

Fourth Annual McKnight Brain Research Foundation Inter-Institutional Meeting

“Reducing the risk of age-related memory loss”

Sunday, May 1st to Tuesday, May 3rd, 2011

University of Miami

Sunday, May 1, 2011

3:00 -5:15 p.m.

Registration Opens
Pre-function Area
Mediterranean Center Foyer

5:30 p.m. – 7:00 p.m.

Welcome Reception - located at pool deck
Miami Beach Resort and Spa
4833 Collins Ave
Miami Beach Florida 33140
(305) 532-3600

(Dinner at leisure)

Ralph L. Sacco, M.S., M.D., F.A.A.N., F.A.H.A. - Introductions
Executive Director, Evelyn F. McKnight Brain Institute
University of Miami Miller School of Medicine

Donna E. Shalala, Ph.D.
President, University of Miami

John G. Clarkson, M.D.
Trustee, McKnight Brain Research Foundation
Dean Emeritus, University of Miami Miller School of Medicine

Clinton B. Wright, M.S., M.D. – Program preview
Scientific Director, Evelyn F. McKnight Brain Institute
University of Miami Miller School of Medicine

Fourth Annual McKnight Brain Research Foundation Inter-Institutional Meeting

Monday, May 2, 2011

7:00 a.m. - 8:30 a.m. Buffet breakfast for participants
Grand Promenade Room

8:00 a.m. - 8:45 a.m. Registration
Pre-function Area
Mediterranean Center Foyer

8:55 a.m. – 9:10 a.m. Welcome
Mediterranean Center Ballroom

Ralph L. Sacco, M.S., M.D., F.A.A.N., F.A.H.A.
Executive Director, Evelyn F. McKnight Brain Institute
Chairman, Department of Neurology
University of Miami Miller School of Medicine

Pascal J. Goldschmidt, M.D.
Senior Vice President for Medical Affairs and Dean,
University of Miami Miller School of Medicine;
Chief Executive Officer, University of Miami Health System

J. Lee Dockery, M.D.
Trustee, McKnight Brain Research Foundation

Opening Remarks
Clinton B. Wright, M.S., M.D.
Scientific Director, Evelyn F. McKnight Brain Institute
Department of Neurology
University of Miami Miller School of Medicine

SESSION I – Speakers **Modifiable Vascular Risks in Cognitive Aging**

9:10 a.m. - 9:30 a.m. *“Ideal Cardiovascular and Brain Health”*
Ralph L. Sacco, M.S., M.D., F.A.A.N., F.A.H.A.
Executive Director, Evelyn F. McKnight Brain Institute
Chairman, Department of Neurology
University of Miami Miller School of Medicine

Fourth Annual McKnight Brain Research Foundation Inter-Institutional Meeting

Monday, May 2, 2011 (continued)

- 9:30 a.m. – 9:50 a.m.** *“Cognitive Correlates of Cardiometabolic Syndrome”*
Bonnie E. Levin, Ph.D.
Schoninger Associate Professor of Neurology
Evelyn F. McKnight Brain Institute
University of Miami Miller School of Medicine
- 9:50 a.m. – 10:10 a.m.** *“The Spectrum of Vascular Cognitive Disorders”*
Michael F. Waters, M.D., Ph.D.
Assistant Professor of Neurology and Neuroscience
William L. and Evelyn F. McKnight Brain Institute, University of Florida
- 10:10 a.m. – 10:30 a.m.** *“Impact of Hypertension and Aerobic Fitness on Cognitive Aging”*
Gene E. Alexander, Ph.D.
Professor, Department of Psychology and
Evelyn F. McKnight Brain Institute
School of Mind, Brain and Behavior, University of Arizona
- 10:30 a.m. – 10:45 a.m.** Panel Discussion
- 10:45 a.m. – 11:00 a.m.** Break
Mediterranean West Ballroom
- DATA BLITZ I: Neurobiology of Memory**
10 minute Mini Talks
- Moderator:** **Thomas C. Foster, Ph.D.**
Professor and McKnight Chair for Research on Aging & Memory
Department of Neuroscience
William L. and Evelyn F. McKnight Brain Institute, University of Florida
- 11:00 a.m. - 11:10 a.m.** *“Basal Forebrain Systems and Age-related Cognitive Decline”*
Jennifer L. Bizon, Ph.D.
Associate Professor, Department of Neuroscience
William L. and Evelyn F. McKnight Brain Institute, University of Florida

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Monday, May 2, 2011 (continued)

- 11:10 a.m. - 11:20 a.m.** *“Influence of an active lifestyle on memory and senescent physiology: Rejuvenation through neural activity”*
Ashok Kumar, Ph.D.
Research Assistant Professor, Department of Neuroscience
William L. and Evelyn F. McKnight Brain Institute, University of Florida
- 11:20 a.m. – 11:30 a.m.** *“Loss of astrocyte regulated potassium and glutamate homeostasis in pathophysiology”*
Michelle Olsen, Ph.D.
Assistant Professor, Department of Physiology & Biophysics
Investigator, Evelyn F. McKnight Brain Institute
University of Alabama at Birmingham
- 11:30 a.m. – 11:40 a.m.** *“Klotho Protein in Aging-related Memory Dysfunction”*
Gwendalyn King, Ph.D.
Assistant Professor, Department of Neurobiology
Investigator, Evelyn F. McKnight Brain Institute
University of Alabama at Birmingham
- 11:40 a.m. – 11:50 a.m.** *“Improved Automated Ventricular Segmentation by Combining FreeSurfer and Guided Morphological Filter”*
Ahmet Murat Bagci, Ph.D.
Senior Research Associate, Department of Radiology
Evelyn F. McKnight Brain Institute
University of Miami Miller School of Medicine
- 11:50 a.m. – 12:00 p.m.** *“Prefrontal cortex function and decision making in aging rats”*
Nathan Insel, Ph.D.
Postdoctoral Research Associate
Evelyn F. McKnight Brain Institute
University of Arizona
- 12:00 p.m. - 1:00 p.m.** *Lunch & Learn*
Mediterranean West Ballroom
- 12:30 p.m. -1:00 p.m.** *“Education Initiatives in Age-related Memory Loss”*
Richard S. Isaacson, M.D.
Education Director, Evelyn F. McKnight Brain Institute
University of Miami Miller School of Medicine

Fourth Annual McKnight Brain Research Foundation Inter-Institutional Meeting

Monday, May 2, 2011 (continued)

1:00 p.m. – 1:15 p.m.

Shuttles Depart to University of Miami for Tour

Pickup outside lobby area – street level

2:00 p.m. – 2:15 p.m.

**Welcome to McKnight Brain Institute at the University of Miami
Miller School of Medicine**

Clinical Research Building - 6th Floor Executive Center

Ralph L. Sacco, M.S., M.D., F.A.A.N., F.A.H.A.

Executive Director, Evelyn F. McKnight Brain Institute

Chairman, Department of Neurology

University of Miami Miller School of Medicine

2:15 p.m. – 3:15p.m.

Keynote Speaker

“The science of vascular dementia”

Costantino Iadecola, M.D.

George C. Cotzias Distinguished Professor of Neurology and Neuroscience

Chief, Division of Neurobiology

Department of Neurology and Neuroscience

Weill Cornell Medical College

Attending Neurologist, New York-Presbyterian Hospital

3:15 p.m. – 4:15p.m.

McKnight Brain Institute - Group tours

- Neurology Laboratory & Scheinberg Cerebrovascular Lab (TSL)
Drs. Moraes, Defazio and Perez-Pinzon
- Hussman Institute for Human Genomics
Drs. Blanton, Hedges and McCauley
- Brain Imaging Tour –Evelyn F. McKnight Brain Institute (CRB) 13th Floor
Conf. room # 1381
Drs. Alperin and Nahab

4:15p.m.

Shuttle service to Hotel

Pickup in front of Clinical Research Building (CRB)

Fourth Annual McKnight Brain Research Foundation Inter-Institutional Meeting

Monday, May 2, 2011 (continued)

- 6:30 p.m. - 7:00 p.m.** **Board Ship & Set Sail**
“Biscayne Lady” –docked across the street from hotel
- 7:00 p.m. - 7:30 p.m.** Cocktail Reception
- 7:30 p.m. - 10:30 p.m.** Dinner – Biscayne Lady
Touring Miami Bay

Fourth Annual McKnight Brain Research Foundation Inter-Institutional Meeting

Tuesday May 3, 2011

- 7:30 a.m. - 8:55 a.m.** Buffet Breakfast
Pre-function Area
Grand Promenade Room
- 8:00 a.m. – 9:00 a.m.** Private Breakfast & meeting of Trustees, McKnight Directors, Endowed Professors and Endowed Chairs
Miramar North Conference Room
- 9:00 a.m.** Sessions begin - *Mediterranean Center Ballroom*

SESSION II – Speakers **Brain Fitness and Targets for Intervention**

- 9:00 a.m. - 9:20 a.m.** *"The Age-protective Effects of Mindfulness Training on Working Memory and Attention"*
Amishi P. Jha, Ph.D.
Associate Professor, Department of Psychology
Evelyn F. McKnight Brain Institute
University of Miami Miller School of Medicine
- 9:20 a.m. – 9:40 a.m.** *"Visual Cognition in Aging"*
David S. Geldmacher, M.D., F.A.C.P.
Collat Endowed Professor of Neurology
Director of the Division of Memory Disorders and Behavioral Neurology
Investigator, Evelyn F. McKnight Brain Institute
University of Alabama at Birmingham
- 9:40 a.m. – 10:00 a.m.** *"Increased mitochondrial metabolism protects cells during aging"*
Carlos T. Moraes, Ph.D.
Professor of Neurology and Cell Biology and Anatomy
Evelyn F. McKnight Brain Institute
University of Miami Miller School of Medicine

Fourth Annual McKnight Brain Research Foundation Inter-Institutional Meeting

Tuesday May 3, 2011 (continued)

10:00 a.m. – 10:20 a.m. *“Project VITAL: Does pre-dosing with exercise affect behavioral plasticity associated with cognitive training?”*

Michael Marsiske, Ph.D.

Associate Professor and Associate Chair for Research

Department of Clinical and Health Psychology

University of Florida

&

Dawn Bowers, Ph.D.

Professor, Department of Clinical and Health Psychology

William L. and Evelyn F. McKnight Brain Institute, University of Florida

10:20 a.m. – 10:35 a.m. Panel Discussion

10:35 a.m. – 11:00 a.m. Break - *Mediterranean West Ballroom*
Check out - *Lobby*

Data Blitz II: Human Cognition

10 minute Mini Talks

Moderator:

Carol A. Barnes, Ph.D.

Director, Evelyn F. McKnight Brain Institute

Regents' Professor, Psychology and Neurology

Evelyn F. McKnight Chair for Learning and Memory in Aging

University of Arizona

11:00 a.m. - 11:10 a.m. *“Symptom Dimensions of Depression and Working Memory-related Neural Activity in Older Adults”*

Vonetta Dotson, Ph.D.

Assistant Professor, Department of Clinical & Health Psychology

College of Medicine, University of Florida

11:10 a.m. – 11:20 a.m. *“The effects of distraction and interruption forms of interference on recognition memory”*

Sara N. Burke, Ph.D.

Postdoctoral Research Associate

Evelyn F. McKnight Brain Institute

University of Arizona

Fourth Annual McKnight Brain Research Foundation Inter-Institutional Meeting

Tuesday May 3, 2011 (continued)

- 11:20 a.m. – 11:30 a.m.** “*Networks of gray and white matter in healthy aging*”
Kaitlin L. Bergfield, B.S.
Graduate Associate
Evelyn F. McKnight Brain Institute
University of Arizona
- 11:30 a.m. – 11:40 a.m.** “*Functional compensation in older adults: Varying task difficulty in an fMRI source memory task*”
Lee Ryan, Ph.D.
Associate Professor, Departments of Psychology and Neurology
Evelyn F. McKnight Brain Institute
University of Arizona
- 11:40 a.m. -11:55 a.m.** Concluding Remarks
- Clinton B. Wright, M.S., M.D.**
Scientific Director, Evelyn F. McKnight Brain Institute
Department of Neurology
University of Miami Miller School of Medicine
- J. Lee Dockery, M.D.**
Trustee, McKnight Brain Research Foundation
- 11:55 a.m. – 12:05 p.m.** Box Lunch – *Pick up at Mediterranean West Ballroom*
- 12:10 p.m.** Departure
- 12:15 p.m. - 5:00 p.m.** Private Board Meeting/Luncheon
Miramar North Conference Room

Keynote Speaker

Costantino Iadecola, M.D.

George C. Cotzias Distinguished Professor of Neurology and Neuroscience
Chief, Division of Neurobiology
Department of Neurology and Neuroscience
Weill Cornell Medical College
Attending Neurologist, New York –Presbyterian Hospital
Phone: 646 -962-8279
Email: coi2001@med.cornell.edu



Dr. Iadecola is a clinician-scientist who is an internationally-recognized expert in the field of cerebrovascular diseases and stroke. His research focuses on the basic mechanisms by which the brain suffers and dies when its blood supply is compromised, leading to stroke and dementia, and in developing new therapies for these devastating conditions.

Biography

Costantino Iadecola is the G. C. Cotzias Distinguished Professor of Neurology and Neuroscience and Chief of the Division of Neurobiology at Weill Cornell Medical College, New York City.

Dr. Iadecola received the MD degree from the University of Rome, Italy, in 1977, wherein he pursued neurology training with Prof. Cesare Fieschi. In 1980, he joined Cornell University first as a post-doctoral fellow with Dr. Donald Reis, and then as Neurology Resident with Dr. Fred Plum. In 1990, Dr. Iadecola was recruited to the Department of Neurology of the University of Minnesota by Dr. Richard Price. He rose through the academic ranks serving as Professor and Vice-Chair for Research from 1997 to 2001. In 2001, Dr. Iadecola was recruited back to Cornell to his current post, previously held by his mentor Dr. Reis.

Dr. Iadecola's research focuses on the mechanisms of normal and abnormal cerebrovascular regulation, and on the molecular pathology of ischemic brain injury and neurodegeneration. A major area of interest deals with the interactions between cardiovascular risk factors, stroke and Alzheimer's disease. His laboratory is a fertile training ground for junior faculty, post-doctoral fellows, graduate and medical students. Dr. Iadecola has published over 200 papers in peer-reviewed journals. He is active in several national and international research organizations and funding agencies. He has served on the Research Committee of the American Heart Association (AHA) and on the Stroke Council. He has chaired the Program Committee of the International Stroke Conference. He participates in focus groups and review committees at the NIH. He is President (Chair) of the Scientific Advisory Committee of the Fondation Leducq and is an advisor to the Canadian Stroke Network, the European Stroke Network, the German Stroke Network and for the Institute of Stroke and Dementia Research. Dr. Iadecola has served as Associate Editor (2000-2010) and is currently Consulting Editor for *Stroke*, the leading journal for cerebrovascular diseases, and Reviewing Editor for the *Journal of Neuroscience*, the official journal of the Society for Neuroscience. He serves as Guest Editor for *Circulation* and for the

Proceeding of the National Academy or Sciences. He is a member of the editorial board of the *Annals of Neurology*, the *American Journal of Physiology (Heart and Circ. Physiol.)*, *Cerebrovascular Diseases*, and the *Journal of Cerebral Blood Flow and Metabolism*. He has received the Laurence McHenry Award from the American Academy of Neurology, the Louis Sklarow Memorial Award, the Established Investigator Award from the AHA, the Jacob Javits Award from National Institute of Neurological Disorders and Stroke, NIH. In 2009, Dr. Iadecola received the Willis Award, the highest honor bestowed by the AHA, in recognition of his outstanding accomplishments in the field of stroke and cerebrovascular diseases. Since the 1980s, his work has been consistently funded by the NIH and the American Heart Associat