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

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**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

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**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  
McKnight Brain Research Foundation
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