

*The National Academies of*  
SCIENCES • ENGINEERING • MEDICINE

**DIVISION OF BEHAVIORAL AND SOCIAL SCIENCES AND EDUCATION**  
*Board on Behavioral, Cognitive, and Sensory Sciences*

v. 6/5/17

**Workshop on Understanding Pathways to Successful Aging: Behavioral and Social Factors  
Related to Alzheimer's Disease**

**The National Academies Keck Center**  
**500 Fifth Street, NW, Room 106**  
**Washington, DC**

**June 12-13, 2017**

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**WORKSHOP OBJECTIVE**

To understand the position of personality, a socially integrated and engaged lifestyle, and educational attainment in the causal pathways leading to Alzheimer's Disease.

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**AGENDA**

<b>Day One</b>	
<b>9:00 am</b>	<b>Welcoming Remarks and Introductions</b> <i>Barbara Wanchisen, Director, Board on Behavioral, Cognitive, and Sensory Sciences National Academies of Sciences, Engineering, and Medicine</i>
<b>9:10 am</b>	<b>Context and Meeting Objectives</b> <i>Lis Nielsen and Jonathan King, Division of Behavioral and Social Research National Institute on Aging</i>
<b>9:30 am</b>	<b>Overview of Meeting Agenda</b> <i>Arthur F. Kramer, Committee and Workshop Chair Northeastern University</i>

<p><b>9:40 am</b></p>	<p><b>SESSION ONE: METHODOLOGICAL APPROACHES FOR UNDERSTANDING PATHWAYS TO ALZHEIMER’S DISEASE</b></p> <p><b>Session Introduction</b>  <i>Roger Dixon, University of Alberta</i></p> <p>This session will focus on various study designs and methods for understanding pathways, including observational approaches (for example, large-scale, longitudinal, multivariate approaches), interventions (for example, clinical trials, translational approaches) and novel community-based approaches. Discussion will focus on strengths and weaknesses of various methods.</p> <p><b>Speakers</b>  <i>Roger Dixon, University of Alberta</i>  <i>Arthur F. Kramer, Northeastern University</i>  <i>Michelle Carlson, Johns Hopkins University School of Public Health</i></p> <p>Each presentation will be 15 minutes in length. Each presentation will be followed by 5 minutes of Q&amp;A. The session will conclude with 20 minutes of discussion. Presentations will cover the strengths and weaknesses of various approaches and how they may complement one another. Presenters will also discuss future directions for research.</p>
<p><b>11:00 am</b></p>	<p><b>Break</b></p>
<p><b>11:10 am</b></p>	<p><b>SESSION TWO: PERSONALITY</b></p> <p><b>Session Introduction</b>  <i>Angelina Sutin, Florida State University College of Medicine</i></p> <p>This session will provide a framing of what is known about the role of personality in the development of AD, risk factors for cognitive decline, potential mediators of personality and AD, and what happens to personality pre and post AD diagnosis.</p> <p><b>Speakers</b>  <i>Angelina Sutin, Florida State University College of Medicine</i>  <i>Grant Edmonds, Oregon Research Institute</i>  <i>Antonio Terracciano, Florida State University College of Medicine</i></p> <p>Each presentation will be 15 minutes in length. Each presentation will be followed by 5 minutes of Q&amp;A. The session will conclude with 20 minutes of discussion. Presentations will focus on the following topics:</p> <ul style="list-style-type: none"> <li>• Evidence linking personality to cognitive decline and AD.</li> <li>• Behavioral risk factors, life span models, and mechanisms.</li> <li>• Neuropathology and manifestation of dementia.</li> <li>• Future directions for research.</li> </ul>
<p><b>12:30 pm</b></p>	<p><b>Lunch (on your own in Keck 3<sup>rd</sup> floor atrium)</b></p>

<p><b>1:30 pm</b></p>	<p><b>SESSION THREE: SOCIAL AND COGNITIVE ENGAGEMENT</b></p> <p><b>Session Introduction</b>  <i>Arthur F. Kramer, Northeastern University</i></p> <p>This session will focus on what is known about the role of social and cognitive engagement in the development of AD and whether it is possible to tease apart these conceptually distinct areas. Panelists will discuss risk factors, trials, and social interventions.</p> <p><b>Speakers</b>  <i>Deborah Barnes, University of California, San Francisco</i>  <i>Elizabeth Stine-Morrow, University of Illinois</i>  <i>Denise Park, The University of Texas at Dallas (via video)</i></p> <p>Each presentation will be 15 minutes in length. Each presentation will be followed by 5 minutes of Q&amp;A. The session will conclude with 20 minutes of discussion. Presentations will focus on the following topics:</p> <ul style="list-style-type: none"> <li>• Importance of social activation for maintaining cognitive function.</li> <li>• Potential mechanisms by which social engagement impacts cognition.</li> <li>• Methodological approaches.</li> <li>• Future directions for research.</li> </ul>
<p><b>2:50 pm</b></p>	<p><b>Break</b></p>
<p><b>3:00 pm</b></p>	<p><b>SESSION FOUR: EDUCATION</b></p> <p><b>Session Introduction</b>  <i>Jennifer Manly, Columbia University Medical School</i></p> <p>This session will focus on what is known about years of education and educational experience as modifiable risk factors. Panelists will discuss how education influences cognitive function and AD, and potential mechanisms.</p> <p><b>Speakers</b>  <i>Jennifer Manly, Columbia University Medical School</i>  <i>Chandra Muller, The University of Texas at Austin</i>  <i>William S. Kremen, University of California San Diego</i></p> <p>Each presentation will be 15 minutes in length. Each presentation will be followed by 5 minutes of Q&amp;A. The session will conclude with 20 minutes of discussion. Presentations will cover:</p> <ul style="list-style-type: none"> <li>• Overview of disparities in cognitive functioning, AD, and noncognitive impairment and how educational experience may be a mechanism for these disparities.</li> <li>• What components of education may confer resilience or lead to risk.</li> <li>• Genetic and environmental influences on cognition.</li> <li>• Future directions for research.</li> </ul>
<p><b>4:20 pm</b></p>	<p><b>Discussion, Wrap up, Charge for Day 2</b>  <i>Arthur F. Kramer, Committee and Workshop Chair</i></p>
<p><b>5:00 pm</b></p>	<p><b>Adjourn Day One</b></p>

<b>Day Two</b>	
<b>9:00 am</b>	<b>Opening Remarks and Overview of Day Two</b> <i>Arthur Kramer</i>
<b>9:15 am</b>	<b>Reflections and Questions from Day One</b> <i>Arthur Kramer</i>  Discussion of outstanding questions and comments stemming from the prior day's presentations.
<b>9:45 am</b>	<b>Introduction to Breakout Sessions</b> <i>Arthur Kramer</i>
<b>10:15 am</b>	<b>Breakout Sessions</b>  All participants will be divided into one of three breakout groups (composition will be determined at the end of day 1). The task of each group is to identify gaps in knowledge, and generate study designs or compelling questions that could enhance the delineation of causal pathways.  <b>Session Moderators</b> <i>Roger Dixon</i> <i>Jennifer Manly</i> <i>Angelina Sutin</i>
<b>12:00 pm</b>	<b>Lunch (on your own in Keck 3<sup>rd</sup> floor atrium)</b>
<b>1:00 pm</b>	<b>Research Design Sessions continue</b>
<b>1:45 pm</b>	<b>Reports from Breakout Groups and Discussion of Proposed Studies/Questions</b>  Designated reporters from each group will summarize discussion (30 minutes of presentation and discussion time for each group).
<b>3:15 pm</b>	<b>Break</b>
<b>3:30 pm</b>	<b>Synthesis of Workshop Sessions</b> <i>Arthur Kramer</i>
<b>4:00 pm</b>	<b>Adjourn Workshop</b>