



McKNIGHT BRAIN

RESEARCH FOUNDATION

Preserving memory, enhancing life

16th Annual Inter-Institutional Meeting
Evelyn F. McKnight Brain Institutes
McKnight Brain Research Foundation and University of Miami MBI
MAY 14 - 16, 2025

BRAIN HEALTH: From Discoveries to Community

Wednesday, May 14th, 2025

Location: Nautilus Sonesta
1825 Collins Ave
Miami Beach, FL 33139
Phone 305-503-5700

- 12:00pm - 4:00pm** **PRE-MEETINGS** *in the Bridge Room*
- 12:00pm - 12:15pm** **Welcome and Introduction to Pre-Meetings** (Ihtsham Haq and Tatjana Rundek, UM)
- 12:15pm - 1:00pm** **Buffet Lunch** *in the Bridge Room*
- 12:30pm - 1:10pm** Neuromodulation (Chairs: John Williamson, UF; Keith McGregor, UAB)
- 1:10pm - 1:50pm** Precision Aging (Chairs: Carol Barnes, UA; Ron Lazar, UAB)
- 1:50pm - 2:30pm** Metabolism & Cardiovascular Function (Chairs: Sara Burke, UF; Lee Ryan, UA)
- 2:30pm - 3:10pm** Neuroinflammation (Chairs: Tom Foster, UF; Meredith Hay, UA)
- 3:10pm - 3:50pm** AI & Neuroimaging (Chairs: Ihtsham Haq, UM; Arne Ekstrom, UA)
- 3:50pm - 4:00pm** **Break**

- 4:00pm - 4:30pm** **MCKNIGHT BRAIN AGING REGISTRY (MBAR)** (*Chairs: Kristina Visscher, UAB; Bonnie Levin, UM; Ron Cohen, UF*) *In the Bridge Room*
- 4:30pm - 5:00pm** **INTER-INSTITUTIONAL PROJECTS AND COLLABORATIONS** - Cognitive Aging and Memory Intervention (CAMI) Core: Ihtsham Haq, UM; Sara Burke, UF) *In the Bridge Room*
- 5:15pm - 7:15pm** **Welcome Reception at Lobby Bar**
Nautilus Hotel
- 5:45pm - 6:00pm** **Welcome**
Tatjana Rundek, M.D., Ph.D.
Director of Evelyn F. McKnight Brain Institute
- Guillermo (Willy) Prado Ph.D.
Interim Provost and Executive Vice President for Academic Affairs
- Michael L. Dockery, M.D.
Chair, Board of Trustees, McKnight Brain Research Foundation
- 6:00pm - 7:15pm** **Dinner at The Backyard, Nautilus Hotel**
- 7:30pm - 9:00pm** **Miami City Ballet Studios**
2200 Liberty Ave
Miami Beach, FL 33139

Thursday, May 15th, 2025

Location: Nautilus Sonesta
1825 Collins Ave
Miami Beach, FL 33139
Phone 305-503-5700

8:00am - 8:45am Breakfast at the Nautilus Cabana Club Terrace

8:00pm - 8:45am **YOUNG INVESTIGATOR SESSION: Future Research Directions** (*Leaders:* Bonnie Levin, UM; Carole Barnes, UA; Ron Lazar, UAB; Tom Foster, UF)

9:00am - 9:30am **Welcome & Introduction in the Bridge Room**

Tatjana Rundek, M.D., Ph.D.
Director of Evelyn F. McKnight Brain Institute

Henri R. Ford, M.D., MHA
Dean and Chief Academic Officer
University of Miami Leonard M. Miller School of Medicine

Jose Romano, FAHA, FAAN, FAAN
Chairman, Department of Neurology U Miami

New Direction McKnight Brain Research Foundation
Michael L. Dockery, M.D.
Chair, Board of Trustees, McKnight Brain Research Foundation (MBRF)

Introduction to Program and Meeting Overview
Tatjana Rundek, M.D., Ph.D.
Director of Evelyn F. McKnight Brain Institute

SESSION I **Biomarkers of Optimal Aging: Potential Intervention Targets**

9:30am - 10:30am **Moderators: Farah Lubin, UAB and Tom Foster, UF**

9:30am - 9:40am Consequences of Mitochondrial Defects in Aging Neurons: Carlos Moraes (UM)

9:40am - 9:50am Imaging and Epigenetic Biomarkers of Brain Health: Yenisel Cruz-Almeida (UF)

9:50am - 10:00am Characteristics of Exceptional Performers and Resilient Individuals: Matt Huentelman (UA)

10:00am - 10:10am Biomarkers of Sleep in Aging: Christian Agudelo (UM)

10:10am - 10:30am **Panel Discussion (Discussion Lead: Farah Lubin)**

10:30am - 10:45am Break

SESSION II **Translation to Practice and Community**

10:45am - 11:45am **Moderators: Ron Lazar, UAB and James Galvin, UM**

10:45am - 11:00am Community Participatory Research: Rosie Curiel (UM)

11:00am - 11:15am Precision Aging in the Community: Education, Engagement, and Participation: Lee Ryan (UA)

11:15am - 11:30am Cognitive Decline Following Transient Ischemic Attack: Victor Del Bene (UAB)

11:30am - 11:50am **Panel Discussion (Discussion Lead: Susan Fox-Rosellini, UM)**

12:00pm - 2:00pm **Lunch at the Nautilus Cabana Club Terrace**

12:45pm - 12:55pm **Introduction of the 1st Ralph L. Sacco Scholars in Brain Health by AAN/AHA**
(Dr. Patrick Devlin, UT Houston and Dr. Cyprien Rivier, Yale) *in the Bridge Room*

1:00pm - 2:00pm **KEYNOTE LECTURE: Updates on Vascular Cognitive Aging and Risk for Dementia**

Charles DeCarli, MD, FAAN, FAHA

Victor and Genevieve Orsi Chair in Alzheimer's Research

Distinguished Professor of Neurology

Co-Director, Alzheimer's Disease Research Center

Chief, Imaging of Dementia and Aging (IDeA) Laboratory

University of California at Davis

SESSION III **Environmental Challenges to Brain Health**

2:00pm - 3:00pm **Moderators: Bonnie Levin, UM and Lee Ryan, UA**

2:00pm - 2:10pm Harmful Algal Blooms and Brain Health: Larry Brand (UM)

2:10pm - 2:20pm PFAS and Brain Health: Hannah Gardener (UM)

2:20pm - 2:30pm Microgravity Effects on the Human Brain and Behavior: Co-occurring Dysfunction and Adaptive Plasticity: Rachael Seidler (UF)

2:30pm - 2:40pm Environmental Exposures Accelerate Brain Aging and Influence: Ashely Adamson (UAB)

2:40pm - 3:00pm **Panel Discussion (Discussion Lead: David Davis, UM)**

3:00pm - 3:15pm Break

SESSION IV **Machine Learning and Big Data Approaches to Cognitive Aging**

3:15pm - 4:00pm **Moderators: Ihtsham Haq, UM and Aprinda Queen, UF**

3:15pm - 3:30pm Digital Twin Approaches to Cognitive Aging: Yelena Yesha (UM)

3:30pm - 3:45pm Examining the Relationship Between Brain Aging and Cognition With a Machine Learning Approach: Junghee Lee (UAB)

3:45pm - 3:55pm AI in Oculomics: Jianhua Wang (UM)

3:55pm - 4:15pm **Panel Discussion (Discussion Lead: Ihtsham Haq, UM)**

SESSION V **Brain Health: Action & Implementation (from pre-meeting groups)**

4:15pm - 5:30pm **Moderators: Carol Barnes, UAB and Ihtsham Haq, UM**

4:15pm - 5:00pm Pre-Meeting Group Leaders Present Action Items and Next Steps

5:00pm - 5:30pm Discussion

6:00pm - 6:15pm Board buses

6:30pm - 9:00pm **Dinner (*Per invitation only*)**

Friday, May 16th, 2025

6:30am - 8:00am **Breakfast at the Nautilus Cabana Club Terrace**
Board of Directors Breakfast with MBI Directors

8:15am - 8:45am **Board buses to depart for UM**

Location: **University of Miami**
Bascom Palmer Auditorium
900 NW 17th Street
Miami, FL 33136

9:15am - 9:30am **Welcome**
Tatjana Rundek, M.D., Ph.D.

SESSION VI **Translating Discoveries into Action**
9:30am - 10:30am **Moderators: Carol Barnes, UA and Tatjana Rundek, UM**
(10 minute presentations with 5 minutes Q & A)

9:30am - 9:45am Effect of Genetic Ancestry on APOE Risk for Dementia on the Aging Population:
Anthony Griswold (UM)

9:45am - 10:00am Vascular Health and HIV: Exercise is Medicine: Raymond Jones (UAB)

10:00am - 10:15am Studying the Aging Social-Cognitive Brain: Bridging Basic Science and Real-World
Impact: Natalie Ebner (UF)

10:15am - 10:30am Transcranial Magnetic Stimulation for Mild Cognitive Impairment and Alzheimer's
Disease: Ying-Hui Chou (UA)

10:30am - 10:40am Break

Session VII **Blitz Presentations**
10:40am - 11:45am **Moderators: Christian Agudelo, UM and Natalie Ebner, UF**

10:40am - 10:55am McKnight Brain Aging Registry (MBAR) Updates: Kristina Visscher (UAB) and Bonnie
Levin (UM)

10:55am - 11:10am Cognitive Aging and Memory Intervention (CAMI) Core Updates: Ihtsham Haq
(UM) and Keith McGregor (UAB)

(6 minute presentations with 3 minutes Q & A)

11:10am - 11:20am Life Essential 8 and Cognition: Tali Elfassy (UM)

- 11:20am - 11:30am Cognitive Intervention and Brain Change: Can These be Applied to Aging: Arne Ekstrom (UA)
- 11:30am - 11:40am Understanding Cognitive Health and Health Disparities: Social Determinants of Health Perspective: Kun Wang (UAB)
- 11:40am - 11:50am Tinker-FUN (Tinkering activities to Flex Ur brain): A Cognitive Flexibility Oriented Intervention for Older adults: Vince Wu (UF)
- 11:50am - 12:00pm Closing Remarks
- 12:00pm Meeting adjourns**
Lunch: Boxed lunches available for pickup on the way out