



Department of Learning Disabilities Faculty of Education University of Haifa

Inaugural Conference

# The Young and the Adult Brain

## **Learning Disabilities: Prevention and Intervention**

May 31-June 2, 2009



**PROGRAM & ABSTRACTS** 



E D M O N D J. S A F R A PHILANTHROPIC FOUNDATION

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# Sunday, May 31, 2009

### Hecht Museum Auditorium

- 09:00-10:00 Registration
- 10:00-10:30 **Opening remarks:**

**Prof. Zvia Breznitz,** Head of the Edmond J. Safra Brain Research Center for the Study of Learning Disabilities, Faculty of Education, University of Haifa

Greetings: Prof. Ofra Mayseless - Dean, Faculty of Education, University of Haifa

### Session 1: The Reading Brain 1 Head: Prof. Avi Karni

10:30-11:15 **Kenneth R. Pugh**, Ph.D President and Director of Research, Haskins Laboratories, Yale University, School of Medicine, New Haven Connecticut, USA *Neuroimaging studies of skilled reading and reading disability: Establishing brain/behavior links* 

11:15-12:00	Heinz Wimmer, Ph.D
	Department of Psychology and Centre for Neurocognitive Research,
	University of Salzburg, Austria
	Developmental dyslexia: Cognitive phenotype and brain
	dysfunctions in a relatively transparent orthography
	(German)

### 12:00-12:30 **Zvia Breznitz**, Ph.D Edmond J. Safra Brain Research Center for the Study of Learning Disabilities, Faculty of Education, University of Haifa, Israel *The rate at which linguistic information enters into cerebral systems directs its processing: The Asynchrony theory as a possible explanation of dyslexia*

12:30-14:30 Lunch and Poster Session

### Session 2: The Reading Brain 2 Head: Dr. Tami Katzir

### 14:30-15:15 **Daniel Brandeis**, Ph.D Department of Child and Adolescent Psychiatry, University of Zurich, Switzerland *Neural changes with learning to read: Effects of dyslexia and early training*

### 15:15-16:00 **Bruce D. McCandliss**, Ph.D Vanderbilt University, Nashville, Tennessee, USA *The role of attention and learning in shaping the response properties of the visual word form area*

16:00-16:30 Coffee Break

# 16:30-17:15 Richard K. Olson, Ph.D

Department of Psychology, University of Colorado, Boulder, USA Genetic and environmental influences on reading ability and disability

### 17:15-17:45 **Tami Katzir**, Ph.D Edmond J. Safra Brain Research Center for the Study of Learning Disabilities, Faculty of Education, University of Haifa, Israel *A structural basis for reading fluency: Cortico-cortical fiber tract disruptions are associated with reading impairment in a neuronal migration disorder*

# Monday, June 1, 2009 Hecht Museum Auditorium

08:30-09:30	Registration
	Session 3: The Young Brain Head: Prof. David Share
09:30-10:00	<b>Iris Levin</b> , Ph.D Dept. of Human Development and Education, Tel Aviv University <i>Promoting early literacy by parent-child joint activities in</i> <i>low SES strata (Iris Levin and Dorit Aram)</i>
10:00-10:45	<b>Linda S. Siegel</b> , Ph.D Department of Educational and Counseling Psychology and Special Education, University of British Columbia, Vancouver, Canada <i>Early identification and intervention to prevent reading failure</i>
10:45-11:15	Coffee Break
11:15-12:00	<b>Dennis Molfese</b> , Ph.D and <b>Victoria Molfese</b> , Ph.D University of Louisville, Kentucky, USA Impact of early experience on subsequent brain and cognitive development
12:00-12:30	<b>Anat Scher</b> , Ph.D Faculty of Education, University of Haifa, Israel <i>Turning off at night: The importance of sleep to early learning</i>
12:30-13:30	Lunch Break

# Prof. Dina Feitelson Award

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13:30-13:45	<b>Opening Remarks:</b> <b>Prof. David Share</b> , Edmond J. Safra Brain Research Center for the Study of Learning Disabilities, Faculty of Education, University of Haifa, Israel
13:45-14:30	<b>Dina Feitelson Memorial Lecture</b> <b>Ludo Verhoeven</b> , Ph.D Behavioural Science Institute, Radboud University Nijmegen, The Netherlands <i>Quality of phonological representations and phonological</i> <i>awareness as predictors of early literacy development</i>
14:30-14:45	The Award winner presentation Student Recipient: Irit Bar-Kochva, Brain and Behavior Program Cognitive factors underlying reading in Hebrew at different stages of development

### Session 4: The Young and the Adult Brain Head: Dr. Shelley Shaul

### 14:45-15:15 **Shelley Shaul**, Ph.D Edmond J. Safra Brain Research Center for the Study of Learning Disabilities, Faculty of Education, University of Haifa, Israel *A model of brain activity of young as compared to adult dyslexic readers*

### 15:15-15:45 Avi Karni, M.D, Ph.D

Edmond J. Safra Brain Research Center for the Study of Learning Disabilities, Faculty of Education, University of Haifa, Israel *Critical thoughts on critical periods in skill acquisition and brain plasticity* 

15:45-16:15 Coffee Break

### 16:15-16:45 **Michal Shany**, Ph.D Edmond J. Safra Brain Research Center for the Study of Learning Disabilities, Faculty of Education, University of Haifa, Israel Subtypes of reading disabilities among young and adult Hebrew readers: Linguistic/cognitive and ERP profiles

### Session 5: Learning Disabilities Head: Dr. Raphiq Ibrahim

# 16:45-17:15 David Share, Ph.D Edmond J. Safra Brain Research Center for the Study of Learning Disabilities, Faculty of Education, University of Haifa, Israel The self-teaching model of orthographic learning: A theoretical and empirical overview

### 17:15-17:45 **Paul Miller**, Ph.D Department of Special Education, University of Haifa *The role of phonology in the word decoding skills of poor readers*

# Tuesday, June 2, 2009 Sfadia Auditorium

08:30-09:30	Registration
	Session 6: Brain and Numbers
	Head: Dr. Orly Rubensten
09:30-10:00	<b>Orly Rubensten</b> , Ph.D <sup>1</sup> Edmond J. Safra Brain Research Center for the Study of Learning Disabilities, Faculty of Education, University of Haifa, Israel <i>Co-morbidity of mathematical learning disabilities with Attention</i> <i>Deficit/Hyperactivity Disorder (ADHD) or with reading</i> <i>disabilities</i>
	(Orly Rubinsten <sup>1</sup> , Logika Rasalingam <sup>3</sup> , Stephanie Tang <sup>3</sup> , Betty Chiu <sup>3</sup> , Rosemary Tannock <sup>2,4</sup> ) <sup>2</sup> Neuroscience and Mental Health Research Program, Hospital for Sick Children, Toronto, Ontario, Canada. <sup>3</sup> Research Opportunity Program, University of Toronto <sup>4</sup> Human Development and Applied Psychology, Ontario Institute for Studies in Education, University of Toronto
10:00-10:45	Liane Kaufmann, Ph.D Department of Psychology, University of Salzburg, Austria Neural correlates of number processing and simple arithmetic in children with and without dyscalculia
10:45-11:15	Avishai Henik, Ph.D Department of Psychology and Zlotowski Center for Neuroscience, Ben-Gurion University of the Negev, Beer-Sheva, Israel <i>How pure is pure developmental dyscalculia?</i> (Avishai Henik and Sarit Ashkenazi)
11:15-11:45	Coffee Break

### **Session 7:** The Bilingual Brain

### Head: Dr. Anat Prior

### 11:45-12:15 **Anat Prior**, Ph.D Edmond J. Safra Brain Research Center for the Study of Learning Disabilities, Faculty of Education, University of Haifa, Israel *Bilingualism and executive function*

### 12:15-12:45 **Asaid Khateb**, Ph.D

Edmond J. Safra Brain Research Center for the Study of Learning Disabilities, Faculty of Education, University of Haifa, Israel *Languages in the bilingual brain: What about language selection mechanisms?* 

### 12:45-13:30 **Malatesha Joshi**, Ph.D

College of Education and Human Development, Texas, A & M University College Station, Texas, USA *The role of orthography in literacy acquisition in monolinguals and bilinguals* 

### 13:30-13:50 Mila Shwartz, Ph.D

Edmond J. Safra Brain Research Center for the Study of Learning Disabilities, Faculty of Education, University of Haifa, Israel Evidence for the script-dependent hypothesis: The fully-fledged alphabet versus consonantal script

### 13:50-14:45 Lunch Break

### Session 8: Cognition, Language, and Literacy Head: Dr. Karen Banai

14:45-15:00	Karen Banai, Ph.D Department of Communication Disorders, University of Haifa, Israel Cognition and Subcortical Auditory Processing
15:00-15:15	<b>Tali Bitan</b> , Ph.D <sup>1</sup> Department of Communication Disorders, University of Haifa, Israel <i>Inter-hemispheric connectivity during phonological processing</i> <i>in children</i> (Tali Bitan <sup>1</sup> , Adi Lifshitz <sup>2</sup> , Zvia Breznitz <sup>2</sup> , James Booth <sup>3</sup> ) <sup>2</sup> Dept. of Learning Disabilities, The E dmond J. Safra Brain Research Center for the Study of Learning Disabilities, Haifa University, Israel <sup>3</sup> Department of Communication Sciences and Disorders, Northwestern University, IL, USA
15:15-15:30	<b>Elinor Saiegh-Haddad</b> , Ph.D Bar-Ilan University, Israel Linguistic intervention and the development of word reading

in Arabic: A developmental study

### 16:30 **The Edmond J. Safra Center Inauguration** Stadia Auditorium

Short film: "Struggling with learning disabilities in Arab Society"

**Greetings: Prof. Aaron Ben Zeev** President, University of Haifa

**Prof. Ofra Mayseless** Dean, Faculty of Education, University of Haifa

**Prof. Majid Al-Haj** Vice President and Dean of Research, University of Haifa

### Prof. Zvia Breznitz

Head, Edmond J. Safra Brain Research Center for the Study of Learning Disabilities, Faculty of Education, University of Haifa Aims of the Edmond J. Safra Brain Research Center for Learning Disabilities, including the Arabic project

### Keynote address Dr. Kenneth Pugh

President and Director of Research, Haskins Laboratories, Yale University, School of Medicine, New Haven Connecticut, USA

*The contribution of advances in neuroscience to understanding learning disabilities* 

### The Edmond J. Safra Award for Student Excellence

Student Recipient: **Waleed Jarjoura**, Edmond J. Safra Unit for the Advancement of Learning Disabilities Research in the Arabic Language

Student Recipient: Shay Menashe, Brain and Behavior Program

### Ribbon-cutting ceremony and festive toast on site

- 18:30-19:00 Cocktail Hour at the opening ceremony of the Board of Governors
- 19:00 Honorary doctorate ceremony