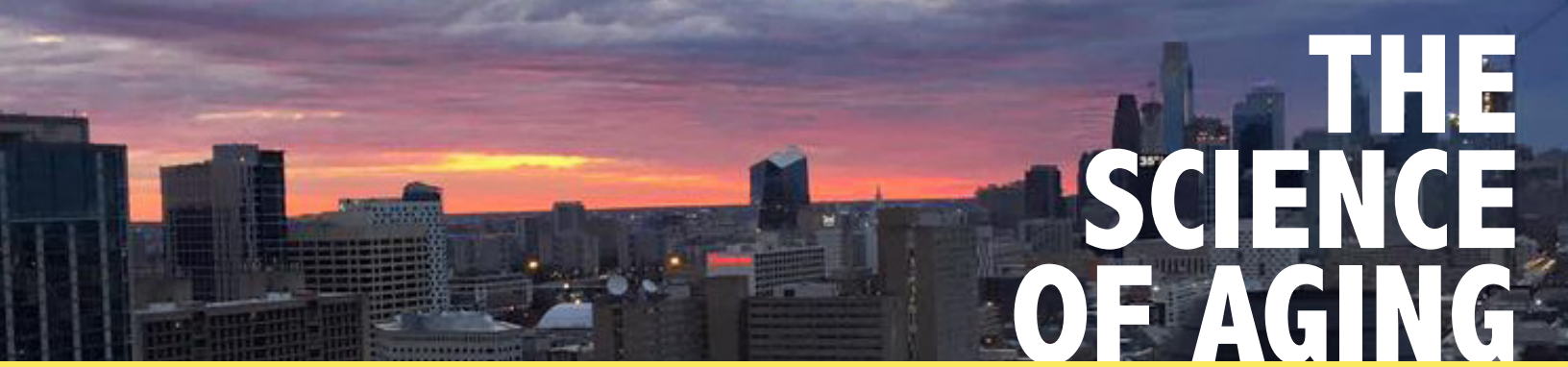

THE SCIENCE OF AGING

SUMMER 2016 | *an Institute on Aging Publication*

2016 SYLVAN M. COHEN RETREAT & POSTER SESSION

"To Sleep, per chance to age... and avoid Alzheimer's disease"

On Wednesday, June 8, 2016, the Institute on Aging hosted its annual Sylvan M. Cohen Retreat and Poster Session. This year's retreat, titled "To sleep, per chance to age… and avoid Alzheimer's disease," was co-sponsored by Penn's Center for Sleep and Circadian Neurobiology and explored the effects of sleep loss and the possible link to Alzheimer's and other neurodegenerative conditions.

As usual, the event began with lunch and a series of lectures, but this year we had the pleasure of having **J. Larry Jameson, MD, PhD**, *dean of the Perelman School of Medicine (PSOM)*, join us for opening remarks. He expressed his excitement to see such collaboration amongst the two sponsoring centers and encouraged more of this, not only in the PSOM, but also across the University as a whole.

"One of the secrets at Penn Medicine is that we have these catalytic centers and institutes and it's even more impressive that there is often cross fertilization between them," explained Dean Jameson.

Keynote speaker, **David M. Holtzman, MD**, *professor and chairman, Department of Neurology at Washington University School of Medicine*, kicked off the lectures discussing his research in "Understanding the Relationship between Sleep, Protein Aggregation, and Alzheimer's disease," followed by a variety of related talks by our 2016 Penn Presenters, **Matthew S. Kayser, MD, PhD, David M. Raizen, MD, PhD, Nirinjini Naidoo, PhD,** and **Sigrid C. Veasey, MD**.

Immediately following the lectures, researchers from the University of Pennsylvania and beyond presented their aging-related work at our annual Poster Session. Categories included basic science, clinical research, and education and community.

See more, including poster winners, lecture titles, & video interviews at:
www.penninstituteonaging.wordpress.com

RALSTON CENTER launches AGE FRIENDLY WEST PHILADELPHIA INITIATIVE

Photo credit: Twitter.com/PhillyMayor

On May 31, 2016, **Mayor Jim Kenney** helped kick off the "Age Friendly West Philadelphia" initiative. Through this effort, the Ralston Center and its partners have identified the most pressing needs of older West Philadelphians—ranging from food access to increasing the safety of local public parks and spaces—and established a series of projects to address those needs.

The Ralston Center, located at 3615 Chestnut Street, Philadelphia PA 19104, houses a variety of other programs and services aimed at improving the lives of the elderly population.

Learn more at: www.ralstoncenter.org

WHAT'S INSIDE?

MUHAMMAD ALI & PARKINSON'S DISEASE

Did the sport itself lead to this boxing legend's toughest battle?

Muhammad Ali and Michael J. Fox, actor and founder of the Michael J. Fox Foundation for Parkinson's Research, pose for a photo at an event in 2002.

Photo Credit: Statnews.com // KENNETH LAMBERT/AP

In 1984, three years after retiring from boxing, the late, great Muhammad Ali was diagnosed with Parkinson's disease, a neurological condition that affects movement, motor skills, and in some cases memory.

Over the years, we've started to hear more and more about the possible link between repeated head injury, especially concussions, and neurodegenerative diseases such as Parkinson's and Alzheimer's... but could high-contact sports like boxing and football for example—which often result in these injuries—really be to blame?

According to a recent *STAT news* article, while it is difficult for a neurologist to pinpoint a definitive cause of Parkinson's disease in any individual patient, **John Q. Trojanowski, MD, PhD**, *director of the Institute on Aging and the Udall Center for Parkinson's Research at the University of Pennsylvania*, says it is "highly likely that [Ali's] early on-set Parkinson's was a result of his boxing."

The underlying cause of Parkinson's disease is believed to be the loss of dopamine, a compound in the brain which is vital for the control of muscle movement, due to protein misfolding. The theory is that head injury can cause inflammation in the brain which may ultimately lead to the chemical changes that cause Parkinson's disease and related disorders.

> "We know that at some threshold... exposure to traumatic brian injury and repetitve brain injury sets the stage for early onset forms of neurodegeneration."
>
> **- John Trojanowski, MD, PhD**

For the full article on "Muhammad Ali and Parkinson's disease: Was boxing to blame?" visit statnews.com

MARK YOUR CALENDARS

for our future events

JOSEPH A. PIGNOLO AWARD IN AGING RESEARCH
TOPIC: TBD
October 27, 2016 | 3:00pm | Smilow Center
Keynote Speaker: Luigi Ferrucci, MD, PhD

STEPHEN SALLOWAY, MD, MS: VISITNG SCHOLARS SERIES
TOPIC: TBD
November 15, 2016 | 3:00pm | Location TBD

VINCENT J. CRISTOFALO LECTURESHIP & RECEPTION
TOPIC: TBD
November 29, 2016 | 3:00pm | Location TBD
Keynote Speaker: S. Jay Olshansky, PhD

EDWARD MARCANTONIO, MD, SM: VISITNG SCHOLARS SERIES
TOPIC: TBD
April 18, 2017 | Time: TBD | Location: TBD

SYLVAN M. COHEN RETREAT & POSTER SESSION:
"GENETICS OF AGING-RELATED NEURODEGENERATION"
May 23, 2017 | 11:30am | Location TBD
Keynote Speaker: Philip De Jager, MD, PhD
Co-sponsor: Penn Neurodegeneration Genomics Center

Our calendar is updated on a rolling basis.
Visit us online to check for newly added lectures, updated talk titles, and event details!
www.med.upenn.edu/aging/events.html

PENN NEURODEGENERATION GENOMICS CENTER:

A National Hub for Alzheimer's Research

Researchers at the University of Pennsylvania recently launched the new Penn Neurodegeneration Genomics Center (PNGC), an interdisciplinary program that aims to bring together faculty members in neurodegenerative disorders, human genetics, genomics, bioinformatics, and biostatistics "to get at the root cause of Alzheimer's disease," according to **Li-San Wang, PhD**, *Co-director of PNGC*, in a recent Penn Medicine News Release.

The PNGC "will interact with other campus investigators with large-scale data sequence data sets to make Penn a natoinal center for genomic-based disease research," explains **Gerard (Jerry) D. Schellenberg, PhD**, *Co-director of PNGC*.

The center's mission focuses on two main areas of Alzheimer's disease (AD) research: 1.) to find new AD genes and 2.) to translate these findings to identify new drug targets.

"The establishment of the PNGC is both timely and important," said **John Q. Trojanowski, MD, PhD**, *Director of the Institute on Aging (IOA)*, also featured in the announcement. "Timely because of the new funding to harmonize the study of Alzheimer's disease genomics among international partners, as well as new funding opportunities for research on Alzheimer's disease and related dementias and important because of the growing surge in Alzheimer's gene discovery that raises important new questions about disease mechanisms and treatment."

To read more on this, and other aging-related Penn Medicine News Releases*, visit: www.med.upenn.edu/aging/news.html

Penn Medicine Announces a $3 Million Gift to support

A UNIQUE PULMONARY PROGRAM FOR PATIENTS WITH ALS and other neurodegenerative diseases

A $3 million gift from University of Pennsylvania alumnus Jay Fishman, and his wife, Randy, will support comprehensive at-home respiratory care for adult Penn Medicine patients with chronic respiratory insufficiency due to neurological, muscular, skeletal or chronic respiratory diseases, including Amyotrophic lateral sclerosis (ALS or Lou Gehrig's disease), a progressive neurodegenerative disease that affects the nerve cells in the brain and spinal cord.

The multidisciplinary *Randy and Jay Fishman Program for Home Assisted Ventilation* will reside within Penn's Harron Lung Center as part of the division of Pulmonary, Allergy and Critical Care in the Perelman School of Medicine at the University of Pennsylvania.

Penn Medicine is partnering with The ALS Association to have the program recognized as an ALS Association-approved program in pulmonary care. Such a designation would be a first for a specific medical practice within the broad ALS clinical arena. The intent of the program is to deliver the benefits of rapidly emerging new technologies and related data to physicians caring for patients whose breathing is compromised.

*Source: Penn Medicine department of Communications **

John Hansen-Flaschen, MD, *Founding Director of Penn Medicine's Harron Lung Center*, will lead the new program. "In the past, adults who lost the strength to breathe on their own died or required a tracheostomy for long-term mechanical ventilation. Most survivors lived away from home in specialized nursing facilities," he said.

> "Through the exceptional generosity of the Fishmans, we will be able to help more people continue to breathe comfortably, speak, eat by mouth and live in their own homes."
>
> **- John Hansen-Flaschen, MD**

The inspiration behind this gift was personal. Mr. Fishman, Executive Chairman of the Board and former Chief Executive Officer of The Travelers Companies, Inc. and a member of the University of Pennsylvania Board Of Trustees, was diagnosed with ALS in 2014.

"I sought pulmonary treatment at Penn," Mr. Fishman said, "and it was through my relationship with Dr. Hansen-Flaschen that I became excited by the opportunity to work with Penn Medicine in bringing the most recent technological advancements in non-invasive ventilation therapy to the ALS community. John's commitment, passion and thoughtfulness to help patients 'lean into' these difficult diseases is remarkable. Randy and I are privileged to support his vision."

PENN MEDICINE RESEARCHER RECEIVES $7.5 MILLION NIH RENEWAL

for Frontotemporal Dementia Research

& an inside look at the FTD research already underway

The National Institute on Aging (NIA) of the National Institutes of Health (NIH) has awarded **Virginia M.-Y. Lee, PhD, MBA**, *Director of Penn's Center for Neurodegenerative Disease Research (CNDR)*, a $7.5 million, five-year grant renewal for her research on Frontotemporal dementia (FTD).

"Frontotemporal dementia can rob people of their personalities and basic ability to comminucate. It is an insidious cluster of related conditions," explained Dr. Lee, principal investiagor of the program project grant (PPG), in the Penn Medicine News Release announcing the renewal. Lee continued, saying:

> "While we continue to make progress in tracking down its underlying sources and how it does its damage, significant gaps in our understanding remain. This grant will enable us to continue the important work that has been taking place at Penn over the past 15 years, with an overall aim of earlier diagnosis, possible prevention, and eventual treatment."

The main goals of this grant are to identify genetic mutations that may cause, contribute to, or possibly prevent the disease, to better classify and interpret symptoms, and to improve the undestanding of how the tau proteins, a major component of the disease, clump together.

Additionally, Penn is home of the Frontotemporal Degeneration Center (Penn FTD Center), directed by **Murray Grossman, MD**, who also leads a project and a core in the PPG. Drs. Lee and Grossman's teams work very closely to bring together researchers and clinicians dedicated to the investigation and treatment of FTD.

The newest Virtual Tour video, produced by the IOA, illustrates this collaborative partnership and highlights the research and care taking place here at Penn to better the lives of those affected by Frontotemporal degeneration.

To view the Virtual Tour video, visit:
www.youtube.com/penninstituteonaging

Institute on Aging
University of Pennsylvania

Institute on Aging
3615 Chestnut Street
Philadelphia, PA 19104-2676

Make a Gift

To support aging-related research and care at Penn's Institute on Aging, contact:
Aubre Naughton, Penn Medicine Development
aubren@upenn.edu or 215-898-9174

Become an IOA Fellow

Learn more about becoming an IOA Fellow at: **www.med.upenn.edu/aging/fellows.html**

Need More IOA News?

Subscribe to our monthly e-newsletter by emailing: **aging@mail.med.upenn.edu**

IOA External Advisory Board

Meet our External Advisory Board (EAB) members at:
www.med.upenn.edu/aging/ExternalAdvBoard.html

MEET OUR // IOA TEAM

John Q. Trojanowski, MD, PhD
Director

M. Kathryn Jedrziewski, PhD
Deputy Director

Nicolette Patete
Digital Media Specialist

Ebony Fenderson
Administrative Assistant

Aubre Naughton
Penn Medicine Development

Lee-Ann Donegan
Penn Medicine Communications

CONNECT WITH US // ONLINE

Facebook.com/PennAging

Twitter.com/PennAging

Youtube.com/PennInstituteonAging

PennInstituteonAging.wordpress.com

The mission of the Institute on Aging at the University of Pennsylvania is to improve the health of older adults by increasing the quality and quantity of clinical and basic research as well as educational programs focusing on normal aging and aging-related diseases across the entire Penn campus.