

## Welcome

We are delighted that you can join us in a scientific celebration of the field of working memory research. This conference marks 40 years since the publication of the ground-breaking paper on working memory by Baddeley and Hitch in 1974. It has shaped the field of memory research ever since, and this third International Conference on Working Memory returns to Cambridge where the early research and much of the subsequent research on working memory was conducted.

The longevity of any theory in science attests to its utility and influence. After four decades and over 9000 citations, the 1974 paper has led to substantial empirical research and data-driven development of the original multiple component model. It has also stimulated a broad range of independent research programmes, and multiple different approaches and theories of on-line cognition. The conference will cover the full range of theoretical and empirical approaches, with presentations from many of the leading international working memory researchers.

The conference will be held at the University Arms Hotel in central Cambridge. On the evening of the first day, Wednesday 9<sup>th</sup> July, there will be a garden party at the MRC Cognition and Brain Sciences Unit, formerly the Applied Psychology Unit where Alan Baddeley and Graham Hitch first developed their ideas. We hope you will be able to join us for a drink this evening.

Robert Logie

Susan Gathercole

University of Edinburgh

MRC Cognition and Brain  
Sciences Unit, Cambridge



# **INTERNATIONAL CONFERENCE ON WORKING MEMORY**

Cambridge, 9-11<sup>th</sup> July 2014

## **PROGRAMME**

### **Venues**

Presentations, posters, lunches: University Arms  
Hotel, Regent Street, Cambridge, CB2 1AD

Evening reception (9<sup>th</sup> July): MRC Cognition and Brain  
Sciences Unit, 15 Chaucer Road, Cambridge, CB2 7EF

Conference Dinner (10<sup>th</sup> July, pre-booked places  
only): Trinity Hall, Trinity Lane, Cambridge, CB2 1TJ

Venue map at rear of booklet



## **Wednesday 9<sup>th</sup> July – Afternoon and reception**

12pm Registration at the University Arms Hotel

12-2pm **Poster session I** and Lunch, Mezzanine

### **Presentations, Session I, Main room:**

2.00pm **Susan Gathercole** (Cognition and Brain Sciences Unit)  
*Introduction to ICWM*

2.05pm **Alan Baddeley** (University of York)  
*Working memory at 40*

2.50pm **Pierre Barrouillet** (University of Geneva)  
*Loss of information from working memory*

3.10pm **Valerie Camos** (University of Fribourg)  
*The mechanisms of reconstruction in working memory*

3.30pm **Andrew Conway** (Princeton University)  
*Process Overlap Theory: A new interpretation of working memory capacity*

3.50pm *Refreshments*

4.20pm **Clive Frankish** (University of Bristol)  
*Memory for alternating lists: evidence for, rather than against, chaining models of serial order*

4.40pm **Steve Majerus** (Université de Liège, Belgium)  
*Working memory for serial order and the development of verbal and numerical abilities*

5.00pm **Klaus Oberauer** (University of Zurich)  
*Removal of distractors in complex working memory span tasks*

6-8pm **Drinks reception**  
MRC Cognition and Brain Sciences Unit

## Thursday 10<sup>th</sup> July – Morning and lunch

### Presentations, Session II, Main room:

- 9.15am **Graham Hitch** (University of York)  
*Exploring the episodic buffer*
- 10.00am **Richard Allen** (University of Leeds)  
*Exploring the dynamic interplay between attention and working memory*
- 10.20am **Dylan Jones** (Cardiff University)  
*Perceptual-motor affordance and short-term memory*
- 10.40am **Ed Awh** (University of Oregon)  
*Tracking the content and quality of working memory with near real-time temporal precision*
- 11.00am *Refreshments*
- 11.40am **Simon Farrell** (University of Bristol)  
Local and global effects of distraction in complex span
- 12.00pm **Brad Postle** (University of Wisconsin-Madison)  
*Revisiting assumptions about the physiological mechanisms underlying the short-term retention of information*
- 12.20pm **Zachary Shipstead** (Arizona State University)  
*Working Memory Capacity and Fluid Intelligence: Maintenance and Disengagement*
- 12.40pm **Nilli Lavie** (University College London)  
*Working memory and perception: dissociating maintenance and cognitive control functions through load*
- 1-2.30pm **Poster session II** and Lunch, Mezzanine

## Thursday 10<sup>th</sup> July – Afternoon and conference dinner

### Presentations, Session III, Main room:

- 2.30pm **Ed Vogel** (University of Oregon)  
*Inter- and intra-individual differences in visual working memory capacity and attentional lapses*
- 2.50pm **Mark D'Esposito** (University of California, Berkeley)  
*Revisiting the role of persistent neural activity during working memory*
- 3.10pm **Robert Logie** (University of Edinburgh)  
*Visual short-term memory, visual working memory and the visuo-spatial sketch pad*
- 3.30pm **Chris Jarrold** (University of Bristol)  
*Rehearsal and the development of verbal working memory*
- 3.50pm *Refreshments*
- 4.30pm **Stephan Lewandowsky** (University of Bristol and University of Western Australia)  
*Mechanisms of forgetting in short-term and working memory*
- 4.50pm **Dennis Norris** (Cognition and Brain Sciences Unit)  
*What are chunks, and where are they?*
- 5.10pm **Saturo Saito** (Kyoto University)  
*The role of temporal factors and long-term phonotactic knowledge in verbal short-term memory*
- 5.30pm **Mike Page** (University of Hertfordshire)  
*The phonological loop 40 years on: a mildly controversial view on what it is and what it's for*
- 7pm **Drinks and conference dinner**  
Trinity Hall, Cambridge (pre-booked places only)

## Friday 11<sup>th</sup> July – morning only

### Presentations, Session IV, Main room:

- 9.30am **Susan Gathercole** (Cognition and Brain Sciences Unit)  
*Working memory training, what training?*
- 9.50am **Joni Holmes** (Cognition and Brain Sciences Unit)  
*Working memory impairments and training in children with language difficulties*
- 10.10am **Donna Bayliss** (University of Western Australia)  
*Consolidating working memory: Enhancing cognitive performance through effective encoding*
- 10.30am **Poster session III** and coffee, Mezzanine
- 11.50am **John Duncan** (Cognition and Brain Sciences Unit)  
*A core brain system in assembly of cognitive episodes*
- 12.10pm **André Vandierendonck** (Ghent University)  
*Towards a working memory system with distributed executive control*
- 12.30pm **Nelson Cowan** (University of Missouri)  
*Working memory for the amount of change in an array*
- 1pm **Conference closes**