



Tenth McKnight Inter-Institutional Meeting Birmingham, Alabama April 4 – 6, 2018

Wednesday, April 4, 2018

- 1:00 – 6:00 p.m. Registration: DoubleTree by Hilton – Lower Level - Foyer
- 6:00 - 6:30 p.m. Reception: Doubletree Hilton Hotel - Lower Level - Heritage 1
- 6:30 - 8:00 p.m. Dinner: Doubletree Hilton Hotel – Lower Level – Heritage 1

Welcome

Ronald M. Lazar, PhD, FAAN, FAHA

Evelyn F. McKnight Endowed Chair

Professor of Neurology

Director, Evelyn F. McKnight Brain Institute at UAB

Director, Division of Neuropsychology

University of Alabama at Birmingham

J. Lee Dockery, MD

Chair, Board of Trustees

McKnight Brain Research Foundation

Thursday, April 5, 2018

- 7:30 – 8:40 a.m. Breakfast: Doubletree Hilton Hotel – Heritage 2
- 8:45 - 9:00 a.m. Opening Remarks – Heritage 1

Ronald M. Lazar, PhD, FAAN, FAHA

Evelyn F. McKnight Endowed Chair

Director, Evelyn F. McKnight Brain Institute at UAB

University of Alabama at Birmingham

Christopher S. Brown, PhD

Vice President for Research

University of Alabama at Birmingham

J. Lee Dockery, MD

Chair, Board of Trustees

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SESSION I Intervention

Location: Heritage 1 Moderator: **Carol Barnes, PhD**

- 9:00 – 9:15 a.m. *“Intervention Opportunities for Cognitive Decline: Report from the National Academy of Medicine”*
Ralph Sacco, MD, MS, FAHA, FAAN
Professor and Olemberg Chair of Neurology
Executive Director McKnight Brain Institute
Chief of Neurology Jackson Memorial Hospital
Director, UM Clinical & Translational Science Institute
Senior Associate Dean for Clinical & Translational Science
Miller School of Medicine, University of Miami
President, American Academy of Neurology
- 9:20 – 9:45 a.m. *“Exercise is Regenerative Medicine: Impact on Aging”*
Marcas M. Bamman, PhD, FACMS
Professor and Center Director
Center for Exercise Medicine
University of Alabama at Birmingham
- 9:50 – 10:15 a.m. *“The ACT Intervention Trial”*
Ronald Cohen, PhD, ABPP, ABCN
Evelyn McKnight Chair of Clinical Translation in Cognitive Aging
Professor, Clinical and Health Psychology, Neurology and Psychiatry
Director, Center for Cognitive Aging and Memory
University of Florida
- Adam Woods, PhD**
Assistant Professor, Clinical and Health Psychology, Neuroscience
Assistant Director, Ctr for Cognitive Aging and Memory Clinical Trans Res
University of Florida
- 10:20 – 10:25 a.m. Additional Q & A
- 10:30 – 10:40 a.m. Break
- 10:40 – 11:00 a.m. *“Modifiable Risk Factors in Cognitive Aging: Influence of Vascular Health and Physical Activity”*
Gene Alexander, PhD
Professor
Departments of Psychology and Psychiatry
University of Arizona
- 11:05 - 11:25 a.m. *“Cognitive Resilience: Mechanisms and Therapeutic Windows for Memory Loss”*
Jeremy Herskowitz, PhD
Assistant Professor
Department of Neurology
University of Alabama at Birmingham
- 11:25 – 11:30 a.m. Additional Q & A
- 11:30 – 12:30 p.m. Lunch - Heritage 2

KEYNOTE ADDRESS

12:30 -1:45 p.m. *“Epigenetic Clock Analysis of Cognitive Aging”*
Steve Horvath, PhD
Professor, Human Genetics and Biostatistics
David Geffen School of Medicine
University of California

SESSION II MBAR

Location: Heritage 1 Moderator: **Tatjana Rundek, MD, PhD, FANA**

2:00 - 2:20 p.m. *“MBAR I: Clinical Update”*
Bonnie Levin, PhD
Bernard and Alexandria Schoninger Professor of Neurology
Director, Division of Neuropsychology
University of Miami, Miller School of medicine

2:20 - 2:40 p.m. *“MBAR II: Imaging Update”*
Kristina Visscher, PhD
Associate Professor
Department of Neurobiology
University of Alabama at Birmingham

2:40 – 2:45 p.m. Additional Q & A

2:45 – 3:00 p.m. Break

SESSION III New MBI Faculty

Location: Heritage 1 Moderator: **Ron Cohen, PhD**

3:00 – 3:12 p.m. *“Cardiac Reperfusion, Neuro-inflammation and Human Cognition”*
Ronald M. Lazar, PhD, FAAN, FAHA
Evelyn F. McKnight Endowed Chair
Director, Evelyn F. McKnight Brain Institute at UAB
University of Alabama at Birmingham

3:15 – 3:27 p.m. *“Novel Peptide Therapy to Treat Cognitive Impairment in Heart Disease Patients at Risk for Alzheimer’s Disease”*
Meredith Hay, PhD
Professor, Physiology, Psychology
Evelyn F. McKnight Brain Institute
Arizona Health Sciences Center

- 3:30 – 3:42 p.m. *“Cognitive, Cultural and Affective Dimensions of Frailty”*
Katalina McInerney, PhD
Assistant Professor – Clinical
Department of Neurology
University of Miami
- Sarah Getz, PhD**
Neuropsychology Postdoctoral Fellow
Department of Neurology
University of Miami
- 3:45 – 3:57 p.m. *“Exosomes: Biomarkers of Aging and Potential Mediators of Therapeutic Interventions”*
Brittney Yegla, PhD
Post-doctoral Researcher
University of Florida
- 4:00 – 4:12 p.m. *“The Gut Microbiome: A Target for Improving Late Life Cognition?”*
Tom Buford, PhD
Associate Professor
Med – Gerontology, Geriatrics, and Palliative Care
University of Alabama at Birmingham
- 4:15 – 4:27 p.m. *“Encoding and Retrieval of Complex Events: A Shift towards Knowledge-Based Processing with Normal Aging”*
Matthew Grilli, PhD
Assistant Professor
Department of Psychology
Evelyn F. McKnight Brain Institute
University of Arizona
- 4:30 – 4:42 p.m. *“Sleep and Neurocognitive Aging in Population Based Studies”*
Alberto Ramos, MD, MSPH, FAASM
Associate Professor
Research Director, Sleep Disorders Program
University of Miami, Miller School of Medicine
- 4:45 – 4:57 p.m. *“Frontal Gamma-Aminobutyric Acid Concentrations are Associated with Cognitive Performance in Older Adults”*
Eric Porges, PhD
Assistant Professor
University of Florida
- 5:00 – 5:05 p.m. Additional Q & A

Friday, April 6, 2018

7:30 - 9:00 a.m. Breakfast Buffet and Hotel Check-out
Location: Heritage 2

7:30 – 9:00 a.m. Board of Directors Breakfast with MBI Directors
Breakfast Buffet: Location: Heritage 2
Meeting: Hotel Boardroom – Lower Level

SESSION IV Data Blitz: Trends in Neuroscience

Location: Heritage 1 MODERATOR – **Erik Roberson, MD, PhD**

9:00 – 9:08 a.m. *“Neurobiological Mechanisms of Age-Associated Changes in Decision-Making”*

Jennifer Bizon, PhD

Professor

College of Medicine

Department of Neuroscience and Psychiatry

Evelyn F. and William L. McKnight Brain Institute

University of Florida

9:10 – 9:18 a.m. *“Contributions of Perirhinal and Postrhinal Cortex to Memory: Implications for Aging”*

Lee Ryan, PhD

Professor and Department Head

Associate Director, Evelyn F. McKnight Brain Institute

Director, Cognition and Neuroimaging Laboratory

University of Arizona

9:20 – 9:28 a.m. *“Processing Speed Training to Preserve Driving and Functional Competencies in Persons with Mild Cognitive Impairment”*

Virginia Bradley, PhD

Professor

Med-Gerontology/Geriatrics/Palliative Care

University of Alabama at Birmingham

9:30 – 9:38 a.m. *“Retinal Microvascular and Microstructural Changes in Normal Aging and Alzheimer’s Disease”*

Hong Jiang, MD, PhD

Assistant Professor of Clinical

Neuro-ophthalmology & Neurology

Bascom Palmer Eye Institute

Department of Neurology

University of Miami

9:40 – 9:48 a.m. *“Perforant Path Fiber Loss Impairs Mnemonic Similarity Task Performance in Rats”*

Sara Burke, PhD

Assistant Professor

Department of Neuroscience

University of Florida

- 9:50 – 9:58 a.m. *"Neat1 Mediated Histone Methylation and c-Fos Gene Expression in Memory and Age-Related Memory Deficits"*
Farah Lubin, PhD
Associate Professor
Department of Neurobiology
University of Alabama at Birmingham
- 10:00 – 10:08 a.m. *"Post-Stroke Physical Exercise Improves Cognitive Outcomes in Young and Elderly Animals"*
Kunjan Dave, PhD
Research Associate Professor
Department of Neurology
University of Miami
- 10:10 – 10:18 a.m. *"Use of Internet-Based Testing to Identify Factors Associated with Successful Cognitive Aging"*
Matthew Huentelman, PhD
Professor, Neurogenomics Division
Scientific Director, Center for Rare Childhood Disorders
The Translational Genomics Research Institute
University of Arizona
- 10:20 - 11:20 a.m. Pre-Meeting Reports
- 11:20 a.m. Closing Remarks

Ronald M. Lazar, PhD

J. Lee Dockery, MD
- 11:30 a.m. Travelers pick up box lunches
Foyer – Lower Level
- 11:30 a.m. Shuttle service to airport begins