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The UTMB Claude D. Pepper Older Americans Independence Center

“What have I done today to lighten the burden of those who suffer?” Claude D. Pepper _____



The Claude Pepper Older Americans Independence Center honors the memory of Claude Denson Pepper (1900–1989, pictured left), Florida congressman and career-long advocate for the rights of older adults. He rejected the idea that physical and mental decline were part of normal aging.

In 1991, Congress provided funding sources to the National Institute on Aging to establish special aging research and education centers across the country. These Centers were named for Congressman Pepper since their primary goal reflects his interest in helping older Americans maintain their independence for as long as possible. Pepper Center research supports this goal by working on ways to delay or even prevent chronic diseases that can disable older people and cause them to become dependent on others. As an educational resource, the Pepper Centers also work to educate and encourage older adults, sharing free health promotion information about ways to improve health and better the lives of older adults.

UTMB Claude D. Pepper Older Americans Independence Center (OAIC)—1999–2004

In 1999, the University of Texas Medical Branch, Sealy Center on Aging was awarded a \$6.5 million grant from the National Institute on Aging (NIA) to establish the *UTMB Claude D. Pepper Older Americans Independence Center (OAIC)*, the only Pepper Center serving the Southwest. Since declining function, particularly mobility, is a major contributor to loss of independence, UTMB researchers studied how muscle building and function change with age. Between 1999 and 2004, under the direction of Principle Investigator, James S. Goodwin, M.D., director of UTMB Division of Geriatrics/Sealy Center on Aging, more than 60 investigators worked on Pepper Center intervention development studies and pilot projects all across the UTMB campus; conducting studies on the effects of nutritional, hormonal and exercise interventions, alone or in combination, on muscle function in older subjects. The other major focus of the UTMB OAIC has been on factors affecting physical functioning in older Mexican Americans. These population-based epidemiologic studies were started in the mid 1990's, but with the support of the UTMB OAIC, they have begun to employ more clinical measurements such as performance-based assessment, gait speed, grip strength, and muscle strength at the elbow, knee and hip.



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UTMB CLAUDE D. PEPPER OLDER AMERICANS INDEPENDENCE CENTER (OAIC)—2004 (RENEWAL)

The UTMB Claude D. Pepper Older Americans Independence Center (OAIC) grant was approved for renewed funding by NIA for an additional five years, scheduled to begin on February, 2005. During the next five years, the UTMB OAIC will examine muscle function from interdisciplinary perspectives across the entire spectrum of biomedical investigation from molecular biology to outcomes assessment. Briefly, the conceptual model driving the OAIC research is as follows: muscle function is dependent on muscle mass and energy supply. Muscle mass, in turn, is a function of muscle synthesis and muscle breakdown. Muscle synthesis is affected by nutrient delivery, which in turn is affected by factors controlling blood levels of nutrients, blood supply, and uptake of nutrients into the cell. Similarly, energy supply is affected by mitochondrial function.

The **First Specific Aim** for the current UTMB OAIC is to provide core support to funded interdisciplinary translational research on age-related sarcopenia (muscle degeneration) by UTMB investigators and investigators at other OAICs.

The **Second Specific Aim** is to stimulate additional interdisciplinary research by funding pilot grants (by the Pilot/Exploratory Cores) and developmental projects (by the Research Cores).

The **Third Specific Aim** is to train future leaders in translational interdisciplinary research on the causes, pathophysiology, prevention and treatment of sarcopenia. Year-one investigators include:

1. **Mukaila Raji, M.D.**, assistant professor of geriatric medicine. He will study the relationship between muscle strength, other markers of frailty, inflammatory cytokines and genetic markers in a population-based sample of 500 older Mexican Americans living in Texas City, Texas.
2. **Quynh Bui, M.D., M.P.H.**, assistant professor of geriatric medicine. She will conduct a 16-week trial of the effect of amino acid supplements on muscle function and insulin sensitivity in older subjects with abnormal glucose tolerance not on diabetic medication.

3. **Elizabeth Børsheim, Ph.D.**, assistant professor of surgery. Dr. Børsheim will investigate whether delayed transcapillary transport of insulin into muscle interstitium contributes to the insulin resistance of muscle protein synthesis in the elderly.
4. **Bartosz Szczesny, Ph.D.**, is a postdoctoral fellow in Human Biological Chemistry and Genetics. He will study mitochondrial DNA repair in skeletal muscle of aged model systems (mice) and in human biopsy specimens.

The **Fourth Specific Aim** of the UTMB OAIC is to recruit established investigators to the study of age-related sarcopenia. The new focus for the OAIC provides support for research conducted by Henry Epstein, M.D., professor and chair of cellular physiology and cell biology, and William Mitch, M.D., professor in the Department of Internal Medicine, with Pilot Research projects. Dr. Epstein will continue his research on “Age-dependent changes in striatal muscle chaperone protein levels and function,” whereas Dr. Mitch will examine nutrition and muscle loss in renal disease, with his most recent focus on the pathways of muscle catabolism with special attention to changes in regulation of muscle catabolism with age, and its contribution to age-associated sarcopenia.

The **Fifth Specific Aim** is to promote collaborations of UTMB OAIC investigators with investigators at other OAICs and other institutions in interdisciplinary translational research on age-related sarcopenia. This includes continued and expanded collaborations by Drs. Randall Urban and John Papaconstantinou with the Wake Forest and University of Maryland OAICs, whereby they analyze muscle biopsy samples from patients enrolled in clinical trials of interventions to improve muscle function. The UTMB OAIC will also establish a similar collaboration with Johns Hopkins OAIC investigators.

The Claude D. Pepper Older Americans Independence Center Volunteer Opportunities

The current UTMB OAIC projects require the services of dedicated senior volunteers (age 60 and over) to participate in research on age-related muscle function. The Pepper Center Studies will primarily investigate how exercise, drugs, hormones and nutrition

affect muscle mass and strength. Pepper Center Volunteers will have a chance to learn more about their own health, receive a newsletter focusing on senior health issues, and participate in studies helping Americans retain or improve basic muscle function as they age.

UTMB researchers with a special interest in muscle function and strength are presently recruiting subjects for their studies. Volunteers are never under any obligation to participate in a study.

Reimbursement: Most studies pay for transportation and/or participation.

Pepper Center Volunteer Information Form: If you are interested in becoming a Pepper Center Volunteer please fill out the **Subject Information Form**

online and submit it through our web site <http://www.utmb.edu/aging/volunteer/pepper.asp> or call toll free (800) 298-7015 and a form will be mailed to you.

For more information, please contact:

Susan Minello, R.N., M.S.N., ANP, CCRC or Roxana Hirst, MS, Clinical Gerontology Recruitment Coordinators

UTMB Claude D. Pepper Older Americans Independence Center, Sealy Center on Aging
301 University Blvd.

Galveston, Texas 77555-0460

(800) 298-7015

(409) 772-8350

(409) 772-8931 FAX

Email: sue.minello@utmb.edu or rmhirst@utmb.edu

Recent Publications from SCoA Faculty and Students

▶ Heyn P., Abreu B.C. and Ottenbacher, K.J. 2004. "The effects of exercise on the elderly with cognitive impairment and dementia: A Meta-analysis." *Archives of Physical Medicine and Rehabilitation*, 85, 1694-1704.

▶ Kuo Y.F., Raji M.A., Markides K.S., Ray L.A., Espino D.V., and Goodwin J.S. 2003. "Inconsistent use of diabetes medications, diabetic complications, and mortality in older Mexican Americans over a 7 year period: Data from the Hispanic-EPESE." *Diabetes Care*, 26:3054-3060.

▶ Kuo Y.F., Raji M.A., Peek M.K., and Goodwin J.S. 2004. Health-related social disengagement in elderly diabetic patients: Association with subsequent disability and survival. *Diabetes Care*, 27:1630-7.

▶ Mishra D. and Raji M.A. 2004. Squamous Cell Carcinoma Occurring at Site of Prior Herpes Zoster Infection of the Scalp: A Case Report of Marjolin's Ulcer. *Journal of the American Geriatrics Society*, 52:1221-1222.

▶ Ostir G.V., Ottenbacher K.J., and Markides K.S. 2004. Onset of frailty in older adults and the protective role of positive affect. *Psychology of Aging*, 19(3), 402-408.

▶ Ottenbacher K.J., Ostir G.V., Peek M.K., and Markides, K.S. 2004. Diabetes mellitus as a risk factor for stroke in Mexican American Older Adults. *Journal of Gerontology: Medical Sciences*, 59A:6, 640-645.

▶ Ottenbacher K.J., Linn R., Smith P., Illig S., Mancuso M., and Granger, C.V. 2004. Comparison of logistic regression and neural network analysis applied to predicting living setting after hip fracture. *Annals of Epidemiology*, 14(8), 551-559.

▶ Ottenbacher K.J., Smith P.M., Illig S.B., Linn R.T., Ostir G.V., and Granger, C.V. 2004. Trends in length of stay, living setting, functional outcome and mortality following medical rehabilitation. *Journal of the American Medical Association*, 292:1687-1695.

▶ Peek M.K., Ray L., Patel, K., Stoebner-May D., and Ottenbacher K. 2004. Reliability and validity of the SF-36 among older Mexican Americans. *The Gerontologist*, 44:3, 418-425.

▶ Raji M.A., and Goodwin J.S. 2003. Perception of causes and treatments of common diseases in black, non-Hispanic white, and Hispanic Americans aged 75 years and older. *Physicians & Patients*, 1(4):20-22.

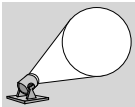
▶ Raji M.A., Ostir G.V., Markides K.S., Espino D.V., and Goodwin J.S. 2003. Potentially Inappropriate Medication Use by Elderly Mexican Americans. *Annals of Pharmacotherapy*, 37:1197-1202.

▶ Raji M.A. and Goodwin J.S. 2003. Perception of causes and treatments of common diseases in black, non-Hispanic white, and Hispanic Americans aged 75 years and older. *Physicians & Patients*, 1(4):20-22.

▶ Reyes-Ortiz C.A., Al Snih S., Loera J., Ray L.A., and Markides K.S. Risk factors for falling in older Mexican Americans. *Ethnicity & Disease*, 14:417-422; 2004.

▶ Tooth L., Ottenbacher K.J., Smith P.M., Illig S.B., Linn R.T., and Granger, C.V. 2004. Satisfaction with medical rehabilitation after spinal cord injury. *Spine*, 29:2, 211-219.

▶ Tooth L.R., and Ottenbacher K.J. 2004. The Kappa statistic in rehabilitation research: an examination. *Archives of Physical Medicine and Rehabilitation*, 85, 1371-1376.



SPOTLIGHT ON NEW EMPLOYEES

▶ **PATRICE BARNUM, M.D.**



Dr. Barnum joined the Division of Geriatrics, Geriatric Services, as an assistant professor in 2004 to assist in patient care at the Texas City–Danforth clinic.

Dr. Barnum received her medical degree from Louisiana State University Health Sciences Center School of Medicine. In 2004 she completed her residency in

Internal Medicine and was the UTMB Department of Internal Medicine Intern of the Year in 2001–02. Dr. Barnum is excited about joining Geriatrics and is committed to providing comprehensive care.

▶ **QUYNH BUI, M.D., M.P.H.**



Dr. Bui is an assistant professor with the Department of Internal Medicine, Division of Geriatrics. She received her medical training and internship in internal medicine at University of Ho Chi Minh City, School of Medicine, Dentistry–Pharmacy. She also received a M.P.H. degree from Tulane University–School of Public Health in 1996. In 2001 she

entered the UTMB Geriatric Medicine Fellowship Program where she earning her certification in internal medicine and geriatrics. She completed a second year in the Geriatric Fellowship Program concentrating on aging research. Her main area of study was the relationship of depression to patient satisfaction in older women diagnosed with breast cancer. She accepted a faculty position as assistant professor with the Department of Internal Medicine, Division of Geriatrics in 2004. Dr. Bui is also an investigator trainee with the UTMB Claude D. Pepper Older Americans Independence Center (OAIC), examining the effects of amino acid supplements on muscle function and insulin sensitivity in older subjects with abnormal glucose tolerance not on diabetic medication.

▶ **ELENA VOLPI, M.D., PH.D.**



WELCOME BACK!!

Dr. Volpi is an associate professor with the Department of Internal Medicine/Division of Geriatrics, and the Daisy Emery Allen Distinguished Chair in Geriatric Medicine. She received her degrees from the University of Perugia in Italy, where she did her residency in Endocrinology. Dr. Volpi originally

came to UTMB as a post doctoral fellow in 1996 and then joined the Geriatric faculty for two years, before going to the University of Southern California. Dr. Volpi is an Endocrinologist, and Gerontologist. Her research on muscle metabolism and sarcopenia dates back to 1996. Her current research examines skin protein turnover in older adults. Dr. Volpi is accompanied by three assistants, Satoshi Fujita, Ph.D. and Jersen Cadenas, M.D. and Hans Dreyer, Ph.D.

PEPPER CENTER RECRUITMENT

To help determine why muscle function deteriorates with age, researchers with the Pepper Center are recruiting volunteers 60 years old or older, and in good general health. For information, please contact: Susan Minello (409) 772-8350, Roxana Hirst (409) 772-3588, or use our toll free number, (800)298-7015.

THE SEALY CENTER ON AGING VOLUNTEER REGISTRY

There are more than 700 volunteers who have joined the UTMB Sealy Center on Aging Volunteer Registry to participate in a variety of UTMB research projects. If you are 55 or older, and would like information on becoming a volunteer, please call Roxana Hirst or Susan Minello, registry coordinators at (409) 772-3588 or toll free (800) 298-7015.



UPCOMING EVENTS

THE WINTER SERIES ON AGING ▸

Each year, the Sealy Center on Aging sponsors seven weeks of nationally and internationally known speakers on aging topics. This year, the Winter Series on Aging begins Tuesday, January 25, 2005, and continues each Tuesday until March 8, 2005. Lectures will be held from 5–6 p.m. in Levin Hall on the UTMB campus. There are wine and cheese receptions following each lecture. All are welcome! Please refer to the following information for lecture and reception locations.

For more information, contact Rhonda Bailes at (409)772-8333 or rbailes@utmb.edu.

January 25, 2005

John Astin, Ph.D.

Scientist

California Pacific Medical Center Research Institute
Levin Hall North Auditorium, Reception in Foyer

February 1, 2005

Robert Wallace, M.D.

Professor of Epidemiology and Internal Medicine

University of Iowa
Levin Hall North Auditorium, Reception in Foyer

February 8, 2005

James Lynch, Ph.D.

Director of Life Care Health Associates

Towson, MD
Levin Hall South Auditorium, Reception in Dining Room

February 15, 2005

Teresa Seeman, Ph.D.

*Professor of Medicine & Epidemiology
Division of Geriatrics*

Geffen School of Medicine at UCLA
Levin Hall North Auditorium, Reception in Foyer

February 22, 2005

Eric Larson, M.D., M.P.H.

Director

Group Health Cooperative, Center for Health Studies
Seattle, WA
Levin Hall North Auditorium, Reception in Foyer

March 1, 2005

Cynthia Kenyon, Ph.D.

*Herbert Boyer Professor of Biochemistry and Biophysics
Director, Hillblom Center for the Biology of Aging*

University of California, San Francisco
Levin Hall North Auditorium, Reception in Foyer

March 8, 2005

Seth Landefeld, M.D.

Chief, Division of Geriatrics

University of California, San Francisco
Levin Hall South Auditorium, Reception in Dining Room



IN THE NEWS

MedWatch—The FDA Safety Information and Adverse Event Reporting Program

Merck & Co., Inc. announced a voluntary withdrawal of Vioxx (rofecoxib) from the United States and worldwide market due to safety concerns of an increased risk of cardiovascular events (including heart attack and stroke) in patients on Vioxx. Vioxx is a prescription COX-2 selective, non-steroidal anti-inflammatory drug (NSAID) that was approved by FDA in May

1999 for relief of signs and symptoms of osteoarthritis, for management of acute pain in adults, and for treatment of menstrual symptoms, and was later approved for relief of the signs and symptoms of rheumatoid arthritis in adults and children.

For more information, please read the 2004 MedWatch safety summary, including links to the Public Health Advisory, press release and Questions and Answers, at: <http://www.fda.gov/medwatch/SAFETY/2004/safety04.htm#vioxx>



AWARDS • SCHOLARSHIPS • GRANTS

AWARDS

Congratulations to Drs. Daniel and Jean Freeman!

The following UTMB faculty who have affiliations with Geriatrics were appointed to endowed chairs/professorships:

Daniel H. Freeman, Jr., Ph.D., director, Office of Biostatistics, and professor, Departments of Preventive Medicine & Community Health and Psychiatry & Behavioral Sciences, inaugural holder of the **Edgar Gnitzinger Distinguished Professorship In Aging**.

Jean L. Freeman, Ph.D., professor, Departments of Internal Medicine/Division of Geriatrics and Preventive Medicine & Community Health, inaugural holder of the **Grace Bucksch Gnitzinger Distinguished Professorship In Aging**.



From left to right: Dr. Daniel Freeman, Dr. Ken Ottenbacher, associate director, the Sealy Center on Aging; Elizabeth Freeman; Dr. James S. Goodwin, director, the Sealy Center on Aging; and Dr. Jean Freeman.

STUDENT SCHOLARSHIP AWARDS/REGOGNITION

Another successful Forum on Aging!

Thanks to all who participated and provided such excellent presentations for the 2004 Forum on Aging. We had almost 200 in attendance to go along with more than 70 poster presentations!

Congratulations to the six student poster winners:

William Hal Boylston

UTMB Department of Human Biological Chemistry and Genetics, Graduate School of Biomedical Sciences

Presentation title: ALTERED HEPATIC EXPRESSION OF LIPOGENIC AND CHOLESTEROLOGENIC TRANSCRIPTS IN LONG-LIVED PIT1^{DW/DWJ} MICE: A MOLECULAR LINK BETWEEN LONGEVITY AND LIPID METABOLISM?

Krystyn Bourne

UTMB Department of Neuroscience and Cell Biology

Presentation title: RAT BACE1 PROMOTER NUCLEAR FACTOR-KAPPAB BINDING SITE CHARACTERIZATION

Melanie Cree

UTMB Department of Surgery, Department of Preventive Medicine & Community Health

Presentation title: THE EFFECT OF 61 DAYS OF FENOFIBRATE ON INSULIN SENSITIVITY IN HEALTHY AND INSULIN RESISTANT ELDERLY

Sonali Singh

UTMB Department of Ophthalmology

Presentation title: PREVALENCE OF COGNITIVE IMPAIRMENT IN VISUALLY IMPAIRED ELDER TEXANS

Carlos Reyes-Ortiz

UTMB Department of Internal Medicine Division of Geriatrics, Sealy Center on Aging

Presentation title: PREVALENCE AND SOCIODEMOGRAPHIC FACTORS INFLUENCING MAMMOGRAPHY USE AMONG OLDER WOMEN OF SEVEN LATIN AMERICAN AND CARIBBEAN CAPITALS

SCHOLARSHIP AWARDS, CONT. ▸

Soham Al Snih

UTMB Department of Internal Medicine/Sealy Center on Aging, Department of Preventive Medicine & Community Health

Presentation title: PAIN, LOWER EXTREMITY MUSCLE STRENGTH AND PHYSICAL FUNCTION AMONG OLDER MEXICAN AMERICANS



Dr. Kenneth Ottenbacher presented the awards for Best Student Poster at the eighth annual Forum on Aging, Sept. 15, 2004 in the Levin Hall Dining Room. Winners pictured from left to right are Melanie Cree, Soham Al Snih, Carlos Reyes-Ortiz, Kenneth Ottenbacher, associate director, the Sealy Center on Aging, William Boylston, Sonali Singh, and Krystyn Bourne.

GRANTS ▸

Max Otiniano, M.D., research fellow, received a minority supplement grant application award from the Longitudinal Study of Mexican American Elderly Health-AG10939-11. Goal: The purposes of the proposed research are to examine the distribution of HbA1C values in Mexican American elders aged 75 and older with diabetes, and to address whether there is a correlation between the high level of HbA1C and a high rate of complications, disability and shorter life expectancy in this population.

Glenn Ostir, Ph.D., assistant professor, Department of Internal Medicine/Division of Geriatrics. Grant # 1 RO1 AG024806-01. Stroke Recovery in Underserved Populations, National Institute on Aging, NIH—\$1,083,425 (five years, 10/01/04–09/30/09). Goal: To study “the impact of optimism, happiness or a positive attitude on well-being and health; and

social functioning and health” by initiating a longitudinal study to examine how positive emotion (e.g., joy, gratitude, love, contentment) and social networks independently and interactively contribute to recovery of functional status after stroke within two underserved groups—African Americans and Hispanics. Findings will be compared with a sample of whites with stroke.

Jean Freeman, Ph.D., associate professor, Department of Internal Medicine/Division of Geriatrics. Grant # 2 R24 HS011618-04. Health Services Research in Under-Served Populations, Agency for Health Research and Quality (AHRQ), Minority Research Infrastructure Support Program—\$674,7000 (three years, 09/30/04–09/29/07). Goal: to increase the capacity of UTMB faculty to conduct rigorous health services research with a focus on minority, underserved and disadvantaged populations.

Sealy Center on Aging
Volunteer Registry
301 University Boulevard
Galveston, TX 77555-0460

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Information

Contact Tony DiNuzzo, Ph.D. at (409) 772-5367 or Frances A. Gambino at the Sealy Center on Aging, (409) 747-0008, for information regarding items in this issue.

THE SEALY CENTER ON AGING at UTMB has openings for predoctoral and postdoctoral positions for Fall of 2005. Funded by a training grant from the National Institute on Aging, these research positions focus on the health of older minorities, with a particular emphasis on older Hispanics. Fellows will collaborate with any of more than 15 Center faculty with over \$42 million in aging research in the areas of medical outcomes, health service utilization, social epidemiology, psychosocial stress, and health promotion as they pertain to older minorities. The salary stipend for predoctoral positions is \$21,840 and ranges from \$35,568–\$51,036 for postdoctoral positions depending on experience level. Applicants must be U.S. citizens or permanent residents. Applicants should send a letter stating research interests, relevant prior training, and a curriculum vitae to: Karl Eschbach, Ph.D., Sealy Center on Aging, The University of Texas Medical Branch, 301 University Blvd., Galveston, TX, 77555-0460. Email: kaeschba@utmb.edu.

UTMB is an equal opportunity, affirmative action institution which proudly values diversity.

Donations and Bequests UTMB's Sealy Center on Aging welcomes contributions to further geriatric research, education and training. You can help by contributing to the Fund for the Study of Aging, or contact us for information on how to select a particular program to support. Donations can be made to honor an individual and are deductible for income tax purposes to the extent allowed by law. Donations and bequests may be sent to:

The Fund for the Study of Aging
The Sealy Center on Aging
UTMB Office of University Advancement
301 University Blvd.
Galveston, TX 77555-0842

Please direct inquiries to: (409) 772-3950.

For more information on the Sealy Center on Aging, please go to our web site: <http://www.utmb.edu/aging/>