2020 Cognitive Aging Conference
Condensed Program
2020 Cognitive Aging Conference Schedule

**Wednesday, April 15**

4:00 PM – 6:00 PM  Conference Registration Begins

**Thursday, April 16**

8:00 AM – 1:00 PM  Conference Registration
9:00 AM – 12:00 PM  Pre-Conference Workshops
1:00 PM – 1:05 PM  Welcoming Remarks
1:05 PM – 3:05 PM  Symposium Session 1: Motivation-Cognition Interactions
3:05 PM – 3:30 PM  Break
3:30 PM – 5:30 PM  Poster Session A
5:30 PM – 6:00 PM  Break
6:00 PM – 7:00 PM  Keynote: The Arousal Hub Region in the Aging Brain (Dr. Mara Mather)
7:00 PM – 8:30 PM  Welcome Reception

**Friday, April 17**

8:00 AM – 10:00 AM  Symposium Session 2: The Noradrenergic System Shapes Later-Life Neural and Cognitive Development
10:00 AM – 10:30 AM  Break
10:30 AM – 12:30 PM  Symposium Session 3: Neural Pattern Analysis and Brain Aging
12:30 PM – 1:00 PM  Break (Lunch)
1:00 PM – 3:00 PM  Poster Session B
3:00 PM – 4:30 PM  Symposium Session 4: Longitudinal Change in Brain Function
4:30 PM – 5:00 PM  Break
5:00 PM – 5:30 PM  NIH/NIA Funding Opportunities, Initiatives and Insights
5:30 PM – 7:30 PM  Poster Session C & Cash Bar

**Saturday, April 18**

8:00 AM – 10:00 AM  Plenary Session 1: Sex & Gender
10:00 AM – 10:30 AM  Break
10:30 AM – 12:30 PM  Plenary Session 2: Emotion, Cognition, & Self-Regulation
12:30 PM – 1:00 PM  Break (Lunch)
1:00 PM – 3:00 PM  Poster Session D
3:00 PM – 5:00 PM  Symposium Session 5: Exercise and Cognitive Aging
5:00 PM – 5:30 PM  Break
5:30 PM – 7:30 PM  Poster Session E & Cash Bar

**Sunday, April 19**

8:00 AM – 10:00 AM  Poster Session F
10:00 AM – 10:30 AM  Break
10:30 AM – 12:30 PM  Plenary Session 3: Interventions
Thursday, April 16

**Workshop 1:** Using Mobile Technology to Administer and Collect Data  
Martin Sliwinski, Pennsylvania State University

**Workshop 2:** Separating Vascular and Neural Effects of Aging on fMRI BOLD Data  
Kamen A. Tsvetanov, Department of Clinical Neurosciences, University of Cambridge; Department of Psychology, University of Cambridge

**Symposium 1:** Motivation-Cognition Interactions

*Organizer:* Julia Spaniol, Ryerson University  
*Discussant:* Thomas M. Hess, North Carolina State University  
*Keywords:* Emotion and Affect, Memory, Decision making, Metacognition, Neuroscience: Functional

Heart rate oscillation biofeedback reduces default mode network functional connectivity and improves mindfulness  
Kaoru Nashiro, University of Southern California

Influences of self-reference and emotion on memory: Shared or separable mechanisms?  
Angela Gutchess, Brandeis University

Social associative learning and trust formation across adulthood  
Kendra L. Seaman, University of Texas at Dallas

Responsible remembering and the fear of forgetting fuels metamemory in older age  
Alan D. Castel, University of California, Los Angeles

**Poster Session A**  
3:30 PM -- 5:30 PM

**Keynote Address:** The Arousal Hub Region in the Aging Brain  
Mara Mather, Leonard Davis School of Gerontology and Department of Psychology, University of Southern California
Friday, April 17

Symposium 2: The Noradrenergic System Shapes Later-Life Neural and Cognitive Development

Organizer: Martin J. Dahl, Max Planck Institute for Human Development, Berlin, Germany
Keywords: Neuroscience: Structural, Cognitive Decline, Memory, Attention, Alzheimer's Disease

Locus coeruleus MRI signal intensity and associated cognitive performance across the adult lifespan
Kathy Liu, Division of Psychiatry, University College London, UK

Locus coeruleus integrity is positively related to cortical thickness in older adults
Shelby L. Bachman, Davis School of Gerontology, University of Southern California, Los Angeles, CA, USA

Noradrenergic responsiveness preserves selective attention across the adult lifespan
Martin J. Dahl, Max Planck Institute for Human Development, Berlin, Germany

Elucidating the role of the locus coeruleus in Alzheimer's disease from an aging perspective
Heidi IL Jacobs, Division of Nuclear Medicine and Molecular Imaging, Department of Radiology, Mass. General Hospital/Harvard Medical School

Symposium 3: Neural Pattern Analysis and Brain Aging

Organizer: Michael D. Rugg, University of Texas at Dallas
Discussant: Michael D. Rugg, University of Texas at Dallas
Keywords: Neuroimaging: Functional

Age deficits in neural discriminability and its relationship to memory
Nancy A. Dennis, Penn State University

Using pattern analysis to track interference in episodic memory across the adult lifespan
Audrey Duarte, Georgia Institute of Technology

Contributions of neural specificity and pattern stability to memory performance in younger and older adults
Myriam Sander, Max Planck Institute for Human Development

Neurocognitive and disease-related mechanisms underlying individual differences in episodic memory in cognitively normal older adults
Alexandra N. Trelle, Stanford University
**Symposium 4: Longitudinal Change in Brain Function**

**Organizer:** Kristen Kennedy, University of Texas at Dallas, Center for Vital Longevity  
**Discussant:** Naftali Raz, Wayne State University  
**Keywords:** Longitudinal, Neuroimaging: Functional, Methods, Cognitive Decline, Cognitive Control

- Longitudinal and cross-sectional network-cognition relations in the Reference Ability Neural Network (RANN) study  
  Christian Habeck, Columbia University

- Longitudinal evidence for reduced functional segregation in aging: Links to cognition and dopamine availability  
  Alireza Salami, Umea University, Karolinska Institute

- **Four Year Longitudinal Change in Task-Related Functional Activation across the Adult Lifespan**  
  Kristen Kennedy, University of Texas at Dallas

**NIH/NIA Symposium:** NIH/NIA Funding Opportunities, Initiatives and Insights

**Organizer:** Dana Plude, NIH National Institute on Aging

- **NIA Budget Growth, Funding Opportunities for Research in Aging**  
  Dr. Dana Plude, Deputy Director, Division of Behavioral and Social Research, NIA

- **Funding Opportunities and Initiatives in the Division of Behavioral and Social Research**  
  Dr. Jonathan King, Program Director, Individual Behavioral Processes Branch, NIA/BSR

- **Funding Opportunities and Initiatives in the Division of Neuroscience**  
  Dr. Molly Wagster, Chief of the Behavioral and Systems Neuroscience Branch in the Division of Neuroscience, NIA
Saturday, April 18

Plenary Session 1: Sex & Gender

Overview Speaker: Susan Resnick, Laboratory of Behavioral Neuroscience, National Institutes of Health

Males with Parkinson’s May Experience Greater Disease Burden in Aspects Of Cognitive And Psychosocial Function than Women
Allison A Bay, Emory University

Associations among latent factors of metabolic risk, brain volume, and cognition in old age differ by sex
Sandra Duzel, Max-Planck-Institute for Human Research

Spatial Mnemonic Similarity Task Performance is Associated with Sex, Age, and Hippocampal Subfield Volume Differences
Chris M Foster, University of Texas at Dallas

Gender Differences in Brain Morphology, Function and Blood Flow in the Cognitively Normal Oldest Old from McKnight Brain Aging Registry
Noam Alperin, University of Miami

Plenary Session 2: Emotion, Cognition, & Self-Regulation

Overview Speaker: Derek Isaacowitz, Northeastern University

Emotion, Cognition, and Aging: A Strategy Approach
Patrick Lemaire, Aix-Marseille University, CNRS

Oxytocin may facilitate neural recruitment in medial prefrontal cortex and superior temporal gyrus during emotion recognition in young but not older adults
Diana S. Cortes, Stockholm University

Examination of Behavioral and Neural Correlates of Emotional Response Inhibition in Older Adults
Anja Pogarcic, Saint Louis University

Attentional refocusing subsequent a negative stressor facilitates mood improvement in old age
Eric Allard, Cleveland State University
Poster Session D

Symposium 5: Exercise and Cognitive Aging: Key Mechanisms and Moderators

Organizer: Michelle W. Voss, PhD, Department of Psychological and Brain Sciences, University of Iowa

Keywords: Exercise and Fitness, Activity Engagement, Interventions, Executive Function, Memory

Refining Exercise Prescription for Cognitive Health
Teresa Liu-Ambrose, Department of Physical Therapy, The University of British Columbia

Cardiorespiratory Fitness is Associated with White Matter Hyperintensity Burden in Late-life
Jamie C. Peven, Department of Psychology, University of Pittsburgh

Designing Socially Motivated Interventions to Promote Cognitive and Physical Activity and Neurocognitive Health
Michelle C. Carlson, Johns Hopkins Bloomberg School of Public Health

Acute Exercise Promotes Engagement of Executive Control and Memory Networks
J. Carson Smith, Department of Kinesiology and the Neuroscience and Cognitive Science Program

Saturday, April 18
5:30 PM -- 7:30 PM
Sunday, April 19

Poster Session F

8:00 AM -- 10:00 AM

Plenary Session 3: Interventions

Overview Speaker: George Rebok, Johns Hopkins University

Synergistic effects of cognitive training and physical exercise on dual-task performance in older adults
Louis Bherer, Department of Medicine, Université de Montréal, Research center, Montreal Heart Institute, Research center, Institut universitaire de gériatrie de Montréal

A Systematic Review and Meta-Analysis of Older Driver Interventions
Bernadette A Fausto, Rutgers University — Newark

Train the aging brain through music: A randomized controlled trial in healthy older adults in Germany and Switzerland
Matthias Kliegel, University of Geneva, Switzerland

When is more better? The effect of dose on efficacy of the MAPT multidomain intervention in older adults
Sylvie Belleville, University of Montreal