Memory Day 2013
December 11-12
Australian Hearing Hub, Macquarie University

Draft Program
(subject to change)

DAY ONE (11TH December)

Memory, Cognition and Collaboration in Healthy Aging

9:00-9:30 Registration

Welcome and Overview of Themes, Theories, and Concepts

9:30-9:45 Dr. Adam Congleton, Department of Cognitive Science, Macquarie University

The workshop starts with a welcome by the Chair of the Organizing Committee, Adam Congleton. Associate Professor Amanda Barnier then offers a theoretical, methodological, empirical and applied framework for discussions about shared remembering.

9:45-10:45 Keynote: Associate Professor Amanda Barnier, Department of Cognitive Science, Macquarie University

From autobiographical memory to collective memory: Why remembering together might be crucial as we age

For more than a decade I have investigated individual memory, individual memory in small groups, and small-group collective memory, motivated by the observation that in everyday life we engage in many cognitive activities in the presence of, prompted by and in partnership with others. Guided by the philosophical framework of “distributed cognition/extended mind” and the little tested cognitive theory of “transactive memory”, our Collective Cognition team has used a range of memory paradigms to measure the products and processes, costs and benefits of remembering together versus alone. For instance, in a series of Collaborative Recall experiments we focused on older married couples sharing rich information and memories from their past. These older adults remembered better when they remembered with their spouse, which reduces the usual age-related deficit in episodic memory. These findings are inspiring us to explore when and how “collaborative remembering” with a long-term partner might compensate for, predict and/or even reduce the risk of memory and cognitive decline. Can remembering together promote and protect “healthy memory”, especially as we age and our memories start to fail? More broadly, our research adds to a growing literature that acknowledges that we live and operate in “cognitive systems” as well as to new methods striving to reliably and validly test people within such systems.
10:45-11:15 Morning Tea

**Memory and Cognition in Aging Adults**

**11:15-12:15 Keynote: Professor David Balota, Department of Psychology, Washington University in St. Louis**

*Discriminating healthy aging from the earliest stages of Alzheimer’s disease: Integrating neuroscience, attentional control, and behavioral variability*

Research examining changes in attentional control systems will be examined as a behavioral marker for early stage Alzheimer’s Disease (AD), and a potential predictor of later conversion to AD in cognitively normal individuals. Discussion will focus on the consequences of breakdowns in attentional control on memory performance, variability, and characteristics of reaction time distributions. Emphasis will be placed on recent work relating biomarkers (e.g., resting state fMRI connectivity and cerebral spinal fluid estimates of Aβ42 and tau) to changes in these control systems in non-demented individuals at risk for developing AD.

**12:15-1:15 Keynote: Professor Janet Duchek, Department of Psychology, Washington University in St. Louis**

*Lifestyle and personality measures as markers and predictors for early stage Alzheimer’s disease*

There is accumulating evidence that lifestyle and personality factors can modify the trajectory of age-related changes in cognitive performance, and indeed may directly influence neural systems underlying cognitive performance. Individual differences in various lifestyle and personality variables will be examined in cognitively normal individuals and early stage Alzheimer’s disease (AD). Our results suggest that personality (i.e., Neuroticism and Conscientiousness) is related to specific aspects of attentional control and may indeed serve as a unique indicator of the onset of AD. Furthermore, engagement in certain cognitive and social activity appears to be related to CSF biomarkers in non-demented individuals at risk for AD.

**1:15-2:30 Lunch Break**

**Collaboration and Memory in Older and Younger Adults**

**2:30-3:30 Keynote: Associate Professor Michelle Meade, Department of Psychology, Montana State University**

*Age and the social contagion of memory*

Remembering with other people is an important part of our lives as we often reminisce with others about our shared past experiences. However, others are not always accurate, and we often incorporate others’ errors into our own memory reports, a phenomenon known as the social contagion of memory. This talk will focus on the impact of age on the social contagion of memory. More specifically, I will present research examining age differences in susceptibility to social contagion and also research examining the role of partner age on social contagion.
Sequestration of Old Age

4:00-5:00 Keynote: Professor Michael Fine, Department of Sociology, Macquarie University

Ageism, envy and fear: The contradictory politics of the sequestration of old age in the 21st century

This paper explores sociological and other evidence and perspectives on the changing position of old age in the new millennium. Population ageing and the growth in welfare and affluence have facilitated the recognition of old age, according a veneer of respect, rights and privileges to ‘seniors’ in Australia as in most comparable countries. But this is accompanied by, and to extent disguises, the reality of sequestration and ‘othering’ that involves marginalization and lack of recognition (and often everyday humiliation) of those who grow older. The twentieth century saw an unprecedented extension of life expectancy and the growth of ‘the aged’ as a population group – with a corresponding level of recognition in policy and at a political level. Although significant inequalities and exclusion within age cohorts continue, this has ushered in a gradual process of recognition that is especially evident for those we may think of as the ‘young old’ / ‘third age’. For the ‘old old’, the so-called ‘fourth agers’, the physically and the cognitively dependent who experience chronic disease and disabilities, vulnerability and sequestration remains very real. Old age continues to present profound questions for psychologists, sociologists, researchers in other disciplines and for all of us as individual survivors as we grow older, about the value of old age in the so-called advanced societies of the 21st century.

5:30-6:00 Drinks Reception

Public Lecture

6:00-7:00 Professor David Balota, Department of Psychology, Washington University in St. Louis

Healthy aging and early stage Alzheimer’s disease: A paradigm shift in research

As the population ages, there is increasing economic and personal burden on society from Alzheimer’s disease. Professor Balota will present recent evidence suggesting that there are neural changes in the brain at least a decade before the onset of a clinical diagnosis. Because there is neuronal damage prior to diagnosis, there has been an increased emphasis on early behavioral and biological markers that predict later transition from healthy aging to early stage dementia. Evidence will be reviewed which integrates research from neurology, neuroimaging, and cognitive science in an attempt to better understand the disease in its earliest stages. Recent work will be presented which targets genetic disorders that allow for novel approaches to understanding basic mechanisms and provides a platform for investigations of potential treatments.
This session will be chaired by Lynne Malcolm from ABC's "All in the Mind" radio program. The public is invited to attend this lecture and will be encouraged to join the post lecture discussion with Professor Balota.

DAY TWO (12th December)

Session 1: Memory, Collaboration, and Interventions: Translating Ideas from the Lab to the "Wild"

In this session, five speakers with diverse research backgrounds will explore the complex process of taking well-established, laboratory-based techniques for improving memory and using them as memory intervention tools in everyday life. Harris will discuss the need to identify the specific ingredients involved in shared remembering amongst older adult couples that enable people to derive memory benefits from such collaboration, while Reese will discuss applied research looking at the consequences of coaching parents to use more elaborative forms of communication to support their children's memories. Lampit will present research investigating the reciprocal relationship between a healthy body and a healthy mind, while Wong will discuss how practicing spatial navigation skills in video games may improve memory. The session will end with a talk presented by Van Bergen discussing the contributions that developmental psychology has made towards memory intervention strategies for older adults.

9:30-10:00 Dr. Celia Harris, Department of Cognitive Science, Macquarie University

What are the active ingredients of successful shared remembering?

10:00-10:30 Professor Elaine Reese, Department of Psychology, University of Otago

Memory interventions with young children: Intended and unintended consequences

10:30-11:00 Morning Tea

11:00-11:30 Dr. Amit Lampit, Brain & Mind Research Institute, University of Sydney

Exercising body and brain for better cognitive health

11:30-12:00 Dr. Cara Wong, School of Psychology, University of Sydney

Spatial navigation and the hippocampus: Can playing video games in topographical environments help to rehabilitate memory?

12:00-12:30 Dr. Penny Van Bergen, Department of Education, Macquarie University

Interventions of older adults 101: Lessons from developmental psychology

12:30-2:00 Lunch Break
**Autobiographical and Social Memory**

In this session, Early Career Researchers (ECRs), Higher Degree Researchers (HDRs), and Postdoctoral Research Fellows will discuss research that examines a wide range of topics in social and autobiographical memory.

**2:00-2:15 Dr. Adam Congleton, Department of Cognitive Science, Macquarie University**

*The role of collaboration in the formation of shared memories and shared beliefs*

**2:15-2:30 Vana Webster, Department of Cognitive Science, Macquarie University**

*With a little help from my Fast Friends: How intimacy and cognitive load affects collaborative recall*

**2:30-2:45 Aline Cordonnier, Department of Cognitive Science, Macquarie University**

*Ordering our thoughts: What is future thinking and how do we talk about it?*

**2:45-3:00 Amanda Selwood, Department of Cognitive Science, Macquarie University**

*Cues, categories and strategies: Developing a simple collaborative process coding scheme*

**3:00-3:30 Afternoon Tea**

**3:30-3:45 Katya Numbers, Department of Cognitive Science, Macquarie University**

*Did I see that? Can I trust you? Credibility as a potential moderator in the transmission of false memories*

**3:45-4:00 Elizabeth Austin, Department of Cognitive Science, Macquarie University**

*The presentation and production: Role of gesture in spatial communication*

**4:00-4:15 Dr. Kirstin Robertson-Gillam, Department of Cognitive Science, Macquarie University**

*Reminiscence for cognitive impairment in depression and dementia*

**4:15-4:30 Annemarie Zijlema, University of Technology, Sydney**

*Cue’s life cycles*

**4:30-4:45 Gina Lattas, Department of Psychology, Macquarie University**

*Expressive disclosure of concealed memories through art and writing*