Division of Behavioral and Social Sciences and Education
Board on Behavioral, Cognitive, and Sensory Sciences

Workshop on Understanding Pathways to Successful Aging: How Social and Behavioral Factors Affect Health at Older Ages

June 11-12, 2015

Workshop Objectives

1. To review what is known in three focal areas on consistent associations between social and behavioral variables and health outcomes in midlife and older age.
2. To define a set of objective criteria for delineating causal pathways and causal relationships underlying such associations.
3. To identify the strongest approaches for investigating how antecedents of healthy aging are linked to favorable outcomes and for identifying the most promising targets for interventions in these domains.

AGENDA

DAY ONE

9:00 am EST Welcoming Remarks and Introductions
Barbara Wanchisen, Director, Board on Behavioral, Cognitive, and Sensory Sciences, NRC
Susan Fiske, Committee and Workshop Chair, Princeton University
David Reiss & Lis Nielsen, Division of Behavioral and Social Research, National Institute on Aging

9:30 am Session One: Exploring Three Antecedents to Healthy Aging
Three areas of research are the focus in this session because they have established clear association between an antecedent and consequent healthy aging. However, each would benefit from a more rigorous causal analysis. These areas are intended as a focus for all subsequent discussion.

- Optimism and healthy aging
- Marital satisfaction and healthy aging
- Educational attainment and healthy aging
Each presentation will address the following questions, using the focal domains as exemplars for approaching a deeper understanding of causal pathways linking social and behavioral factors to health in midlife and older age:

- What is the state of evidence regarding causal relationships between the antecedents and aging outcomes?
- Where causal associations are established, what are known or hypothesized mediators or moderators that affect the association between the antecedent and aging outcomes, with a particular emphasis on behavioral, social, and biological processes or mechanisms in the causal chain?
- What questions remain to be addressed to delineate causal pathways and identify – where appropriate - potential mechanistic targets for intervention?

Each presentation will be followed by 15 minutes of discussion time with the presenter.

**Optimism and healthy aging**  
*Laura Kubzansky, Harvard University*

**Marital satisfaction and healthy aging**  
*Janice Kiecolt-Glaser, The Ohio State University*

**Educational Attainment and healthy aging**  
*Jennifer Manly, Columbia University*

11:00 am  
**Break**

11:15 am  
**Session One, Continued**

12:00 pm  
**Q&A with Session One Presenters**

12:30 pm  
**Lunch (on your own in Keck 3rd floor atrium)**

1:30 pm  
**Introduction to Session Two: Strategies for Clarifying Pathways, Enhancing Causal Analyses and Delineating Mechanisms**  
*Moderator: Arun Karlamangla, University of California, Los Angeles*

*Dalton Conley, New York University*  
*Maria Glymour, University of California, San Francisco*  
*Eric Loucks, Brown University*  
*Matt McGue, University of Minnesota*  
*Joseph Schwartz, State University of New York, Stony Brook*  
*Joshua Smyth, Pennsylvania State University*

**Questions:** What new or underused techniques are available for establishing causal pathways?
• How can we better exploit longitudinal data and data linkages, including natural experiments, to draw more secure inferences about causal pathways?

• How might quantitative and molecular genetics aid in clarifying the role of genetic factors in mediating relationships between measures of the environment and measures of health?

• What are the most promising approaches for “thin slice” studies of mechanisms in each of the domains considered? That is, in what ways can observations conducted over brief spans of time be used to clarify causal pathways that may extend over much greater time periods?

• How can true experiments be used to model naturally occurring sequences and strengthen inferences about causal pathways?

• How might these techniques best identify malleable mediating processes that are plausible targets for intervention?

A panel of experts will address these questions with an emphasis on strengthening understanding as related to the three antecedents discussed in Session One through use of the following strategies:
1. Exploiting longitudinal studies
2. Molecular and quantitative genetic approaches
3. Experimental approaches

1:45 pm Session Two, Part One: Exploiting Longitudinal Studies

Maria Glymour, University of California, San Francisco
Joseph Schwartz, State University of New York, Stony Brook

2:45 pm Session Two, Part Two: Molecular and Quantitative Genetic Approaches

Matt McGue, University of Minnesota
Dalton Conley, New York University

3:45 pm Break

4:00 pm Session Two, Part Three: Experimental Approaches

Eric Loucks, Brown University
Joshua Smyth, Pennsylvania State University

5:00 pm Q&A with Session Two Panelists

5:30 pm Adjourn Day One

DAY TWO

9:00 am Opening Remarks and Overview of Day Two
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<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>9:15 am</td>
<td>Thoughts and Questions from Day One</td>
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<td>Discussion of outstanding questions and comments stemming from the prior day’s presentations.</td>
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<tr>
<td>9:45 am</td>
<td>Introduction to Research Design Sessions</td>
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<tr>
<td>10:15 am</td>
<td>Research Design Sessions.</td>
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<td>All participants will be divided into one of three breakout groups devoted to the topics of optimism, marital satisfaction and educational attainment. The task of each group is to design one more exemplar studies that could enhance the delineation of causal pathways. These designs might focus on a rigorous causal analysis of antecedent and consequent and/or focus on tracing pathways that lead to well-targeted interventions.</td>
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<tr>
<td>12:00 pm</td>
<td>Lunch (on your own in Keck 3rd floor atrium)</td>
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<td>1:00 pm</td>
<td>Research Design Sessions continue</td>
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<tr>
<td>1:45 pm</td>
<td>Reports from Breakout Groups and Discussion of Proposed Studies</td>
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<td>3:15 pm</td>
<td>Break</td>
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<td>3:30 pm</td>
<td>Synthesis of Workshop Sessions</td>
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<td>Robert Levenson, University of California, Berkeley</td>
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<td>4:00 pm</td>
<td>Adjourn Workshop</td>
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