

**POWER OF PRECISION AGING APPROACHES
TO BRAIN HEALTH & COGNITION**

March 23 – 25, 2022
Westin La Paloma Resort, Tucson, Arizona

Wednesday March 23, 2022

12:00 – 5:00 PM	MBRF Board Meeting, <i>Sunsets Room, Lobby Level</i>
1:00 – 6:00 PM	Registration, Sonoran Foyer, <i>Lobby Level</i>
5:30 – 7:30 PM	Opening Reception and Dinner <i>Terrace Level Foyer and Patio</i>
6:00 PM	<i>Welcome Remarks</i> Carol A. Barnes, Ph.D. Director, Evelyn F. McKnight Brain Institute Evelyn F. McKnight Chair for Learning and Memory in Aging Regents Professor, Psychology, Neurology and Neuroscience University of Arizona Robert C. Robbins, M.D. 22 nd President of the University of Arizona JP Roczniak President and CEO, University of Arizona Foundation Michael L. Dockery, M.D. Chair, McKnight Brain Research Foundation

Thursday March 24, 2022

7:30 – 8:40 AM	Breakfast <i>Murphey Room, Terrace Level West</i>
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8:45 – 9:10 AM	Opening Remarks and Welcome <i>Sonoran II, Lobby Level West</i> Lee Ryan, Ph.D. Associate Director, Evelyn F. McKnight Brain Institute, University of Arizona Professor and Head, Psychology Department University of Arizona Elizabeth Cantwell, Ph.D. Senior Vice President for Research and Innovation University of Arizona
9:10 AM	<i>Overview of Meeting Structure</i> Carol Barnes, Ph.D. Director, Evelyn F. McKnight Brain Institute University of Arizona
9:20 AM	<i>Lessons learned from Precision Medicine that apply to Precision Aging.</i> Roberta Diaz Brinton, Ph.D. Director, UA Center for Innovation in Brain Science Regents Professor, Pharmacology and Neurology University of Arizona
9:50 AM	<i>Break</i>
10:20 – 11:10 AM	<i>The importance of centering diversity in cognitive aging research.</i> Keynote Speaker Lisa Barnes, Ph.D. The Alla V. and Solomon Jesmer Professor of Gerontology and Geriatric Medicine, Department of Neurological Sciences Rush Medical College
11:10 – 11:20 AM	Discussion
11:20 – 12:20 PM	Novel methods for recruiting and retaining diverse participants for studies of brain and cognitive aging. Moderator: Bonnie Levin, Ph.D.
11:20 – 11:30 AM	<i>MindCrowd and Mobile Minds: Enhancing recruitment via electronic and mobile lab approaches</i> Matt Huentelman, Ph.D. Professor Neurogenomics Division The Translational Genomics Research Institute
11:30 – 11:35 AM	Discussion

11:35 – 11:45 AM	<i>Creative recruiting strategies, and successes</i> Tatjana Rundek, M.D., Ph.D., FAAN Professor of Neurology Scientific Director, Evelyn F. McKnight Brain Institute University of Miami Miller School of Medicine
11:45 – 11:50 AM	Discussion
11:50 – 12:00 PM	<i>Recruiting and retaining diverse participants for studies of brain and cognitive aging: It takes a village, \$\$, and advance planning</i> Virginia Howard, Ph.D. Distinguished Professor of Epidemiology University of Alabama at Birmingham
12:00 – 12:05 PM	Discussion
12:05 – 12:15 PM	<i>Engagement and Recruitment of Minority Participants – Lessons from the All of Us Program Research</i> Tomas Nuno, Ph.D. Assistant Research Professor Department of Epidemiology and Biostatistics University of Arizona
12:15 – 12:20 PM	Discussion
12:20 – 1:40 PM	Lunch <i>Murphey Room, Terrace Level West</i>
1:45 – 2:35 PM	<i>Why do some people show resistance to cognitive aging?</i> Keynote Speaker Emily Rogalski, Ph.D. Professor of Psychiatry and Behavioral Sciences Northwestern University
2:35 – 2:45 PM	Discussion
2:45 – 3:15 PM	<i>Break</i>
3:15 – 4:15 PM	Genetic and epigenetic contributions to individual differences in aging. Moderator: Erik Roberson, M.D.
3:15 – 3:25 PM	<i>Role of epigenetics in cognitive decline</i> Tom Foster, Ph.D.

Professor of Neuroscience
Evelyn F. McKnight Chair for Research on Cognitive Aging and Memory
University of Florida

3:25 – 3:30 PM

Discussion

3:30 – 3:40 PM

Long noncoding RNAs in aging and memory decline

Farah Lubin, Ph.D.

Associate Professor Neurobiology
University of Alabama at Birmingham

3:40 – 3:45 PM

Discussion

3:45 – 3:55 PM

Biological clocks in families

Susan Blanton, Ph.D.

Professor Human Genetics and Otolaryngology
University of Miami

3:55 – 4:00 PM

Discussion

4:00 – 4:10 PM

Synapse health in cognitive aging: central roles for microglial regulation of the extracellular matrix?

Daniel T Gray, Ph.D.

Postdoctoral Scholar
Awardee, MBRF/AFAR Innovator Award in Cognitive Aging and Memory Loss
UCLA

4:10 – 4:15 PM

Discussion

4:15 – 5:00 PM

Panel: Next steps to make solutions for optimizing cognitive health a reality – or “how to take our science out of the lab and make it useful for people”.

Moderator: Lee Ryan, Ph.D.

- **Meredith Hay, Ph.D.**, Professor of Physiology, University of Arizona
- **Ralph Sacco, M.D., M.S., FAHA, FAAN**, Professor of Neurology, University of Miami
- **Ron Lazar, Ph.D., FAAN**, Professor of Neurology & Neurobiology, U. Alabama at Birmingham
- **Russ Bauer, Ph.D.**, Professor, Department of Neurology, University of Florida

5:30 – 7:30 PM

Casual Reception and Dinner
Fiesta Area

This will be informal, and outside

Friday March 25, 2022

7:00 – 8:30 AM	Breakfast and checkout <i>Murphey Room, Terrace Level West</i>
7:30 – 8:30 AM	Board meeting, Trustees, Leadership Council <i>Cottonwood, Mezzanine Level</i>
8:15 – 8:30 AM	Load buses for departure to campus
8:45 AM	Buses depart for University of Arizona <i>Environment and Natural Resources 2 Building, Room S-107</i>
9:30 – 10:45 AM	<i>Data Blitz on updates on collaborative projects, pilot projects and new findings</i> Moderator: Jen Bizon, Ph.D.
9:00 – 9:05 AM	<i>The McKnight Brain Aging Registry (MBAR): an update</i> Kristina Visscher, Ph.D. Associate Professor Department of Neurobiology Heersink School of Medicine University of Alabama at Birmingham
9:05 – 9:10 AM	Discussion
9:10 – 9:15 AM	<i>Sleep and cognition in Hispanic Community Health Study – Study of Latinos (HCHS-SOL)</i> Christian Agudelo, M.D. McKnight Cognitive Neurology Fellow Department of Neurology, Miller School of Medicine University of Miami
9:15 – 9:20 AM	Discussion
9:20 – 9:25 AM	<i>Biopsychosocial Correlates of Successful Cognitive Aging with HIV</i> Pariya Fazeli Wheeler, Ph.D. Assistant Professor, School of Nursing University of Alabama at Birmingham
9:25 – 9:30 AM	Discussion
9:30 – 9:35 AM	<i>Investigating mediators of exercise-related neuroprotection in mouse models</i> Karina Alviña, Ph.D. Research Assistant Professor of Neurosciences University of Florida

9:35 – 9:40 AM	Discussion
9:40 – 10:05 AM	<i>Break</i>
10:05 – 10:10 AM	<i>The impact of COVID-19 respiratory severity and levels of NFL on cognitive performance among older adults.</i> Justin Palmer Graduate Student Department of Psychology University of Arizona
10:10 – 10:15 AM	Discussion
10:15 – 10:20 AM	<i>Reuniting the Brain and Body to Understand Cognitive Aging: The Nexus of Geroscience and Neuroscience</i> (new McKnight pilot project recipient) Abbi Hernandez, Ph.D. Postdoctoral Fellow Department of Medicine University of Alabama at Birmingham
10:20 – 10:25 AM	Discussion
10:25 – 10:30 AM	<i>Decreasing Cognitive Loss and Vascular Rarefaction with Exercise</i> (new McKnight pilot project recipient) Amani Norling, MA, BCBA Graduate Research Fellow Department of Psychology, Behavioral Neuroscience, Department of Neurology University of Alabama at Birmingham
10:30 – 10:35 AM	Discussion
10:35 – 10:40 AM	<i>The neuroscience of phishing email detection and learning who to trust</i> (past McKnight pilot project recipient) Bob Wilson, Ph.D. Associate Professor, Department of Psychology University of Arizona
10:40 – 10:45 AM	Discussion
10:45 – 11:00 AM	<i>Closing Remarks</i> Carol A. Barnes, Ph.D. Director, Evelyn F. McKnight Brain Institute University of Arizona

Molly V. Wagster, Ph.D.

Chief, Behavioral and Systems Neuroscience Branch
Division of Neuroscience
National Institute on Aging

Michael L. Dockery, M.D.

Chair, McKnight Brain Research Foundation

11:15 AM

Travelers pick up box lunches and navigate to the airport transport buses

Those staying for further discussion meet at the lunch box pickup point