SPECIAL THANKS

to the
Organizing Committee

Carol A. Barnes, PhD
University of Arizona

Patricia A. Boyle, PhD
Rush Alzheimer’s Disease Center

Erin H. Calhoun
National Institute on Aging

John F. Disterhoft, PhD
Northwestern University

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University of Florida

Michela Gallagher, PhD
Johns Hopkins University

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Emily J. Rogalski, PhD
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Tatjana Rundek, MD, PhD
University of Miami

David G. Standaert, MD, PhD
University of Alabama at Birmingham

Adam B. Steinmetz, PhD
National Institute on Aging

Molly V. Wagster, PhD
National Institute on Aging

and to the STAFF from the
Foundation for the
National Institutes of Health

DISCLOSURE:
This conference will be photographed, videotaped, and recorded. Your likeness and voice may be used in various digital and audio formats in communicating information about the Cognitive Aging Summit III, which the National Institute on Aging at NIH may share broadly with the public.

MEDIA ATTENDANCE:
Please note that representatives of the news media are expected to attend the Cognitive Aging Summit III. They may be reporting on comments made at this public conference and may approach attendees for information and background on the Summit and cognitive aging research generally.
SESSION I
HOW DO WE OPERATIONALIZE BRAIN RESERVE, COGNITIVE RESERVE, COGNITIVE RESILIENCE, AND COMPENSATION?

8:45 – 10:05 A.M.
SESSION CHAIR: NAFTALI RAZ, PhD
Wayne State University

SPEAKERS:
YAAKOV STERN, PhD
Columbia University
Reserve: An Evolving Chapter

CAROL A. BARNES, PhD
University of Arizona
Animal Models of Brain Adaptation and Compensation in Aging

CHERYL L. GRADY, PhD
University of Toronto
Age Differences in the Dynamic Flexibility of Brain Activity and Functional Connectivity

RICHARD N. JONES, ScD
Brown University
Measurement of Reserve

GENERAL DISCUSSION: 10:05 – 10:35 A.M.
BREAK: 10:35 – 10:55 A.M.
Salon C

SEVEN II
WHAT ARE THE THREATS TO SUCCESSFUL BRAIN AND COGNITIVE AGING?

10:55 A.M. – 12:15 P.M.
SESSION CHAIR: PETER R. RAPP, PhD
National Institute on Aging

SPEAKERS:
MICHELA GALLAGHER, PhD
Johns Hopkins University
Contributions of Neurocognitive Aging to Risk or Resilience (in Rats)

OZIOMA C. OKONKWO, PhD
University of Wisconsin, Madison
Aerobic Fitness and Genetics Contribute to Resilience in AD

SUSAN M. RESNICK, PhD
National Institute on Aging
Cognitive Resilience in the Face of Pathology

WILLIAM J. JAGUST, MD
University of California, Berkeley
Age-Related Pathology, Cognition, and Resilience

GENERAL DISCUSSION: 12:15 – 12:45 P.M.
LUNCH: 12:45 – 1:45 P.M.
Salon C
SESSION III

WHAT ARE THE EARLIER LIFE CONTRIBUTIONS TO RESERVE AND RESILIENCE?

1:45 – 3:05 P.M.
SESSION CHAIR: CARL W. COTMAN, PhD
University of California, Irvine

SPEAKERS:
KRISTINE B. WALHOVD, PhD
University of Oslo
Neurodevelopmental Origins of Lifespan Changes in Brain and Cognition

GARETH R. HOWELL, PhD
The Jackson Laboratories
Protecting the Neurovascular Unit to Promote Healthy Aging

STUART J. RITCHIE, PhD
University of Edinburgh
Predictors and Mechanisms of Cognitive Ageing: Evidence from the Lothian Birth Cohort of 1936

ROGER T. STAFF, PhD
NHS-Grampain/University of Aberdeen
Early Life Conditions on Late Life Accumulations of Pathological Burden and Cognitive Decline: Findings from the Aberdeen Birth Cohorts

GENERAL DISCUSSION: 3:05 – 3:35 P.M.
BREAK: 3:35 – 3:50 P.M.
Salon C

SESSION IV

WHAT ARE THE LATER LIFE CONTRIBUTIONS TO RESERVE, RESILIENCE, AND COMPENSATION?

3:50 – 5:10 P.M.
SESSION CHAIR: DENISE C. PARK, PhD
University of Texas at Dallas

SPEAKERS:
SARA N. BURKE, PhD
University of Florida
An Animal Model of Cognitive Aging: Do Compensatory Neural Processes Confer Resilience?

ELIZABETH C. MORMINO, PhD
Stanford University
Cognition and Amyloid in Healthy Adults: Who is Resilient and Who Declines?

EMILY J. ROGALSKI, PhD
Northwestern University
Neurobiologic Features of SuperAgers: Is it Resilience or Just Luck?

CLAUDIA H. KAWAS, MD
University of California, Irvine
Cognitive and Brain Resilience: Is it Present in the Oldest Old?

GENERAL DISCUSSION: 5:10 – 5:40 P.M.
WRAP-UP: 5:40 P.M.
RECEPTION: 6:30 – 8:00 P.M.
Foyer A-C
SESSION V
HOW DO WE VALIDATE APPROACHES THAT AIM TO HARNESS RESERVE TO IMPROVE THE AGING BRAIN?

8:30 – 9:50 A.M.
SESSION CHAIR: JOHN F. DISTERHOFT, PhD
Northwestern University

SPEAKERS:
LON R. WHITE, MD, MPH
Pacific Health Research and Education Institute
Brain Reserve, Cognitive Reserve, and Brain Co-Morbidity Burden Together Determine Resilience in Neuropathologic Alzheimer’s Disease

PATRICIA A. BOYLE, PhD
Rush Alzheimer’s Disease Center
Cognitive Aging: A Balance Between Neuropathology and Resilience

THOMAS C. FOSTER, PhD
University of Florida
On Biomarkers, Animal Models, and Senescence

ADAM H. GAZZALEY, MD, PhD
University of California, San Francisco
Technology Meets Neuroscience: A Vision of the Future of Brain Fitness

GENERAL DISCUSSION: 9:50 – 10:20 A.M.

BREAK: 10:20 – 10:30 A.M.
Salon C

SESSION VI
INNOVATIVE APPROACHES IN COGNITIVE AGING

10:30 – 11:50 A.M.
SESSION CHAIR: MARILYN S. ALBERT, PhD
Johns Hopkins University

SPEAKERS:
STEVEN N. AUSTAD, PhD
University Of Alabama At Birmingham
Cognitive Aging: New and Improved Animal Models

MARCELO A. WOOD, PhD
University of California, Irvine
Circadian Gene Regulation by Histone Deacetylation Contributes to Age-Related Impairments in Memory and Synaptic Plasticity

SAUL A. VILLEDA, PhD
University of California, San Francisco
Molecular Mechanisms of Brain Aging and Rejuvenation

JOEL L. VOSS, PhD
Northwestern University
Noninvasive Stimulation Targeting Aging Memory Networks

GENERAL DISCUSSION: 11:50 A.M. – 12:20 P.M.

CLOSING REMARKS: 12:20 – 12:30 P.M.
RICHARD J. HODES, MD
Director, National Institute on Aging

J. LEE DOCKERY, MD
Chair, Board of Trustees, McKnight Brain Research Foundation
The McKnight Brain Research Foundation® was created in 1999 to promote and support research and clinical investigation in mechanisms that underlie the neurobiology of memory, with the goal of improving the quality of life for an aging population through the understanding of cognitive aging and alleviation of age-related memory loss specific to the influence of aging. For more information, please go to [www.tmbrf.org](http://www.tmbrf.org).


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