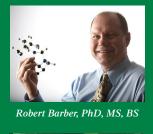
#### **Alzheimer's Association TrialMatch® Program**

TrialMatch is a free, easy-to-use clinical study matching service that connects individuals with Alzheimer's disease, caregivers, healthy volunteers and physicians with current clinical studies. Alzheimer's Association TrialMatch only lists trials and studies that have Institutional Review Board (IRB) approval. This is a committee that approves, monitors and reviews research involving humans to

protect the rights and welfare of the research subjects. You can sign up for TrialMatch in several ways. You can go to the Alzheimer's Association website, www.alz.org, call the TrialMatch toll-free number 1-800-272-3900, or fill out a TrialMatch card available from the Alzheimer's Association. Signing up doesn't obligate you, but merely gives you the option to participate in a clinical study.

# Get to know your IAADR Faculty, Staff, and Students



Dr. Barber's research focuses on identifying biomarkers and genetic variants that mediate a variety of complex human diseases including immune response to traumatic injury and Alzheimer's disease. As the Scientific Manager for the Texas Alzheimer's Research and Care Consortium Dr. Barber is working to ensure that Consortium researchers are making progress toward the goal of identifying biomarkers that influence the risk for and progression of Alzheimer's disease and how this may vary among ethnic groups.



Tori Como is the Research Assistant and Lab Manager for Dr. Sid O'Bryant, and is responsible for supervising the processing and storage of all blood samples that come into the research laboratory. She has been a key person in Dr. O'Bryant's work on a blood test for Alzheimer's disease and most recently on a blood test that distinguishes AD from non-AD neurodegenerative diseases.

Dr. Roby and her student, Nicole Phillips MS, are focusing their research efforts on the role of mitochondrial DNA in Alzheimer's disease. It is possible that mutations and deletions in mitochondrial DNA may be indicators of age-related diseases. Funding for this research was received from the Alzheimer's Association in 2012.

## **Recent IAADR Grants and Funding Achievements**

Chang Su, PhD	The Role of MicroRNA in Regulating Progesterone-Induced Synaptogenesis in a Mouse Stroke Model, funded by American Heart Association, National Scientist Development Grant
Janice Knebl, DO, MBA*	Next Steps in Physicans' Training in Geriatrics, funded by the Donald W. Reynold's Foundation.  Stand-Alone Discharge Planning for Medical Eligible Elders, funded by the Centers for Medicare and Medicaid Services.  *Named "Top Doc" in the April issue of Fort Worth, Texas magazine.
Ran Liu, MD	Methelyne Blue for Ischemic Stroke Therapy, funded by American Heart Association, National Scientist Development Grant.
Sid O'Bryant, PhD	Community-Based Primary Care for the Elderly, funded by the Centers for Medicare and Medicaid Services.
Meharvan Singh, PhD*	Novel Mechanistic Targets of Steroid Hormones in the Brain, funded by the National Institute on Aging.  Training in the Neurobiology of Aging, funded by the National Institute on Aging.  *Honored as "HealthCare Hero" and was awarded the Research in Medicine award by the Fort Worth Business Press



INSTITUTE FOR AGING AND ALZHEIMER'S DISEASE RESEARCH



# Institute for Aging & Alzheimer's Disease Research Newsletter

AUGUST 2013 VOL 1, ISSUE 2

# Research Appreciation Day 2013 - an annual UNTHSC tradition



Akram Sidhu presenting his research findings to Nobel Laureate Stanley Prusiner, MD, and Meharvan Singh, PhD



Meharvan Singh, PhD, Walter Rainwater, Milton Bley, and Nobel Laureate Stanley Prusiner, MD



RAD 2013 award winners and administrators gather together in the Medical Education & Training Building

Research Appreciation Day is a UNT Health Science Center tradition showcasing medicine, public health and basic science. The annual program:

- allows students, faculty and staff to share their research with the campus community and the public
- encourages joint research projects
- increases community awareness of the quality and range of UNTHSC's research

More than 800 people attended this year's Research Appreciation Day, which was highlighted by a standing-room-only keynote address by Nobel Laureate Stanley Prusiner, MD. Dr. Prusiner is responsible for the discovery of prions and implicating them in neurodegenerative disease. More impressive numbers from the event:

- 250 abstracts
- 236 poster presentations
- 14 oral presentations
- 107 scientific judges from throughout the community



www.unthsc.edu/research/IAADR www.unthsc.edu/research/IAADR

## **Commit to be Fit**



egular exercise may very well be the "miracle cure" we've all been waiting for. It's free, easy to take, has both an immediate and long-lasting effect and you don't need a prescription from your physician to get some. Exercise can reduce your risk of major illnesses, such

as heart disease, stroke, diabetes and cancer, and it may lower your risk or delay the onset of dementia and Alzheimer's disease. Following a regular exercise program is a great way to manage stress, fatigue, improve sleep patterns and have an overall better quality of life.

How can you stay fit after 50 years of age? Check with your medical provider to ensure you have no underlying medical condition which will impact the choice and intensity of exercise appropriate for you. If you have specific questions, consult a physical therapist. As the movement experts, physical therapists can design exercise programs to improve your odds for healthy aging and tailor the programs for people with a variety of health conditions.

In general, a well-rounded exercise program should include: Aerobics (walking, hiking, dancing, stair-climbing). Aim for at least 30 minutes per day, 5-7 times per week, with an intensity that will increase your heart rate and breathing rate. It should make you sweat but still allow you to carry on a conversation.

**Resistance** exercises using weights to strengthen major muscle groups. Aim for 2-3 times per week, performing 10-15 repetitions per muscle group.

Flexibility exercises to maintain free movement around the joints. Aim for 3-5 times per week, stretching all major muscle groups to the point of feeling resistance and maintain that position for 30 seconds.



**Balance** exercises involving

both dynamic movements and single leg standing. Aim for 3-5 times per week, progressively challenging your balance to decrease your risk for falls.

Remember: consistency and integration of regular physical activity into your daily life is the key to long-lasting health benefits and improved quality of life.

Because we are living longer, we need to better understand the diseases of aging and how to treat them. Your participation will aid in this effort.

#### **Currently Enrolling IAADR Research Studies:**

#### Exercise and NT-020 (NutraStem) Effects on stem cells

Healthy adults age 50 to 70 are needed for a clinical research study investigating the effect of light exercise and an investigational dietary supplement on your blood stem cells. Participants will be compensated for their time.

#### Genetic and Biomarkers Study of Alzheimer's Disease

Participants age 50 and older who have been diagnosed with Alzheimer's disease are needed to participate in this study. The purpose of this study is to better understand the causes, presentation, and treatment of Alzheimer's disease.

Health & Aging Brain Among Latino Elders (HABLE)

The HABLE study places an emphasis on studying aging among Mexican Americans in Texas. Studying healthy and unhealthy aging in the Mexican American culture will hopefully allow us to create better interventions and treatment programs. Participation may include a blood draw, medical record review, and interview. Current enrollment is limited to those age 50 and older.

#### Health & Aging Brain Study

The Health and Aging Brain Study is a new research project at UNT Health Science Center to help us better understand the biological and lifestyle factors that influence memory and thinking as we age. We are making special efforts to find community members with Alzheimer's disease, memory complaints, or diabetes to participate in our research. Participation may include a blood draw, medical record review, and interview. Current enrollment is limited to people age 50 and older.

#### **UNTHSC Brain Bank**

The Brain Bank is seeking both healthy individuals and individuals with memory loss who are willing to donate their brain after death in order to assist researchers in the battle against dementing illnesses such as Alzheimer's disease.

For more information about IAADR clinical research studies, please contact Kim Brown at 817-735-2694 or kim.brown@unthsc.edu.

#### **MESSAGE FROM THE DIRECTOR**



lzheimer's disease is the sixth leading cause of death in the United States whose impact is made worse by the fact that, at the present time, it cannot be prevented or cured. This impact on individuals,

IAADR faculty's

continued success in research

despite the intense competition

for limited funding is a testament

to their dedication, persistence

and of course, the quality of

their research

families, and the health care system makes it one of America's greatest medical, social and economic challenges of our time. The Institute for Aging and Alzheimer's Disease Research (IAADR), through its dedicated faculty and staff, is addressing this and other age-associated diseases through cutting

edge research. In addition, the IAADR is dedicated to the training of the next generation of professionals in the area of the biology of brain aging and related neurodegenerative diseases, an effort that will help ensure the sustainability of our efforts to eradicate such age-associated diseases.

This past quarter, the IAADR was proud to host Dr. Stanley Prusiner, who served as the keynote speaker for this year's Research Appreciation Day. Dr. Prusiner is the Director of the Institute of Neurodegenerative Diseases and Professor of Neurology at the University of California, San Francisco and

recipient of the 1997 Nobel Prize in Physiology or Medicine for his discovery and work on prions. Prions are a class of pathogens now known to cause disorders such as Creutzfeldt-Jakob disease in humans. Remarkably, prions may also be involved in the development of other neurodegenerative diseases including Alzheimer's disease, Parkinson's

disease and many of the frontotemporal dementias as well as some forms of ALS. As part of his keynote presentation, Dr. Prusiner provided not only a historical perspective on the discovery of prions but also outlined some of his current research aimed at defining new treatment strategies aimed at halting prion-induced neurodegeneration. Dr. Prusiner's visit was sponsored by the generous gift of Mr. Walter Rainwater, who has continued to be a staunch supporter of the IAADR and the UNTHSC as a whole.

The IAADR, through the generous support of Mr. Rainwater and the Rainwater Charitable Trust, was also pleased to announce the availability of two new Pilot Grant mechanisms in the area of Aging and Neurodegenerative disease. One mechanism solicited innovative applications from junior faculty, while the other solicited applications that developed/enabled

collaborative research projects. Such pilot grants will be critical to not only help retain talented junior faculty who are facing unprecedented challenges in securing extramural funding from the NIH, but also to enable faculty to pursue new and innovative collaborative projects and generate key preliminary data necessary for them to be competitive in this tough funding climate.

As interim director for the IAADR, I look forward to my continued interactions with the talented group of faculty and staff here at UNTHSC, and I will continue to promote interprofessional relationships for

research on aging and age-related diseases, including Alzheimer's disease, across the institution and beyond, ensuring that the IAADR serves not only as a resource to our faculty but also to our community. Researchers and professional staff interested in becoming a member of the IAADR can contact me at: meharvan.singh@unthsc.edu.

www.unthsc.edu/research/IAADR www.unthsc.edu/research/IAADR