The Potamkin Prize, one of the nation's highest honors in neurosciences, will be awarded this year to Leon Thal, M.D., University of California, San Diego School of Medicine, and Roger Nitsch, M.D., Neuroscience Center, Switzerland. The two will share the $100,000 awarded at the annual meeting of the American Academy of Neurology April 27, 2004 in San Francisco.

"The Potamkin Prize has come to symbolize internationally the premier neuroscience prize for outstanding excellence in clinical or basic research on Alzheimer's disease and the related dementias," said Roger N. Rosenberg, M.D., former president of the American Academy of Neurology and chair of the Potamkin Prize Committee from 1988 to 1999. He added that it is considered by many to be the Nobel Prize in the field of Alzheimer's research.

Thal was selected in recognition of his "outstanding achievements in research of Alzheimer's and related neurodegenerative diseases," according to the American Academy of Neurology.

Chair of the UCSD Department of Neurosciences, Thal directs the Alzheimer's Disease Research Center at UCSD and leads a national consortium of more than 80 centers called the Alzheimer’s Disease Cooperative Study, funded with a grant from the National Institute on Aging to test promising drugs for Alzheimer's disease.

One of the world’s leading investigators in the development of new therapies for Alzheimer’s, Thal is one of only a handful of scientists whose efforts have significantly contributed to the understanding of the cause, prevention and treatment of Alzheimer’s disease.

(Continued on Page 2)
"Thal is one of only a handful of scientists whose efforts have significantly contributed to the understanding of the cause, prevention and treatment of Alzheimer’s disease."

With his entire career devoted to the study of aging and dementia, he began aggressively pursuing the cholinergic hypothesis of Alzheimer’s disease in the 1970s. After investigations in the laboratory using rat and other models, he translated these studies to humans and subsequently performed clinical trials using choline, lecithin and other precursors of acetylcholine. In 1981, he published his finding that choline chloride failed to improve cognition in Alzheimer’s disease. This lack of initial success challenged him to explore alternative and novel ways to treat the cholinergic deficit of Alzheimer’s disease using other compounds and routes of administration. The importance of this work is evident by its 1983 publication in the New England Journal of Medicine, where Thal provided some of the first evidence that memory could be enhanced in Alzheimer’s patients with cholinesterase inhibition.

In the late 1980s, after nearly two decades of intense research activity, his efforts were rewarded with the approval of the first drug (a cholinesterase inhibitor) for the treatment of Alzheimer’s disease.

In collaboration with Dr. Ken Davis, he organized a landmark clinical trial for evaluating tacrine as a potential treatment. This double-blind, placebo controlled multi-center study was described in a second paper published in the New England Journal of Medicine and paved the way for approval of the compound in the United States. This work established his leadership in the testing and development of drugs for Alzheimer’s disease.

In his capacity as the principal investigator of the Alzheimer’s Disease Cooperative Study (ADCS), Thal has established major, large scale clinical drug trials, as well as validation tests for methods to evaluate the course of Alzheimer’s disease.

On the basis of a single study published in the New England Journal of Medicine by members of the ADCS, vitamin E has now entered clinical practice for the care of patients with Alzheimer’s disease. In another ADCS investigation, estrogen replacement therapy was shown to not be useful for the treatment of mild to moderate Alzheimer’s disease in women, despite its previous clinical popularity. The ADCS has also spearheaded the development of concepts such as mild cognitive impairment and has fostered the development of new study designs and instruments useful for clinical trials.

In addition to his extraordinary efforts in clinical research, Thal has done work involving the enhancement of neuronal function and regeneration. He has shown that grafting nerve growth factor cells improved memory in the rat and that grafting acetylcholine producing cells has a similar effect.

Thal also serves on the editorial board of seven major journals including Neurobiology of Aging and Journal of Molecular Neuroscience. He is a frequent reviewer and consultant for the National Institutes of Health (NIH), the National Science Foundation and the Veterans Administration. He serves as a permanent advisor on the FDA anti-dementia assessment team and currently serves on the National Advisory Council on Aging of the National Institute on Aging.

Thal was recently invited to meet with the Chinese government in Beijing along with four other experts in Alzheimer’s disease to help the Chinese government develop research and treatment programs for this new century. He has trained dozens of scientists who have gone on to be active researchers in Alzheimer’s disease and dementia.
Recent estimates indicate that the number of people with Alzheimer’s disease (AD) will skyrocket in the next few decades - to as many as 13 million by 2050. Scientists are eager to speed research efforts to understand the causes and risk factors for AD to develop ways to treat or even prevent the disease.

This is a nationwide effort funded by the National Institute on Aging (NIA) and is supported by the Alzheimer’s Association that includes 18 NIA-funded Alzheimer’s Disease Centers working to identify 1,000 families with at least two siblings who have been diagnosed with late-onset AD (diagnosed at 60 years or older). Qualified researchers across the country have joined efforts to identifying families with multiple members affected with the condition in order to illuminate the underlying disease process of AD, open up novel areas of research, and identify new targets for drug therapy.

Currently, there are four known genes associated with AD. Three of the genes are associated with the early-onset form of the disease. This form of AD is inherited in an autosomal dominant pattern, meaning that the disease develops in family members in multiple generations. Mutations (changes) in these genes, known as presenilin 1 (PS1), presenilin 2 (PS2) and amyloid precursor protein (APP) are rare and are not associated with the much more common late-onset form of AD.

The fourth gene associated with Alzheimer's Disease is the apolipoprotein E gene (APOE), which is referred to as a risk-factor or susceptibility gene. The e4 variant is associated with an increased risk of developing AD.

AD genes as well as the genes for other human diseases have been located by studying families with multiple cases of the disease in question. It is very difficult to locate one risk factor gene out of the 30,000 or so genes that are contained within the human cell. Researchers believe that there are other risk factor genes for AD and they have identified regions in the human genome where these genes lie, but they have not been able to pinpoint exactly where and what these genes are. The further collection and analysis of families with multiple affected individuals will help identify these risk factor genes more clearly.

**New Genes Sought to Explain Late Onset Alzheimer's Disease**

TO BE ELIGIBLE TO PARTICIPATE IN THE STUDY, FAMILIES MUST HAVE AT LEAST 3 LIVING MEMBERS WHO CAN DONATE BLOOD, INCLUDING:

- Two siblings (brothers or sisters) who developed AD after age 60-
- AND
- Another family member over age 50 who may have memory loss-
- OR
- A family member over age 60 who does not have any memory loss

If a family member is no longer living, but there is frozen autopsy tissue available, then the family may still be eligible.

Participation involves: a neurological examination with cognitive testing or collection of medical records and the donation of a blood sample, which will be made into a cell line (a family of cells grown in the laboratory) that will enable the participant's DNA to be available to qualified scientists over many years. The cell lines and DNA will be stored at a centralized repository at Indiana University - the National Cell Repository for AD (NCRAD). Medical, demographic, and family history information will also be collected. There is no cost for those who join the study.

An important aspect of the study is the confidential treatment of the genetic information collected from participants - all identifying information such as name and date of birth are removed from all materials.

To Participate, Contact: NCRAD toll-free at 1-800-526-2839 - email: alzstudy@iupui.edu - Study Website: www.ncrad.org
ADRC - (858) 622-5800 and ask for the Genetics Study
VITAL VITamins to slow ALzheimer's Disease
STUDY DIRECTOR
Adam Fleisher, M.D.
TIME INVOLVED
Study participation will be about 8 weeks
DESCRIPTION
A new study is seeking 400 individuals to participate in a clinical trial to see whether reducing homocysteine levels in patients with AD will slow the rate of cognitive decline.
People with AD have elevated levels of this protein in their blood and researchers want to find out if high-dose supplements of folate and vitamins B6 and B12 can lower homocysteine levels and slow down the devastating effects of AD.
To participate, individuals must meet ALL of the following conditions and meet other criteria:
- Dementia (probable AD, dementia with Lewy bodies, or Parkinson's disease)
- Psychosis or agitation
- Parkinsonism or extrapyramidal motor features (2 or more: resting tremor, bradykinesia, limb rigidity, shuffling, short-stepped gait)
Participants must have a study partner - a friend or relative who can accompany the volunteer to all clinical visits and answer questions about him/her.
CONTACT
Mary Margaret Pay, N.P., and Judith Rivera, F.N.P., and ask for the “VITAL Study”

R-Flurbiprofen, a Non-Steroidal Anti-Inflammatory Drug (NSAID) and Its Effect on Beta Amyloid Protein
STUDY DIRECTORS
Douglas Galasko, M.D.
Edward Koo, M.D.
TIME INVOLVED
5 visits over a 2 month period
DESCRIPTION
A new study is now recruiting subjects between the ages of 55-80, in general good health, not taking NSAIDs, with no significant memory problems, and willing to undergo 2 spinal taps. The spinal taps are done to measure the amount of Beta amyloid protein in the spinal fluid prior to and at the end of taking study medication. We hope to see a reduction in the amount of Beta amyloid proteins, especially the AB42 protein.
The study will involve taking study medication for 3 weeks and 2 spinal taps. One spinal tap will be performed the day you receive your study medication and the second spinal tap will be performed at the end of 3 weeks. You will be asked to return one month after completion of study for a follow-up visit.
COMPENSATION
You will be compensated $400.00 for your participation.
CONTACT
Helen Vanderswag, B.A., and ask for the “Flurbi Study”

Cerebral Spinal Fluid (CSF) Studies
STUDY DIRECTOR
Douglas Galasko, M.D.
DESCRIPTION
We are currently looking for participants for a group of CSF studies, some of which involve using CSF (Cerebral Spinal Fluid) to monitor a response to an experimental procedure and others involve looking for novel diagnostic biomarkers for AD.
Both normal controls and early to moderate AD participants are needed. These studies will involve lumbar puncture for the withdrawal of cerebrospinal fluid.
COMPENSATION
You will be compensated $200.00 for your participation.
CONTACT
Helen Vanderswag, B.A., and ask for the “CSF Study”

Huperzine A
STUDY DIRECTOR
Jody Corey-Bloom, M.D., Ph.D.
TIME INVOLVED
Study participation will be 24 weeks
DESCRIPTION
This study is to determine whether or not Huperzine A is beneficial in the treatment of patients with mild to moderate Alzheimer's disease.
Huperzine A is a natural cholinesterase inhibitor, derived from the Chinese herb huperzia serrata and is used in China to treat AD. Individuals 65 years of age or older who are not currently taking cholinesterase inhibitors and have mild to moderate Alzheimer's disease (MMSE 10-24) are eligible for screening.
Treatment with memantine (Namenda) and vitamin E is allowed. Two-thirds of participants will be randomly assigned to receive huperzine A throughout the study; one-third will receive placebo for the first 16 weeks, followed by huperzine A for 8 weeks. An open-label extension study for at least 6 months is anticipated.
There will be no payment for participation in this study; however, all tests, examinations, and medical care required as part of the study will be provided.
CONTACT
Karen Wetzel, PA-C, M.P.A.S., and ask for the “Huperzine A Study”

TAP/DAP: Treatment of Agitation/Psychosis in Dementia and Parkinsonism
STUDY DIRECTORS
John Wu, M.D.
Adam Fleisher, M.D.
TIME INVOLVED
Study participation will be about 8 weeks
DESCRIPTION
A new study is seeking 400 individuals to participate in a clinical trial to see whether reducing homocysteine levels in patients with AD will slow the rate of cognitive decline.
People with AD have elevated levels of this protein in their blood and researchers want to find out if high-dose supplements of folate and vitamins B6 and B12 can lower homocysteine levels and slow down the devastating effects of AD.
The VITAL study is seeking volunteers who:
- Have mild or moderate AD
- Are age 55 or older
- Are fluent in English or Spanish
- Are on stable medications for at least 4 weeks prior to screening
- Have a study partner - a friend or relative who can accompany the volunteer to all clinical visits and answer questions about him/her.
CONTACT
Deborah Fontaine, G.N.P., and ask for the “TAP/DAP Study”
On February 11, 2004, ADRC faculty and staff presented information on current studies and research updates on Alzheimer’s disease to our Hispanic families at the 6th annual Appreciation Luncheon. The event was held once again at the Chula Vista Yacht Club. Presenters included Dr. Douglas Galasko who discussed clinical trials currently underway such as the statin, homocysteine, and fluribiprofen trials and some starting in the near future. All these aim to slow the progression of AD. Dr. David Salmon discussed the value of neuropsychological testing and Dr. Tamar Gollan presented results of her study on monolingual and bilingual Spanish speakers which examined differences in language fluency. Krisvell Sanchez of the UCSD caregiver study introduced their program as well.

The Hispanic team is preparing for our 2004 Hispanic Caregiver Conference on August 11th. Community partners co-host this event seeking to bring research information and community resources to families and those caring for persons affected with Alzheimer’s disease. The day is filled with outstanding people, education, food, representatives from community agencies and door prizes.

Mark your calendars. Let’s make this the largest event of this kind in southern California.

Special thanks to those of you who support research and make our program such a success.

On February 11, 2004, la facultad y personal del ADRC presentó información acerca de estudios de investigación y acontecimientos recientes en dichos estudios en el área de Alzheimer’s a las familias hispanas en el 6to "Almuerzo de apreciación" anual. El evento se llevó a cabo una vez más en el Chula Vista Yacht Club. Entre los presentadores, el Dr. Douglas Galasko discurrió los estudios clínicos llevados a cabo en el presente tales como los de estatinas, homocisteína y flurbiprofén, y algunos que comenzarán en un futuro cercano. Todos estos aspiran decelerar el progreso de la EA. El Dr. David Salmon discurrió el valor de las pruebas neuropsicométricas y la Dra. Tamar Gollan compartió los resultados de su estudio acerca de las diferencias en fluides verbal entre hispanoparlantes monolingües y bilingües. Krisvell Sanchez (representante) del estudio de UCSD acerca de las personas que prestan cuidado presentó también su programa.

El equipo hispano está preparándose para nuestra "Conferencia para quienes prestan cuidado 2004" el 11 de agosto. Nuestros compañeros comunitarios co-organizan este evento con el intento de proveer información acerca de investigaciones y recursos comunitarios a las familias y aquellos quienes cuidan de personas afectadas con la enfermedad de Alzheimer. Es un día lleno de personas sobresalientes, educación, comida, representantes de agencias comunitarias y regalos. Marquen sus calendarios. Let’s make this the largest event of this kind in southern California.

Agradecimiento especial a aquellos de ustedes que apoyan la investigación y hacen posible nuestro programa.
Note from the editor: Upon expediting publication of our last issue, mention of specific names of Hispanic Conference sponsors was omitted. Please accept our sincere apologies and most grateful thank you for your generous contributions.
Sustaining a vision requires action today.

Caring friends whose parting gifts to UCSD’s Alzheimer’s Disease Research Center (ADRC) through bequests, life insurance policies, beneficiary designations on retirement plans, charitable gift annuities, charitable remainder trusts, and other legacy gifts reflect their lifetime values and a commitment to perpetuate what's important - learning more about the cause of Alzheimer’s disease, distinguishing Alzheimer’s from similar dementing illnesses, and developing novel and effective therapies for the disease. When you support the ADRC through your estate plans, you help us to accomplish these goals and, in turn, help generations of families.

The ADRC can now offer special recognition to those whose actions today ensure our vision for future generations - the **UCSD Legacy Society**. With benefits such as "thank you" events and insider briefings, the UCSD Legacy Society will welcome as Founding Members all who notify us of their plans by June 1.

For more information on benefiting Alzheimer’s disease research through your estate plans, or if you have already taken steps to do so, please call Dana Weintraub, UCSD Director of Development, at (858) 822-4197, or email her at dweintraub@ucsd.edu. She will also gladly speak with you about the UCSD Legacy Society and its benefits to you.

*We look forward to hearing from you!*