
3. **National Institute of Aging** "Chaperone-mediated signaling in Alzheimer's disease" [PI: Dickey]
4. **National Institute of Aging** "Chaperone-mediated signaling in Alzheimer's disease – minority supplement" [PI: Dickey]
5. **National Institute of Aging** "AAV gene therapy for Alzheimer's disease" [PI: Morgan]
6. **National Institute of Aging** "Functional consequences of vaccination in AD Tg mice" [PI: Morgan]
7. **National Institute of Aging** "Aminergic function in brain aging and Alzheimer's disease" [PI: Morgan]
8. **National Institute of Aging** "Transgenic mice, inflammation and the Alzheimer phenotype" [PI: Gordon]
9. **National Institute of Aging** "Florida Alzheimer's disease research center" [PI: Potter]
10. **National Institute of Aging** "National Alzheimer's coordinating center" [PI: Potter]
11. **National Institute of Aging** "Genome wide association analysis of Alzheimer's disease" [PI: Potter]

12. **National Institute of Aging** “Regulatory functions of Alpha 1-antichymotrypsin in inflammation and Alzheimer’s disease” [PI: Padmanabhan]
13. **National Center for Research Resources** “Digital microscopic image scanning system” [PI: Morgan]

Non-Federal Sponsors

1. **Alzheimer’s Association** “Chemical inhibition of Hsp70 as a therapeutic strategy for AD” [PI: Dickey]
2. **Alzheimer’s Association** “Regulatory functions of inflammatory proteins in Alzheimer’s disease” [PI: Padmanabhan]
3. **Alzheimer’s Association** “Gamma-secretase inhibitors induce cell cycle defects and chromosome aneuploidy [PI: Goodwin]
4. **Michael J Fox Foundation for Parkinson’s Research** “T-cell receptor changes as a biomarker of Parkinson’s disease” [PI: Cao]
5. **Parkinson’s Research Foundation** “Immunology of Parkinson’s disease” [PI: Cao]
6. **Society for Progressive Supranuclear Palsy** “Targeting Hsp70 as a therapeutic strategy for corticobasal degeneration and other tauopathies” [PI: Dickey]
7. **Society for Progressive Supranuclear Palsy** “Unraveling multi-protein chaperone complexes in progressive supranuclear palsy and other tauopathies” [PI: Dickey]
8. **State of Florida Department of Elder Affairs** “Alzheimer’s disease initiative – brain bank” [PI: Potter]
9. **University of South Florida Center of Excellence for Biomolecular Identification and Targeted Therapeutics** “Metabolomics and mitochondrial proteomics of Alzheimer's mice” [PI: Cao]
10. **University of South Florida College of Engineering Interdisciplinary Scholarship Program** “³C-SiC as a novel material for brain machine interfacing” [PI: Weeber]
11. **University of South Florida Neuroscience Collaborative Initiative** “Development of a cubic silicon carbide brain machine interface” [PI: Weeber]
12. **University of South Florida Neuroscience Collaborative Initiative** “Heat-shock complex effects on aggregation kinetic and tau” [PI: Dickey]
13. **University of South Florida Neuroscience Collaborative Initiative** “Symposium on early Alzheimer’s disease” [PI: Potter]

Alzheimer's Clinical Center

The Alzheimer's Clinical Center at the USF Health Byrd Alzheimer's Institute is the enterprise of the Eric Pfeiffer Suncoast Alzheimer's Center and the USF Memory Disorders Clinic. The Center is under the leadership of Medical Director, Dr. Amanda Smith and part of the USF Physicians Practice Group. Our clinical services include comprehensive clinical assessment, medication management and follow-up care after diagnosis, and family counseling.

All physicians at the Alzheimer's Clinical Center are board certified in their area of expertise. The Eric Pfeiffer Suncoast Alzheimer's Center has four providers that perform billable clinical services, of which three are geriatric psychiatrists and one is a licensed clinical social worker. The USF Memory Disorders Clinic has five providers that perform billable clinical services for the Center, of which one is a geriatric psychiatrist, two are neuropsychologists and two are licensed clinical social workers.

Alzheimer's Clinical Center Statistics

	2009/2010
New patient visits to Suncoast Alzheimer's Center	389
Follow-up visits Suncoast Alzheimer's Center	640
Clinical trial visits	263
Memory Disorders Clinic visits	951
Total patient visits	2,243
Suncoast Alzheimer's Center providers	4
Suncoast provider patient services load (# patients/month)	21.44
*Services billed	\$ 225,130
Payments received	\$ 92,763
Contractual adjustments	\$ 113,243
Discounts	\$ 0
Bad debt	\$ 1,962

*Services billed represents only those charges associated with Suncoast Alzheimer's Center clinical activity as this patient services revenue is credited to the USF Health Byrd Alzheimer's Institute. The USF Memory Disorders Clinic patient services revenue is credited to the Department of Psychiatry and Behavioral Medicine within the College of Medicine.

Education

Education and training is an integral part of the Institute and reaches students in pursuit of various degrees, healthcare professionals, Alzheimer's disease caregivers and the community.

Graduate Education

Medical Students

Most faculty in the Institute also have faculty appointments in traditional departments. Within those departments they have teaching responsibilities for medical students, graduate students, residents and in some cases undergraduate students. Major roles are played within the medical curriculum instructing students in Biochemistry, Molecular Biology, Pharmacology and Physiology. A few medical students spend their summer semester between first and second year in research laboratories. The Institute hosted three students in its research laboratories over the period covered by this report.

The third year curriculum for medical students at University of South Florida College of Medicine includes a twelve week primary care and special populations rotation and an eight week neuropsychiatry rotation for which students may select the Institute as their mentoring clinic. The Alzheimer's Clinical Center physicians acted as preceptors for 20 third year medical students in academic year 2009/2010.

Biomedical Sciences Graduate Students

Although, not an academic program home, the Institute participates in the training of post-baccalaureate biomedical sciences degree-seeking students through the Discovery Research Laboratories. Institute faculty participate in courses for PhD students covering topics in Neuroscience, Pharmacology, Physiology, Experimental Design, Molecular Biology and Biochemistry. Graduate students from the College of Medicine and the School of Aging Studies conduct dissertation research at the Institute and participate in a variety of academic enrichment programs such as the Institute seminar series, journal club and research symposia. The Discovery Research Laboratories have 16 continuing graduate students and recommended six individuals for the degree of Ph.D. in academic year 2009/2010.

Allied Health Professional Graduate Students

The USF graduate program in social work is a course of study designed to respond to an identified need in the region for skilled clinical social work practitioners. It is built upon a core of information basic to social work practice, followed by advanced scholarly study in preparation for clinical work with individuals, families, and small groups. An intense field practicum affords the student the opportunity to apply theory gained in the classroom to the problems of agency clients. The Alzheimer's Clinical Center acted as the preceptor for two master of social work students in academic year 2009/2010.

Post-doctoral Training

Clinical and laboratory research fellows choose to continue their specialized training in preparation for independence at the Institute because the environment is innovative, integrated and collaborative. Twelve post-doctoral fellows trained under Institute faculty during academic year 2009/2010.

Undergraduate Student Training

Although the College of Medicine has few courses instructing undergraduates, the Institute trains a number of undergraduate students in biomedical research skills. Students in the Honors program develop thesis projects in Institute laboratories under the guidance of institute investigators. Other students obtain independent study credit or simply volunteer to gain research experience. Still others work as part-time research technicians. In 2009/2010, 10 undergraduate students participated in research at the Alzheimer's Institute.

High School Students

Enterprising high school students also find their way into research laboratories to gain experience and work on science fair projects. In 2009/2010, five high school students worked in laboratories in the Institute. One of these, Jasmine Roberts, was awarded "*Best of Show*", top prize at the State of Florida Science Fair for her project on monocyte migration into the central nervous system.

Caregiving Education

The clinicians and caregiving experts at the Institute have created a portfolio of educational training programs and materials designed to meet the needs of professionals and caregivers involved in caring for individuals throughout the dementia lifespan.

Professional Health Caregivers

Continuing Education

We are approved by the following organizations as an accredited provider of continuing education:

- Florida Board of Nursing
- Florida Board of Clinical Social Work, Marriage and Family Therapy and Mental Health Counseling
- Florida Board of Nursing Home Administrators

We also provide credit and /or certificates of attendance for:

- Assisted Living Administrators
- Care Managers
- Professional Guardians
- Certified Nursing Assistants
- Lifestyle changes that many reduce the risk of Alzheimer's disease
- Dealing with caregiver stress and tips for successful caregiving

Geriatric Institute

The Institute conducts a 3-day continuing education seminar every June for long term care administrators, nurses, social workers, guardians, mental health counselors, care managers and others in the field of aging. Now in its 13th year, this conference is very well recognized in the aging network and the evaluations consistently rate the seminar excellent for content and speakers. The seminar focuses on Alzheimer's disease

and other dementias and also includes other practitioners from USF Health on topics pertaining to critical issues in geriatrics. The 3-day program averages 150 participants from the Tampa Bay area and 15- 20 businesses that pay to exhibit. This conference has been an excellent source of referrals and networking for future program collaboration.

Family Caregivers

Support Groups

Institute staff conduct two monthly support groups, one for caregivers of Mild Cognitively Impaired (MCI) individuals and one for caregivers of individuals with Alzheimer's disease and other dementias. The MCI support group averages seven caregivers at each monthly meeting and the Alzheimer's caregiver support group averages 15 per month. We have received many requests for a support group for the patients, as opposed to only caregivers, and in response to these requests, a third support group is being planned for individuals with very early stage Alzheimer's disease and early onset AD.

Caregiver Seminars

Seven caregiver seminars were conducted in Tampa, Lakeland, Largo, Dunedin and Zephyrhills reaching over 500 caregivers. The seminar, *"Alzheimer's Disease: What Caregivers Need To Know"* features Institute staff and includes the following content: Diagnosing and treating Alzheimer's disease; The benefits of participating in clinical trials; Communication and behavior management strategies with the Alzheimer's patient; Coping with caregiver stress and legal issues for caregivers. The feedback received from the seminars is extremely positive and serves as a good source for patient referral.

Community Education

Critical to achieving early diagnosis and effecting healthcare policy is elevating community awareness about Alzheimer's disease. Our team holds numerous community events throughout the year to engage the public in a conversation about Alzheimer's disease and other dementing disorders.

Special emphasis is placed on educating minority populations. The Institute has focused on developing cultural competency in its staff and in building partnerships with African-American community groups. Alzheimer's is 50-100% more prevalent among African-Americans than among whites according to the Alzheimer's Association. Combine that with the fact that African Americans with Alzheimer's are less likely than whites to receive a specialized diagnostic evaluation for dementia, and are generally diagnosed at more advanced stages and the critical need for outreach to this community is clear.

Faculty at the Institute conduct training and give presentations at a variety of educational and community venues. More than twenty community presentations were conducted during 2009/2010 reaching approximately 1,700 people.

Development

Development is identified as a major priority for the Institute and a dedicated development officer works collaboratively with current staff, former Suncoast Gerontology Alzheimer's Center Board members, and volunteers to gain their support for development efforts.

Development Statistics

	2009/2010
ENDOWMENT	
Principle value	\$ 4,198,266.82
Endowment return	11.81%
Market value	\$ 4,694,119.88
OPERATING FUNDS	
Beginning balance (July 2009)	\$ 938,480.19
Spendable gifts	\$ 108,957.26
Earnings	\$ 219,601.19
Expenditures and transfers	\$ 78,913.96
Current balance (June 2010)	\$ 1,188,124.68
PLEGGED FUNDS	
State match	\$ 1,042,904.57
Pledged gifts	\$ 1,065,379.00

*The endowment represents only those related net assets that are under the control of the USF Health Byrd Alzheimer's Institute. Endowment-related assets include donor-restricted endowments and companion State-match funds. Gift annuities, interests in trusts held by others, contributions pending donor designation, and pledges are not considered components of the endowment.

2009-2010 Development Program

Personal Visits with Donors and Prospects: Visits and communication between development officer and prospects and donors occurred resulting in many new gifts including a major gift pledge as well as support for efforts from former Suncoast Board members.

Advisory Council: Former Suncoast Board members met in December 2009 to discuss forming a new advisory council to work with the Institute to raise funds and awareness and cultivate volunteers. The makeup of the Advisory Council includes: Fundraising Committee, Volunteer Community, Public Relations and Advocacy Committee.

Annual Giving Program – An annual giving program is under development to encompass all areas of annual giving: direct mail appeal, events, personal visits, community speaking, memorial giving, email communication and telefund appeals. The goals of this program are to bring in new gifts, cultivate current gifts to larger gifts and move donors from annual giving to major giving.

Grand Lodge of Free & Accepted Masons of Florida: The Masons 2010 President, Dale Goehrig, has identified the Institute as his president's charity for 2010. Masonic lodges throughout the state have raised nearly \$53,000 for the Institute.

Fraternal Order of Eagles: The Fraternal Order of Eagles incoming State President for 2011, Tom Knox, has identified the Institute as his president's charity for 2011.

Fundraising and Stewardship Events

September 2, 2009 – An Evening with USF Health Alzheimer's Institute featuring Dr. Hunt Potter: The *Evening With* series is a benefit for donors in the Turning Health on Edge giving society of USF Health. Donors from all areas of USF Health were invited and approximately 70 attended.

September 5, 2009 – USF Bulls vs Wofford Football Game in the USF Health Suite: 25 friends, donors and faculty members attended the first Alzheimer's hosted football suite.

November 16, 2009 – Johnnie B. Byrd Sr. Portrait Unveiling – This event was attended by previous Johnnie B. Byrd, Sr. Alzheimer's Institute and Research Center Board members, Joint Affiliation Board members, Suncoast Gerontology and Alzheimer's Center Board members and honored guests of the USF Health Byrd Alzheimer's Institute .

December 12, 2009 – Victory Ball Non-Event – This event was a virtual ball where people were asked to make a contribution while being able to stay in for the evening. It was held in place of the annual Suncoast Victory Ball. The first year for the virtual ball netted approximately \$31,000.

March 26, 2010 – Alzheimer's Institute Advisory Council Committee Workshop & Reception – Approximately 20 former Suncoast Board members attended the workshop held jointly by Development and External Affairs. Subcommittees were formed and charged with developing plans in the respective areas for the upcoming year. As a result of the workshop and subsequent fundraising committee meeting, the fundraising committee has established a goal of \$500,000 in FY2010-11 for the Comprehensive Dementia Care initiative.

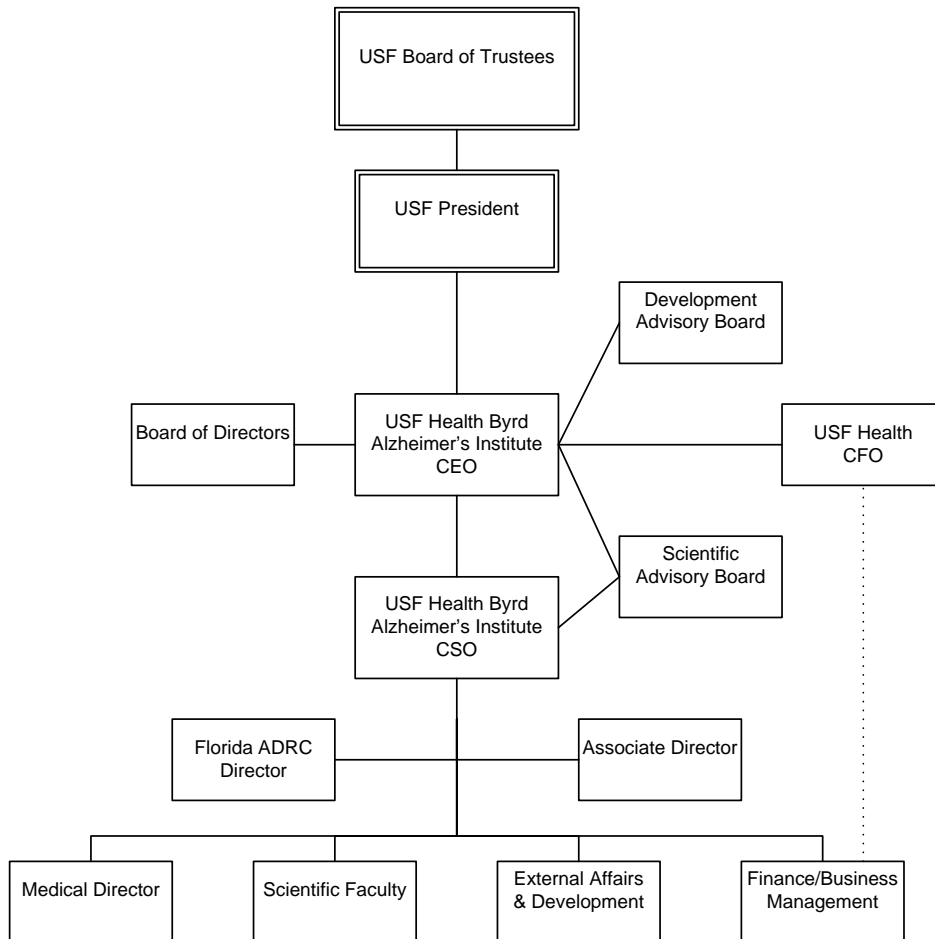
Monthly Public Tours – To provide information and awareness to potential donors, the development office hosts monthly tours of the Discovery Labs and Clinic. Originally scheduled to have 10-20 per tour, the tours are attracting an average audience of 25-30 per tour with wait listing.

June 4, 2010 - Cocktails for a Cause at Mise En Place Restaurant – The Institute was selected as a featured charitable organization for the Cocktails for a Cause program hosted by Mise En Place restaurant. A portion of the drink proceeds from the evening were donated to the Institute. Nearly 50 donors, prospects, Institute staff, Advisory Council, and USF Health staff were in attendance.

Speaking Engagements – Development spoke about the Institute, promoted public tours and other topics of interest at many community events throughout the year.

Business Operations

Institute Organization Chart



Individuals Appointed to the Institute Board of Directors

Sherrill M. Tomasino
Chairman of the Board

Eric Pfeiffer, M.D.
Vice Chairman of the Board

Mary M. Barnes
Johnnie B. Byrd, Jr., J.D.
John M. Hehn, Jr.
Karen Holbrook, Ph.D.
Frank L. Morsani

Individuals Appointed to Administrative Roles within the Institute

Steve K. Klasko, M.D., M.B.A.
Chief Executive Officer

Zoe Gustafson, C.P.A.
Chief Financial Officer

Dave Morgan Ph.D.
Chief Science Officer

Holly Lisle
Associate Director of Development

Jessica L. Banko, Ph.D.
Associate Director

Melanie Meyer
Director of External Affairs

Amanda G. Smith, M.D.
Medical Director

Individuals Appointed to the Institute Scientific Advisory Board

Robert Deschenes, Ph.D.
Fred Wright Professor of Cancer Biology
and Chair, Molecular Medicine
Associate Dean of Research
College of Medicine

Clifton Gooch, M.D.
Professor and Chair, Neurology
College of Medicine

David Diamond, Ph.D.
Professor, Psychology
College of Arts & Sciences

Bruce Lindsey, Ph.D.
Distinguished Professor and Chair, Molecular
Pharmacology & Physiology
College of Medicine

Francisco Fernandez, M.D.
Professor and Chair, Psychiatry and
Neurosciences
College of Medicine

William Marshall, Jr. M.D., M.S., M.B.A.
Professor and Vice Chair, Psychiatry &
Neurosciences
College of Medicine

Paul Sanberg, Ph.D., DSc.
Distinguished Professor and Director,
Center of Excellence for Aging & Brain
Repair
College of Medicine
Senior Associate Vice President for
Research & Innovation, USF

Huntington Potter, Ph.D.
Professor and Eric Pfeiffer Chair for Research on
Alzheimer's Disease, Molecular Medicine
College of medicine

Junius Gonzales, M.D., M.B.A.
Dean and Professor
*College of Behavioral &
Community Sciences*

Michael Shoenberg, Ph.D.
Clinical Director, Memory Disorders Clinic
Associate Professor, Psychiatry and Neurosciences
College of Medicine

State Funding

The Institute submitted a legislative budget issue with the concurrence of the University of South Florida requesting funding for its initiatives.

Request: \$3 million dollars in recurring General Revenue

The state of Florida has invested more than \$70 million dollars in cutting-edge basic, translational and clinical research, outstanding patient care, and effective community outreach and education programs. The Alzheimer's Institute was awarded from the National Institutes of Health the coveted Alzheimer's Disease Research Center (ADRC) grant, developed by a state-wide consortium of investigators. The 2010 budget request was carefully crafted to build on this solid foundation and move this important work forward.

- **State-of-the-Art Basic and Real World (Translational) Research**
Since affiliating with USF in July 2008 the Institute has a 200% increase in competitive funding for ongoing research projects. Over 20 clinical drug trials have become available to patients. Opportunities exist to add 90 more scientists and research staff members to complete the missions of the Institute. The Institute has the potential to become the world's best and largest research center dedicated to Alzheimer's disease.
- **Educational and Training Opportunities for Floridians**
Medical, graduate and undergraduate students receive formal education within the Alzheimer's Institute. Health care professionals receive training updates from Institute staff. Even high school students benefit: one Florida High School student worked on a project with Alzheimer's Institute investigators which won a second-place award at the National Science Fair.
- **Creation of New High-Wage Jobs for Floridians**
The average Florida biotech wage is over \$69,000, nearly double the state average. Because of the affiliation with USF, research at the Byrd Alzheimer's Institute helps train future biotech workers, procure federal research grants to recruit skilled workers to Florida and create new biotech jobs.

Although the request was not honored in its entirety, \$1,907,480 in recurring Plant Operations & Maintenance funding was approved to commence fiscal year 2010/2011.

In effort to raise further awareness for Alzheimer's disease within the State Legislature and inspire their financial commitment to the Institute and the people of Florida touched by this devastating disease, we invite State officials to the Institute to observe first-hand the activities in which we engage. The following is a list of State officials that have visited and toured the Institute during 2009/2010.

- Speaker-designate, Representative Dean Cannon
- Representative Daryl Rousson
- Representative Betty Reed
- Representative Michael Scionti

Faculty Achievement

Peer-Reviewed Publications by Institute Faculty

1. **Padmanabhan J.** Detection of histone H3 phosphorylation in cultured cells and tissue sections by immunostaining. *Methods Mol Biol.* 2009 Jan;523:311-22.
2. Lord A, Englund H, Söderberg L, Tucker S, Clausen F, Hillered L, **Gordon M, Morgan D,** Lannfelt L, Pettersson FE, Nilsson LN. (2009) Amyloid-beta protofibril levels correlate with spatial learning in Arctic Alzheimer's disease transgenic mice. *FEBS J.* 276 2009 Feb;(4):995-1006.
3. Mormino EC, Kluth JT, Madison CM, Rabinovici GD, Baker SL, Miller BL, Koeppe RA, Mathis CA, Weiner MW, Jagust WJ; Alzheimer's Disease Neuroimaging Initiative. (2009) Episodic memory loss is related to hippocampal-mediated beta-amyloid deposition in elderly subjects. *Brain.* 2009 May;132(Pt 5):1310-23.
4. Jack CR Jr, Lowe VJ, Weigand SD, Wiste HJ, Senjem ML, Knopman DS, Shiung MM, Gunter JL, Boeve BF, Kemp BJ, Weiner M, Petersen RC; Alzheimer's Disease Neuroimaging Initiative. Serial PIB and MRI in normal, mild cognitive impairment and Alzheimer's disease: implications for sequence of pathological events in Alzheimer's disease. *Brain.* 2009 May;132(Pt 5):1355-65.
5. Arendash GW, Mori T, **Cao C,** Mamcarz M, Runfeldt M, Dickson A, Rezai-Zadeh K, Tane J, Citron BA, Lin X, Echeverria V, **Potter H.** Caffeine reverses cognitive impairment and decreases brain amyloid-beta levels in aged Alzheimer's disease mice. *J Alzheimers Dis.* 2009 Jul;17(3):661-80.
6. Olcese JM, **Cao C,** Mori T, Mamcarz MB, Maxwell A, Runfeldt MJ, Wang L, Zhang C, Lin X, Zhang G, Arendash GW. Protection against cognitive deficits and markers of neurodegeneration by long-term oral administration of melatonin in a transgenic model of Alzheimer disease. *J Pineal Res.* 2009 Aug;47(1):82-96.
7. Jinwal UK, Miyata Y, Koren J 3rd, Jones JR, Trotter JH, Chang L, O'Leary J, Morgan D, Lee DC, Shults CL, Rousaki A, **Weeber EJ,** Zuiderweg ER, Gestwicki JE, **Dickey CA.** Chemical manipulation of hsp70 ATPase activity regulates tau stability. *J Neurosci.* 2009 Sep 30;29(39):12079-88.
8. Bennett SP, Boyd TD, Norden M, **Padmanabhan J,** Neame P, Wefes I, **Potter H.** A novel technique for simultaneous bilateral brain infusions in a mouse model of neurodegenerative disease. *J Neurosci Methods.* 2009 Nov 15;184(2):320-6.
9. **Cao C,** Cirrito JR, Lin X, Wang L, Verges DK, Dickson A, Mamcarz M, Zhang C, Mori T, Arendash GW, Holtzman DM, **Potter H.** Caffeine suppresses amyloid-beta levels in plasma and brain of Alzheimer's disease transgenic mice. *J Alzheimers Dis.* 2009 Jul;17(3):681-97. Erratum in: *J Alzheimers Dis.* 2009 Nov;18(3):727.
10. Zhu Y, Obregon D, Hou H, Giunta B, Erhart J, Fernandez F, Mori T, Nikolic W, Zhao Y, **Morgan D,** Town T, Tan J. (2009) Mutant presenilin-1 deregulated peripheral immunity exacerbates alzheimer-like pathology. *J Cell Mol Med.* 2009 Nov [Epub ahead of print]

11. Dumanis SB, Tesoriero JA, Babus LW, Nguyen MT, Trotter JH, Ladu MJ, **Weeber EJ**, Turner RS, Xu B, Rebeck GW, Hoe HS. ApoE4 decreases spine density and dendritic complexity in cortical neurons in vivo. *J Neurosci*. 2009 Dec 2;29(48):15317-22.
12. Holland, D. et al., (2009) Subregion neuroanatomical change as a biomarker for Alzheimer's disease. *Proc. Natl. Acad. Sci USA* 2009 Dec;106:20954-20959.
13. Jinwal UK, Koren J, O'Leary JC, Jones JR, Abisambra JF, **Dickey CA**. Hsp70 ATPase Modulators as Therapeutics for Alzheimer's and other Neurodegenerative Diseases. *Mol Cell Pharmacol*. 2010 Jan 1;2(2):43-46.
14. Boyd TD, Bennett SP, Mori T, Governatori N, Runfeldt M, Norden M, **Padmanabhan J**, Neame P, Wefes I, Sanchez-Ramos J, Arendash GW, **Potter H**. GM-CSF upregulated in rheumatoid arthritis reverses cognitive impairment and amyloidosis in Alzheimer mice. *J Alzheimers Dis*. 2010 Jan 1;21(2):507-18.
15. Abisambra JF, Fiorelli T, **Padmanabhan J**, Neame P, Wefes I, **Potter H**. LDLR expression and localization are altered in mouse and human cell culture models of Alzheimer's disease. *PLoS One*. 2010 Jan 1;5(1):e8556.
16. Jinwal UK, Koren J 3rd, Borysov SI, Schmid AB, Abisambra JF, Blair LJ, Johnson AG, Jones JR, Shults CL, O'Leary JC 3rd, Jin Y, Buchner J, Cox MB, **Dickey CA**. The Hsp90 cochaperone, FKBP51, increases Tau stability and polymerizes microtubules. *J Neurosci*. 2010 Jan 13;30(2):591-9.
17. Arendash GW, Sanchez-Ramos J, Mori T, Mamcarz M, Lin X, Runfeldt M, Wang L, Zhang G, Sava V, Tan J, **Cao C**. Electromagnetic field treatment protects against and reverses cognitive impairment in Alzheimer's disease mice. *J Alzheimers Dis*. 2010 Jan;19(1):191-210.
18. Koren J 3rd, Jinwal UK, Jin Y, O'Leary J, Jones JR, Johnson AG, Blair LJ, Abisambra JF, Chang L, Miyata Y, Cheng AM, Guo J, Cheng JQ, Gestwicki JE, **Dickey CA**. Facilitating Akt clearance via manipulation of Hsp70 activity and levels. *J Biol Chem*. 2010 Jan 22;285(4):2498-505.
19. Azorsa DO, Robeson RLH, Frost D, Meechoovet B, Brautigman GR, **Dickey C**, Beaudry C, Basu GD, Holz DR, Hernandez JA, Bisanz KM, Gwinn L, Grover A, Rogers J, Reiman EM, Hutton M, Stephan DA, Mousses S, Dunckley T. "High-content siRNA screening of the kinome identifies kinases involved in Alzheimer's disease-related tau hyperphosphorylation". *BMC Genomics* 2010 Jan;11:25.
20. Arendash GW, **Cao C**. Caffeine and coffee as therapeutics against Alzheimer's disease. *J Alzheimers Dis*. 2010 Jan;20 Suppl 1:S117-26. Review.
21. Arendash GW, Sanchez-Ramos J, Mori T, Mamcarz M, Lin X, Runfeldt M, Wang L, Zhang G, Sava V, Tan J, **Cao C**. Electromagnetic Field Treatment Protects Against and Reverses Cognitive Impairment in Alzheimer's Disease Mice. *J Alzheimers Dis*. 2010 Jan; 2009 Sep 11. [Epub ahead of print]
22. Granic A, **Padmanabhan J**, Norden M, **Potter H**. Alzheimer Abeta peptide induces chromosome mis-segregation and aneuploidy, including trisomy 21: requirement for tau and APP. *Mol Biol Cell*. 2010 Feb 15;21(4):511-20.

23. Li QY, **Gordon MN**, Chackerian B, Alamed J, Ugen KE, **Morgan D**. Virus-like peptide vaccines against Abeta N-terminal or C-terminal domains reduce amyloid deposition in APP transgenic mice without addition of adjuvant. *J Neuroimmune Pharmacol*. 2010 Mar;5(1):133-42.
24. Duara R, Loewenstein DA, Greig-Custo MT, **Raj A**, Barker W, Potter E, Schofield E, Small B, Schinka J, Wu Y, **Potter H**. Diagnosis and staging of mild cognitive impairment, using a modification of the clinical dementia rating scale: the mCDR. *Int J Geriatr Psychiatry*. 2010 Mar;25(3):282-9.
25. Schinka JA, **Raj A**, Loewenstein DA, Small BJ, Duara R, **Potter H**. Cross-validation of the Florida Cognitive Activities Scale (FCAS) in an Alzheimer's disease research center sample. *J Geriatr Psychiatry Neurol*. 2010 Mar;23(1):9-14.
26. Schinka JA, **Raj A**, Loewenstein DA, Small BJ, Duara R, **Potter H**. The cognitive change checklist (3CL): cross-validation of a measure of change in everyday cognition. *Int J Geriatr Psychiatry*. 2010 Mar;25(3):266-74.
27. Duara R, Loewenstein DA, Greig M, Acevedo A, Potter E, Appel J, **Raj A**, Schinka J, Schofield E, Barker W, Wu Y, **Potter H**. Reliability and validity of an algorithm for the diagnosis of normal cognition, mild cognitive impairment, and dementia: implications for multicenter research studies. *Am J Geriatr Psychiatry*. 2010 Apr;18(4):363-70.
28. Heal MR, **Dickey CA**, Heal KV, Stidson RT, Matucha M, Cape JN. The production and degradation of trichloroacetic acid in soil: results from in situ soil column experiments. *Chemosphere*. 2010 Apr;79(4):401-7.
29. Jinwal UK, O'Leary JC 3rd, Borysov SI, Jones JR, Li Q, Koren J 3rd, Abisambra JF, Vestal GD, Lawson LY, Johnson AG, Blair LJ, Jin Y, Miyata Y, Gestwicki JE, **Dickey CA**. Hsc70 rapidly engages tau after microtubule destabilization. *J Biol Chem*. 2010 May 28;285(22):16798-805.
30. Ajmo JM, Bailey LA, Howell MD, Cortez LK, Pennypacker KR, Mehta HN, **Morgan D**, **Gordon MN**, Gottschall PE. Abnormal post-translational and extracellular processing of brevicin in plaque-bearing mice over-expressing APPsw. *J Neurochem*. 2010 May;113(3):784-95.
31. Qiu S, Champagne DL, Peters M, Catania EH, **Weeber EJ**, Levitt P, Pimenta AF. Loss of limbic system-associated membrane protein leads to reduced hippocampal mineralocorticoid receptor expression, impaired synaptic plasticity, and spatial memory deficit. *Biol Psychiatry*. 2010 Jul 15;68(2):197-204.
32. Gustin RM, Bichell TJ, Bubser M, Daily J, Filonova I, Mrelashvili D, Deutch AY, Colbran RJ, **Weeber EJ**, Haas KF. Tissue-specific variation of Ube3a protein expression in rodents and in a mouse model of Angelman syndrome. *Neurobiol Dis*. 2010 Sep;39(3):283-91.

Conferences Attended by Institute Faculty

1. International Conference on Alzheimer's Disease, Jul., 2009; Vienna, Austria
2. Society for Neuroscience Annual Meeting, Oct., 2009; Chicago, IL
3. International Research Conference for Progressive Supranuclear Palsy, Oct., 2009; Chicago, IL
4. Midwest Stress Response Meeting, Jan., 2010; Evanston, IL
5. Winter Brain Conference, Jan., 2010; Breckenridge, CO
6. Mild Cognitive Impairment Symposium, Apr., 2010; Miami, FL
7. American Society for Neural Therapy and Repair, May, 2010; Clearwater, FL
8. Cold Spring Harbor Laboratories, Molecular Chaperones & the Heat Shock Response, May, 2010; NY
9. American Federation for Aging Research Grantee Conference, Jun., 2010; Santa Barbara, CA

Invited Presentations Delivered by Institute Faculty

Chuanhai Cao, Ph.D.

New vaccine approaches for AD Dept. of Biology at USF

How to develop a good vaccine against neurodegenerative disease Tianjin China 2010

Novel vaccine approaches against Alzheimer's disease Beijing China 2010

Chad Dickey, Ph.D.

Functionally intact Hsp27 links tau aggregate disassembly to neuronal activity. American Federation for Aging Research Santa Barbara, California

Folding and aggregation of the intrinsically disordered tau protein are selectively regulated by chaperones. Cold Springs Harbor Laboratories, *Molecular Chaperones & the Heat Shock Response* New York

Functionally intact Hsp27 links tau aggregate disassembly to neuronal activity. ASNTR (2010)

The twists and turns of the intrinsically disordered tau protein. University of Kansas

Hsp90 cochaperone FKBP51 regulates tau and polymerizes microtubules. Midwest Stress Response Meeting Evanston

USF Molecular Medicine Works In Progress (2009)

USF College of Arts and Sciences CMMB Seminar (2009)

The Hsp90 cochaperone, FKBP51, increases tau stability and polymerizes microtubules. International Research Conference for PSP, Chicago

The unstructured protein tau as a chaperone client; a common vector for diseases of aging? Cedars-Sinai Hospital at UCLA

Tau and the chaperone interface. University of Florida

The Hsp90 cochaperone, FKBP51, increases tau stability and polymerizes microtubules. AFAR Grantee Conference, Santa Barbara, California

Chemical manipulation of Hsp70 activity regulates tau processing. ICAD, Vienna, Austria.

Emerging therapeutic strategies for Alzheimer's disease and other neurological disorders. AFAR Florida Affiliate Program, Ft. Lauderdale, FL

Marcia Gordon, Ph.D.

The role of endogenous and blood-derived monocytic cells in Alzheimer's disease, Neuroimmunology and Brain Inflammation Satellite Symposium of the Kuopio Alzheimer Symposium, Kuopio, Finland, June 13-16, 2009

Dave Morgan, Ph.D.

Molecular Approaches to Lowering Brain Amyloid. Georgetown University, Washington DC June 24 2009

New Developments in Alzheimer's Disease. Exchange Club, Tampa FL October 5 2009

Research Developments at the Byrd Alzheimer Institute, Rotary Club, Plant City FL November 30 2009

Molecular Therapeutic for Alzheimer's Disease . Third International Brain Conference, Orlando FL December 4 2009

Molecular Therapeutics for Alzheimer's Disease. Texas A&M University, College Station TX December 10 2009

Aging and Alzheimer's Disease. American Federation for Aging research Fundraiser, Miami FL February 11 2010

Immunotherapeutic Approaches to Reducing Brain Amyloid. Alzheimer's Research Trust Annual Meeting, Southampton England March 19 2010

Immunotherapeutic Approaches to Lowering Abeta. Lundbeck Pharmaceuticals, Copenhagen Denmark April 7 2010

Biology of Alzheimer's Disease. Lifelong Learning seminar, Tampa FL May 13 2010

Measurement of Tau Pathology in Transgenic Mice, Alzheimer's Drug Development Foundation, NY June 21 2010

Advances in Alzheimer's Research and Prevention, Tampa FL June 30 2010

Jaya Padmanabhan, Ph.D.

Molecular Mechanisms of Neurodegeneration in Alzheimer's Disease: Cell Cycle and Inflammation-Dependent Phosphorylation of APP and Tau. University of Alabama Birmingham August 2009

Mitosis specific modifications in APP and tau: Implications in Alzheimer's disease. USF-MINDS November 2009

Mitotic arrest induces APP and tau phosphorylation: Implications in AD. Molecular Medicine December 2009

Signaling pathways in Alzheimer's disease: Cell cycle and inflammation dependent mechanisms. Molecular Medicine retreat December 2009

Huntington Potter, Ph.D.

University of Alabama, Birmingham AL October 1 2009

Geriatric Care Managers Conference, St. Petersburg FL January 15 2010

Kansas City VA Medical Center, KC, MO. February 23 2010

University of Kansas Medical Center, KC, KS February 23 2010

Mayo Clinic, Jacksonville FL May 7 2010

Society of Clinical Scientists Annual Meeting, Tampa FL May 14 2010

Amanda G. Smith, M.D.

Advances in the Diagnosis and Treatment of Alzheimer's Disease. What Caregivers Need to Know sponsored by the USF Health Byrd Alzheimer's Institute, Tampa FL June 29 2010

Advances in the Diagnosis and Treatment of Alzheimer's Disease. 12th Annual University of South Florida Geriatric Institute: Excellence in Geriatric Care sponsored by USF Byrd Alzheimer's Institute, Tampa FL June 9 2010

Understanding Alzheimer's Disease, Progress in Treatment, and Clinical Drug Studies. What Caregivers Need to Know sponsored by Aston Gardens and the USF Byrd Alzheimer's Institute, Tampa FL May 21 2010

Current Treatments and New Treatments on the Horizon. Arden Courts Dementia Education Series, Tampa FL May 13 2010

Healthy Lifestyle and Alzheimer's Disease. Osher Lifelong Learning Institute of the University of South Florida, Tampa FL May 13 2010

Ask the Doctor. USF Health Byrd Alzheimer's Institute Support Group, Tampa FL May 6 2010

Understanding Alzheimer's Disease, Progress in Treatment, and Clinical Drug Studies. What Caregivers Need to Know sponsored by Gulfside Regional Hospice and the USF Health Byrd Alzheimer's Institute, Zephyrhills FL March 31 2010

Alzheimer's Disease Update. National Association of Retired Federal Employees, Sun City Center chapter meeting, Sun City Center FL March 24 2010

Alzheimer's Disease Update. Alzheimer's 6th Annual Educational Seminar sponsored by Samaritan's Alzheimer's Auxiliary, Sun City Center FL February 11 2010

Other Types of Dementia that can Affect Capacity. Hillsborough County Bar Association Educational Seminar, Tampa FL December 16 2009

Understanding Alzheimer's Disease, Progress in Treatment, and Clinical Drug Studies. What Caregivers Need to Know sponsored by Palms of Largo and the USF Health Byrd Alzheimer's Institute, Largo FL December 14 2009

Healthy Lifestyle and Alzheimer's Disease. Healthy Aging seminar sponsored by the Mental Health Coalition, Sun City Center FL October 13 2009

Alzheimer's Disease Update. National Association of Retired Federal Employees, Lakeland Center chapter meeting, Lakeland FL October 1 2009

Advances in the Diagnosis and Treatment of Alzheimer's Disease. What Caregivers Need to Know sponsored by the USF Suncoast Alzheimer's Center and the Byrd Alzheimer's Institute, Tampa FL September 23 2009

Non-Alzheimer's Dementia. Training Event for Florida Association of Homes and Services for the Aging staff, Tampa FL September 22 2009

Advances in the Diagnosis and Treatment of Alzheimer's Disease. What Caregivers Need to Know sponsored by the USF Suncoast Alzheimer's Center and the Hale Activity Center, Dunedin FL August 26 2009

Keeping Your Brain Healthy. Osher Lifelong Learning Institute of the University of South Florida, Tampa FL July 9 2009

Edwin Weeber, Ph.D.

Identifying memory molecules: a story of receptors, the synapse and cognitive ability. Princeton University, Princeton, NJ.

The role of Reelin in mammalian cognitive ability. Winter Brain Conference, Breckenridge, CO.

Insights from the UBE3A maternal deficient mouse model. Baylor College of Medicine, Houston, TX.

ApoER2 activation in mammalian learning and memory. Washington University, St Louis, MO.

The role of apoE receptors in cognitive ability and as a potential therapeutic target. Byrd Institute Translational Seminar.

Genetic and pharmacological strategies for paternal Ube3a expression. Canadian Angelman Syndrome Society (CASS) Montreal, Canada

New role for ancient lipoprotein receptors in learning, memory and therapeutics. Mayo Clinic Jacksonville, Jacksonville, FL.