

JAMES S. MCDONNELL FOUNDATION - UNIVERSIDAD DE CHILE

## **ACADEMIC COMMITTEE**

John T. Bruer - James S. McDonnell Foundation – US Susan Fitzpatrick, James S. McDonnell Foundation – US Kathryn Hirsk-Pasek - Temple University - US David Klahr - Carnegie Mellon University – US Kenneth R. Koedinger -Carnegie Mellon University – US Mark A. McDaniel - Washington University in St. Louis – US Jacques Mehler - Scuola Internazionale Superiore di Studi Avanzati – Italy Marcela Pena – P. Universidad Católica de Chile & CIAE – Chile Sidarta Ribeiro – ELS International Institute of Neuroscience of Natal – Brasil Henry L. Roediger, III - Washington University in St. Louis – US Mariano Sigman - Universidad de Buenos Aires – Argentina

# **SCHOOL PLANNING**

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# **Scientific Program**

# Monday, 7 March

08:00 on ----- Reception & registration

#### Inauguration

17:30 - 18:45 Welcome cocktail

18:45 - 19:15 Welcome to the School. John Bruer, James S. McDonnell Foundation

## <u>Inaugural conference</u>

19:15 - 20:15 The role of attention in learning. Michael Posner, University of Oregon

20:30 ----- Welcome Dinner

# Tuesday, 8 March

07:00 - 08:00 Breakfast

08:00 - 09:30 Practice session: CNS methods (Tobii)

# Session 1

[Chairman: Susan Fitzpatrick, James S. McDonnell Foundation. Assistant: Sidarta Ribeiro, ELS International Institute of Neuroscience of Natal]

09:45 - 10:00 Introduction. Susan Fitzpatrick, James S. McDonnell Foundation

## General conference

10:00 - 11:00 Default network & learning. Marcus E. Raichle, Washington University in St. Louis 11:00 - 11:30 Coffee Break

## Language & reading: From speech to reading

11:30 - 12:30 Syntax and learning. Luiggi Rizzi, Università di Siena

12:30 - 14:00 Lunch

14:00 - 15:00 Phonology and learning. Marina Nespor, Università di Milano Bicocca

15:00 - 16:00 Meaning across modalities: sign vs spoken languages. Philippe Schlenker, Institut Jean-Nicod

16:00 - 16:30 Coffee Break

16:30 - 17:30 Grammar in the brain. Andrea C. Moro, Institute for Advanced Study IUSS Pavia

17:45 - 19:30 Journal club or Round table discussion

19:45 --- Dinner



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# Wednesday, 9 March.

07:00 - 08:00 Breakfast

08:05 - 09:30 Practice session: CNS methods (Tobii)

# Session 2

[Chairman: Kathryn Hirsh-Pasek, Temple University. Assistant: Marcela Peña, PUC & CIAE] 09:45 - 10:00 Introduction. Kathryn Hirsh-Pasek, Temple University

# Language & reading: The case of second language learning

- 10:00 11:00 Language development supporting early reading. Kathryn Hirsh-Pasek, Temple University
- 11:00 12:00 Learning strategies in bilinguals. Janet F. Werker, University of British Columbia
- 12:00 14:00 Lunch
- 14:00 15:00 Do bilinguals learn better? Jacques Mehler, Scuola Internazionale Superiore di Studi Avanzati
- 15:00 17:00 Journal club or Round table discussion

### General conference

- 17:30 18:30 Advanced technologies to support learners and learning scientists. Kenneth Koedinger, Carnegie-Mellon University
- 19:30 --- Dinner

# Thursday, 10 March

07:00 - 08:30 Breakfast

#### Session 3

[Chairman: Frank C. Keil, Yale University. Assistant: Sidarta Ribeiro, ELS International Institute of Neuroscience of Natal]

08:45 - 09:00 Introduction. Frank C. Keil, Yale University

# General conference

- 09:00 10:00 Sleep, memory and learning. Robert Stickgold, Harvard University
- 10:00 11:00 Sleep, Synapses, Synchrony and Circuits. Marcus E. Raichle, Washington University in St. Louis
- 11:00 11:30 Coffee break

## Language & reading: Language beyond sounds

- 11:30 12:30 Think, understand and explain in learning. Frank C. Keil, Yale University
- 12:30 14:00 Lunch
- 14:00 15:00 Perceptual expertise. Isabel Gauthier, Vanderbilt University
- 15:00 16:00 Children's social cognition and classroom learning: Cultural differences. Kristi Lockhart, Yale University
- 16:00 18:00 Journal club or Round table discussion
- 18:15 19:30 Guided project preparation
- 19:30 --- Dinner



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# Friday, 11 March

07:00 - 08:30 Breakfast

# Session 4

[Chairman: Bruce McCandliss, Vanderbilt University. Assistant: Marcela Pena, PUC & CIAE] 08:45 - 09:00 Introduction. Bruce McCandliss, Vanderbilt University

## Language & Reading: The reading brain: Structural constraints and plasticity

- 09:00 10:00 Brain structural constraints for learning: Good and poor readers. Ghislaine Dehaene-Lambertz, INSERM-CEA
- 10:00 11:00 Reading in the brain. Bruce McCandliss, Vanderbilt University
- 11:00 11:30 Coffee Break
- 11:30 12:30 Learning from print and screen media in the first years of life. Judy Deloache,
  University of Virginia
- 12:30 14:00 Lunch
- 14:00 15:00 How does brain research explain Dyslexia? Albert M. Galaburda, Harvard University
- 15:15 17:00 Journal club or Round table discussion

#### General conference

17:30 - 18:30 Beyond reading and math: The case of science education. David Klahr, Carnegie-Mellon University

19:00 --- Dinner

# Monday, 14 March

07:00 - 08:30 Breakfast

## Session 5

[Chairman: Stanislas Dehaene, INSERM-CEA. Assistant: Mariano Sigman, Universidad de Buenos Aires]

08:45 - 09:00 Introduction. Stanislas Dehaene, INSERM-CEA

### General conference

09:00 - 10:00 The learning curve. Charles R. Gallistel, Rutgers University

10:00 - 10:30 Coffee Break

### Math & Reasoning: From early concepts to educational interventions

- 10:30 11:30 Brain based models of math learning. Stanislas Dehaene, INSERM-CEA
- 11:30 12:30 How do children acquire math academic knowledge. Elida Laski, Lynch School of
- 12:30 14:00 Lunch
- 14:00 15:00 Action video games as an exemplary learning tool? Daphne Bavelier, University of Rochester
- 15:15 17:00 Journal club or Round table discussion
- 17:15 19:00 Guided project preparation
- 19:30 --- Dinner



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# Tuesday, 15 March

07:00 - 08:00 Breakfast

08:00 - 09:30 Practice session: CNS methods: EGI

## Session 6

[Chairman: Assistant: Sidarta Ribeiro, ELS International Institute of Neuroscience of Natal] 09:45- 10:00 Introduction. Assistant: Sidarta Ribeiro, ELS Int. Institute of Neuroscience of Natal

#### General conference

10:00 – 11:00 The generative basis of natural number concepts. Rochel Gelman, Rutgers University

11:00 - 11:30 Break

# Math & Reasoning: Math and reasoning development

11:30 - 12:30 Educational role of early number representations. Lisa Feigenson, Johns Hopkins
University

12:30 - 14:00 Lunch

14:00 - 15:00 Bayesian inference in neural circuits: from insects to humans. Alexandre Pouget University of Rochester

15:00 - 17:00 Journal club or Round table discussion

17:00 - 19:00 Guided project preparation

19:30 --- Dinner

# Wednesday, 16 March

07:00 - 08:00 Breakfast

08:00 - 09:30 Practice session: CNS methods: EGI system

#### Session 7

[Chairman: Susan Goldin-Meadow, University of Chicago. Assistant: Mariano Sigman, Universidad de Buenos Aires]

09:45 - 10:00 Introduction. Susan Goldin-Meadow, University of Chicago

## General conference

10:00 - 11:00 Non-verbal information supporting learning. Susan Goldin-Meadow, University of Chicago

11:00 - 11:30 Coffee Break

## Math & Reasoning: From spontaneous to instructional concept learning

11:30 – 12:30 The transition from arithmetic to algebraic reasoning. Mitchell Nathan, University of Wisconsin-Madison

12:30 - 14:00 Lunch

14:00 - 15:00 Learning consolidation. Sidarta Ribeiro, Instituto Internacional de Neurociências de Natal

15:00 - 16:00 Readiness. Mariano Sigman, Universidad de Buenos Aires

16:00 - 17:00 How do the children learn? Marcela Peña, PUC & CIAE

17:00 - 17:30 Coffee break

17:45 - 19:00 Journal club or Round table discussion

19:30 --- Dinner



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# Thursday, 17 March

07:00 - 08:30 Breakfast

# Session 8

[Chairman: Marcela Peña, PUC & CIAE] 08:45 - 09:00 Introduction. Marcela Peña, PUC & CIAE

# Latin American projects on education

09:00 - 10:30 Teaser presentation (1 slide, 3 min talk each)

10:30 - 11:00 Coffee break

11:00 - 12:30 Teaser presentation (1 slide, 3 min talk each)

12:30 - 14:00 Lunch

14:00 - 16:30 Poster presentation (7 letter size pages)

16:30 - 17:00 Coffee break

17:00 - 18:30 General project discussion session

# Closing Words:

18:30 - 19:15 LASchool 2011. Mariano Sigman and Sidarta Ribeiro 19:45 ------ Farewell dinner

Friday, 18 March: Departure