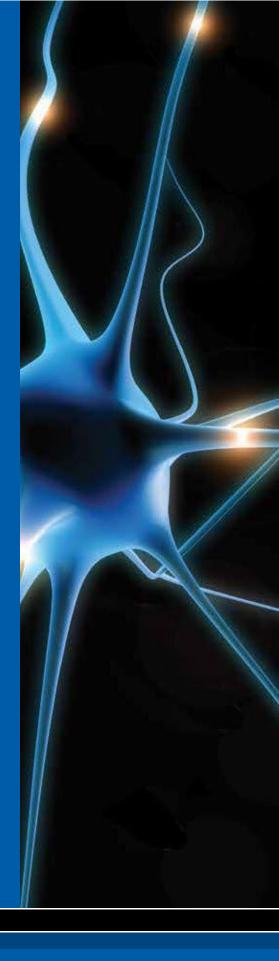
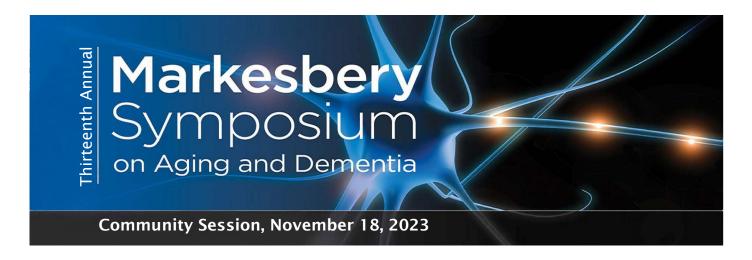
Markesbery Symposium on Aging and Dementia

Community Session November 18, 2023 8:00am - 12:00pm





On behalf of the Sanders-Brown Center on Aging, our philanthropy council, and the symposium planning committee, I am pleased to welcome you to the 13th annual "Markesbery Symposium on Aging and Dementia."

The symposium is named in honor and memory of the late William R. Markesbery, MD, founding director of the Sanders-Brown Center on Aging and Alzheimer's Disease Center at the University of Kentucky. Dr. Markesbery's legacy of groundbreaking research at the Center on Aging has formed the bedrock for our quest to understand and treat Alzheimer's disease and to improve the quality of life of the elderly. We have no doubt that Dr. Bill Markesbery's work will live on for generations to come as we continue the work he started here four decades ago.

In the community session today you will have the opportunity to hear clinicians and researchers from the University of Kentucky and other institutions share current findings, trends, and latest updates on dementia and aging disorders, particularly as related to Alzheimer's disease.

We are honored that so many of you have chosen to join us in seeking to expand our knowledge and friendships. I hope the symposium will be both scientifically rewarding and enjoyable.

Sincerely,

Linda J. Van Eldik, Ph.D.

Director, Sanders-Brown Center on Aging & Alzheimer's Disease Research Center

Symposium Planning Committee:

Linda Jo Van Eldik

Linda Van Eldik, PhD Steven Estus, PhD Heather Nichols Anika Hartz, PhD Frederick Schmitt, PhD Daniel Lee, PhD Paul Murphy, PhD Elizabeth Rhodus, PhD Charlotte Wood Beverly Baesler Laura Clewett April Stauffer Derrick Hord Hillary Smith Beth Wells Alyesse Conrad



2023 Markesbery Symposium, Community Session Saturday, November 18, 2023

8:00am **Registration and Continental Breakfast** 9:00am Welcome Linda Van Eldik, PhD, Director, Sanders-Brown Center on Aging & Alzheimer's Disease Research Center (ADRC), University of Kentucky 9:05am Campaign for Sanders-Brown Susan Krauss, Chair of Philanthropy Council 9:20am Why Gut Health Matters for Brain Health Malu Tansey, PhD, Professor, Neuroscience and Neurology and Director, Center for Translational Research in Neurodegenerative Disease, University of Florida 9:55am Immunotherapy for Alzheimer's Disease: 25 Years from Mouse Models to Approved Treatment in People Living with Alzheimer's David Morgan, PhD, Director Alzheimer's Alliance, MSU Foundation Professor, Translational Neuroscience, Michigan State University 10:30am **Coffee Break** 10:45am Harmonizing Music Therapy Research in Dementia Care Alaine Reschke-Hernandez, PhD, MT-BC, Assistant Professor, Music Education and Therapy, University of Kentucky 10:55am Trisomy 21: Providing Insights into Dementia Frederick Schmitt, PhD, Professor of Neurology and Director of Outreach, Recruitment and **Engagement (ORE) Core, University of Kentucky ADRC** 11:05am Anti-Amyloid Therapy: Who's Benefitting and How Do We Move Forward? Gregory Jicha, MD, PhD, Professor of Neurology and Director of Clinical Core, University of **Kentucky ADRC** 11:15am Panel Discussion moderated by Daniel C. Lee, PhD and Steven Estus, PhD: Malu Tansev. PhD David Morgan, PhD Gregory Jicha, MD, PhD Alaine Reschke-Hernandez, PhD, MT-BC Jordan Harp, PhD, Assistant Professor of Neurology Richard King, MD, PhD, Associate Professor of Neurology Kelly Parsons, Social Worker Senior, Sanders-Brown Center on Aging 11:55 Closing Remarks - Linda Van Eldik, PhD

Please remember to complete the satisfaction survey for this program.



YOU CAN MAKE A DIFFERENCE IN OUR FIGHT AGAINST DEMENTIA

Sanders-Brown is recognized around the world as a leader in the fight against Alzheimer's and other age-related dementias.

You can help continue that legacy for you, your loved ones, and for generations to come.



DONATE NOW

Scan the QR code with your smartphone

Questions?

Contact Beth Wells, Director of Philanthropy Beth.wells@uky.edu | (859) 319-6886



"Why Gut Health Matters for Brain Health"

Dr. Malu Tansey Director of the Center for Translational Research in Neurodegenerative Disease at the University of Florida

In 2019, she was recruited to the University of Florida to be Director of the Center for Translational Research in Neurodegenerative Disease (CTRND) and the first endowed Norman and Susan Fixel Chair in Neuroscience and Neurology at the University of Florida.

Dr. Tansey's lab employs multi-disciplinary approaches to investigate the role of inflammation and immune system responses in

brain health and the development of neurodegenerative diseases with particular focus on the gut-brain axis. Her long-term goal is to train the next generation of scientists who can/and to develop better therapies to prevent and/or delay these disorders.

As a Hispanic American, Dr. Tansey has served as a role model to numerous undergraduate, graduate and post-graduate trainees, many of them women from under-represented groups in STEM. She served as Co-Director of Emory's R25 Initiative for Maximizing Student Development (IMSD) whose mission is to strengthen institutional efforts to enhance recruitment and retention of diverse student and faculty bodies at Emory, by providing research training and mentoring opportunities to both. Dr. Tansey is a fierce advocate for women and other under-represented groups in STEM and has earned several mentoring awards from students and faculty for her efforts in this area.





"Immunotherapy for Alzheimer's Disease: 25 Years from Mouse Models to Approved Treatment in People Living with Alzheimer's"

Dr. David Morgan

Director Alzheimer's Alliance, MSU

Foundation Professor, Translational

Neuroscience, Michigan State University

Dr. Morgan's research interests are aging and brain function, focusing on developing and testing treatments for Alzheimer's dementia. A major therapeutic approach for

his team is modifying innate immune system activity to slow or prevent neurodegeneration. Towards this end the Morgan lab has used immunotherapy and gene therapy approaches.

In the community, Morgan has started a clinical research program through the <u>Alzheimer's Alliance</u>. Community Based Memory Screening is training volunteers to provide free memory evaluations for older adults in their neighborhoods. The Alliance is also recruiting older adults into the NIH supported clinical trial, "Preventing Alzheimer's with Cognitive Training (PACT)". This study is testing the hypothesis that some types of computer games may delay or prevent cognitive impairment in normal older adults.

He is presently an MSU Research Foundation Professor and Director of the College of Human Medicine Alzheimer's Alliance. Dr. Morgan has over 200 peer-reviewed publications and has been continuously funded through NIH since 1989. Morgan served for 6 years on the Program Committee for the Alzheimer's Association International Conference, the last 3 years as Chairperson.

With apologies: Sanders-Brown is unable to share speaker PowerPoint presentations.







"Anti-Amyloid Therapy: Who's Benefitting and How Do We Move Forward?"

Gregory A. Jicha, MD, PhD University of Kentucky

Dr. Jicha is a Professor and Vice Chair for Academic Affairs in the Department of Neurology and an Associate Director of Sanders- Brown Center on Aging. Dr. Jicha holds the Robert T & Nyles Y McCowan Endowed Chair in Alzheimer's Research and leads the Clinical Core of the UK NIA-funded Alzheimer's

Disease Research Center. He also serves as the Medical Director of KY Telecare and directs the Telemedicine Cognitive Clinic at UK, designed to reach out to rural populations across KY for both clinical and research- related activities in the area of AD and related disorders.

He is the principal investigator at UK for the National Alzheimer's Disease Cooperative Study Group, the Alzheimer's Clinical Trial Consortium, and serves on the Clinical Task Force and Steering Committee for the National Institute of Aging Alzheimer's Disease Research Center Program. His current research interests are preclinical disease states of dementia, mild cognitive impairment, vascular contributions to dementia, and clinical trials of disease modifying therapies for degenerative dementias.



"Harmonizing Music Therapy Research in Dementia Care"

Dr. Alaine Reschke-Hernandez University of Kentucky

Dr. Reschke-Hernandez seeks to inform and inspire the effective use of music for health-related outcomes through interdisciplinary research. She is a highly trained musician and has performed professionally for over 20 years. As a board-certified music therapist, she has 2 decades of clinical

experience that has prompted practical understanding of the utility of her research in its translation to music-based intervention training and implementation.

She has worked with diverse individuals in several settings across the lifespan and am passionate about improving the well-being of individuals impacted by dementia, their caregivers, and their families. She is privileged to have received interdisciplinary research training in quantitative, qualitative, and mixed methods. She loves that teaching and her research agenda both allow her to regularly leverage her musicianship and creativity.





SBCoA Researchers



"Trisomy 21: Providing Insights into Dementia"

Frederick Schmitt, PhD University of Kentucky

Dr. Frederick Schmitt received his doctoral degree and completed a fellowship at the University of Akron, Ohio. His clinical interests include biostatistics, dementia and HIV. Schmitt is the Mary Carter Award recipient for his work with patients with Down Syndrome and

neurodegenerative disease and is a nationally and internationally renowned expert on neurodegenerative conditions including Alzheimer's disease.

He is a principal investigator and consultant on numerous grants from the NIH and other federal and state funding mechanisms. He has over 30 years of clinical experience in neurocognition.

Panel discussion will also include:



Jordan Harp, PhD, Assistant Professor of Neurology

Dr. Jordan Harp completed his undergraduate degree in philosophy at DePauw University in Indiana and his MS and PhD in clinical psychology at the University of Kentucky, specializing in clinical neuropsychology. He practiced for one year as a psychologist at the VA Medical Center in Lexington. He completed postdoctoral fellowship in neuropsychology at the University of Kentucky, department of neurology.



Richard King, MD, PhD, Associate Professor of Neurology

Dr. Richard D. King, associate professor of neurology, has mentored dozens of residents, medical students, and graduate students through their journey and will apply this skill to enhance student recruitment, guide the first and second year medical students through their learning experiences, assist in the transition to third year, oversee clinical workshops, and develop and lead efforts to ensure student wellness.

Dr. King earned his MD and PhD in neuroscience from Baylor College of Medicine and continued his training at Massachusetts General Hospital/Brigham & Women's Hospital, University of Texas, and the University of Utah. In 1994, he was awarded an MSTP scholarship and received the Rich Dickason Outstanding Physician Scientist award in 2002. His research interests focus on computer-based neural imaging methods and he is the site co-director for the Alzheimer's Disease Neuroimaging Initiative.

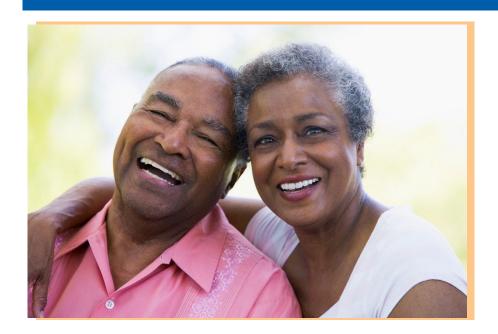


Kelly Parsons, Social Worker Senior, Sanders-Brown Center on Aging

Since graduating from her MSW, Kelly has been working with the older adults. For more than 15 years, she has focused on caregiver advocacy and supporting individuals diagnosed with dementia. Her research interests include dementia caregiving, loneliness in older individuals, and early biological diagnosis of Alzheimer's Disease. At present, Kelly is a social worker at Sanders-Brown Center on Aging with the University of Kentucky.



Sanders-Brown Center on Aging



The Sanders-Brown Center on Aging (SBCoA) was established in 1979, and received funding as one of the original ten National Institutes of Health Alzheimer's Disease Centers in 1985. Internationally acclaimed, the SBCoA is recognized for its contributions to the fight against brain diseases that are associated with aging.

Our vision: The University of Kentucky Sanders-Brown Center on Aging will be recognized locally and nationally as a premier, vitally productive and innovative aging center that effectively translates research findings into interventions and information that will benefit older adults.

ALZHEIMER'S DISEASE FACTS

Normal Age-Related Memory Changes

- Missing a monthly payment
- Forgetting which day it is and remembering later
- Sometimes forgetting which word to use
- Losing things from time

Warning Signs of Dementia

- Poor judgment and decision making
- Inability to manage a budget
- Losing track of the date or the season
- Misplacing things and being unable to retrace steps to find



More than 100 faculty and staff pursuing the following areas of research:

- Basic and clinical research in Alzheimer's disease
- Neurodegenerative disorders
- Risk factors for dementia
- Healthy brain aging

A global pioneer in Alzheimer's disease research, the Center has over forty years of published work and 800 study volunteers (some with the disease and some without). These individuals are studied over time and will donate their brains upon death. Our cutting-edge research focuses on identifying problems as early as possible, before memory loss develops, so that Alzheimer's disease can be prevented or delayed.

The ultimate goal of the Center on Aging is to catalyze innovative and outstanding brain research, while ensuring a more rapid rate of progress toward new therapies, so that our volunteers, patients and caregivers become the beneficiaries of our advances in knowledge.

Unless science finds a way to slow the progression of this devastating disease, the United States will see a nearly 50 percent increase in the number of victims by 2030. In addition to the direct impact on the patient, Alzheimer's disease also affects the lives of family members and friends.

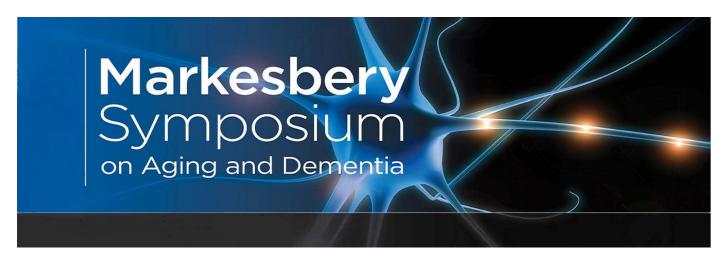


The Center is directed by Linda J. Van Eldik, PhD, Professor, Department of Neuroscience, Director, Alzheimer's Disease Research Center and Co-Director, Kentucky Neuroscience Institute

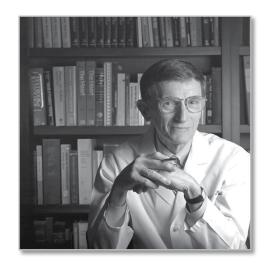


- Alzheimer's disease is the most common cause of dementia, accounting for an estimated 60 to 80 percent of cases. Recent large autopsy studies show that about half of individuals with Alzheimer's dementia have Alzheimer's disease brain changes (pathology) as well as the brain changes of one or more other causes of dementia, such as cerebrovascular disease or Lewy body disease. This is called mixed pathology and, if recognized during life, is called mixed dementia.
- The likelihood of having mixed dementia increases with age and is highest in the oldest-old (people age 85 or older).
 - In 2020, approximately 75,000 persons age 65 and older in Kentucky are living with Alzheimer's disease. This number is estimated to increase to 86,000 (14.7%) by 2025.

From the 2023 Alzheimer's Association Facts & Figures publication.



WILLIAM R. MARKESBERY, MD (1932-2010)



The Markesbery Symposium on Aging and Dementia is named in honor of William R. Markesbery, MD, a gifted scientist and internationally recognized neurologist and neuropathologist. Dr. Markesbery's creativity and commitment to aging research provided the impetus for the University of Kentucky to establish the Sanders-Brown Center on Aging in 1979 and name him as the first director. He held that position until his death in January 2010.



In 1985, Bill Markesbery became the director of the Alzheimer's Disease Research Center, one of the original 10 National Institute on Aging (NIA)-funded centers in the United States, with a primary focus on neuropathology. After more than 35 years, the Alzheimer's Disease Center continues to be funded by NIA, a remarkable achievement that demonstrates the strength and caliber of this program. During his academic career, Dr. Markesbery published more than 400 scientific papers and was one of the world's leading experts on Alzheimer's disease and oxidative stress. He will always be remembered as a compassionate and caring physician, a brilliant researcher, and an inspirational leader.

Notes



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