Edmond J. Safra Brain Research Center for the Study of Learning Disabilities
Department of Learning Disabilities
Faculty of Education
University of Haifa

Brain, Mind and Fluency International Conference

November 11th - 13th, 2013

Festina Lente: "Slow is Smooth and Smooth is Fast"
Augustus, 63 BC
Day 1
November 11th, 2013
The Brain Basis of Fluency as a Stepping Stone Towards Intervention Development
Hecht Museum Auditorium, Main Building

08:30 – 09:30  Registration

09:30 – 10:00  Mr. Amos Shapira, President, University of Haifa
Prof. Lilly Orland-Barak, Dean, Faculty of Education, University of Haifa
Welcome Greetings

10:00 – 10:15  Prof. Zvia Breznitz, University of Haifa
A Scientific Perspective on Fluency

10:15 – 11:00  Prof. Kenneth Pugh, Yale University
Keynote Address 1: Neuroimaging Studies of Reading and Development and Reading Disability: An Update on Recent Findings

11:00 – 11:45  Prof. Scott Holland, Cincinnati University
Keynote Address 2: Influences on Neuroplasticity in functional Brain Networks Supporting Language in Children and Adults

11:45 – 14:00  Lunch & Student Poster Session

14:00 – 14:20  Prof. Zvia Breznitz, University of Haifa
The Right Reading Brain as an Obstacle to Fluency

14:20 – 14:40  Dr. Tami Katzir, University of Haifa
Fluency and the Right Reading Brain

14:40 – 15:00  Dr. Joanna Christodoulou, Harvard University
Behavioral and Neural Correlates of Typical and Atypical Reading Fluency

15:00 – 15:30  Panel Discussion

15:30 – 16:00  Coffee Break

16:00 – 16:20  Prof. Avi Karni, University of Haifa
Motor Fluency in Hand Movements and Speech Production: Indications for Qualitative Changes in Procedural Knowledge

16:20 – 18:00  Student Poster Session
Day 2
November 12th, 2013
Fluency Intervention
Main Hall, Hatter Student Building

08:30 – 09:30
Registration

09:30 – 10:15
Prof. Daniel Brandeis, University of Zurich
Keynote Address 3: The Reading Brain

10:15 – 11:00
Prof. Sid Segalowitz, Brock University
An Inside Look at Brain Responses to Reading: Mapping Word Fluency onto Neural Networks, their Consistency and Connectivity

11:00 – 11:20
Dr. Tzipi Horowitz-Kraus, University of Cincinnati
Can we Train Dyslexic Readers to Read like Typical Readers?
An EEG and fMRI Study Using the Reading Acceleration Program

11:20 – 11:45
Coffee Break

11:45 – 12:30
Dr. Mikko Aro, Jyväskylä University
Training Reading Fluency in Finnish

12:30 – 14:00
Lunch & Poster Session

14:00 – 14:45
Prof. Heikki Lytinen, Jyväskylä University
Preventive Training of Basic Reading Skills

14:45 – 15:30
Prof. Marcus Hasselhorn & Dr. Telse Nagler, German Institute for International Educational Research
A Fact Retrieval Account for the Acceleration Phenomenon: Findings from the Frankfurt IDeA Studies on Reading and Arithmetic

15:30 – 16:15
Prof. Maria del Carmen Lopez Escribano, Universidad Complutense de Madrid
Training Reading Fluency and Comprehension of Spanish Children with Dyslexia

16:15 – 16:45
Coffee Break

16:45 – 17:05
Prof. Michal Shany, University of Haifa
Reading and Intervention: The Subtypes Model

17:05 – 18:30
Student Poster Session
Day 3  
November 13th, 2013

Morning Sessions: Developmental Aspects of Fluency  
Main Hall, Hatter Student Building

08:30 – 09:30  Registration

09:30 – 10:15  Prof. Linda Siegel, University of British Colombia  
*Keynote Address 4: Fluency Matters: A Cross-Linguistic Study of the Role of Fluency in Reading Comprehension and Spelling*

10:15 – 10:35  Dr. Orly Lipka, University of Haifa  
*Developmental Aspects of Fluency*

10:35 – 10:55  Dr. Shelley Shaul, University of Haifa  
*Early Literacy and Fluency*

10:55 – 11:30  Coffee Break

Afternoon Sessions: Reading Fluency in Different Languages

11:30 – 12:15  Prof. Jane Ashby, Central Michigan University  
*How Prosodic Processing Contributes to the Fluency of Skilled Readers of English: Evidence from Eye Movements and ERPs*

12:15 – 13:00  Prof. Malt Joshi, Texas A&M University  
*The Real Magic of Spelling: Improving Reading and Writing*

13:00 – 14:00  Lunch & Poster Session

14:00 – 14:20  Dr. Anat Prior, University of Haifa  
*The Growing Role of Fluency in Predicting Reading Comprehension in Both Languages of Hebrew/English Speaking Adolescents*

14:20 – 14:40  Prof. Asaid Khateb & Dr. Ibrahim Asadi, University of Haifa  
*The Development of Reading Fluency Among Arabic Speaking Children*

14:40 – 15:00  Prof. Elinor Saiegh-Haddad, Bar Ilan University  
*Morphology and Word Processing in Arabic: Is Fluency the Way to Go?*

15:00 – 16:30  Group Discussion & General Conclusions  
*Where Do We Go from Here and Collaborations*
POSTERS
**Human Brain & Learning and Motor Skills and Motor Disabilities Laboratory**

**Ella Gabitov¹,², David Manor²,³, Avi Karni¹,²,³**

*Learning from the Other Limb's Experience: The Neural Mechanism Underlying Inter-Manual Transfer of Motor Sequence Knowledge – an fMRI Study*

¹ Human Brain & Learning Laboratory and Motor Skills and Motor Disabilities Laboratory, Edmond J. Safra Brain Research Center for the Study of Learning Disabilities, Department of Learning Disabilities, University of Haifa, Israel
² The Laboratory of Human Brain and Learning, Sagol Department of Neurobiology and the Department of Human Biology, University of Haifa, Israel
³ fMRI Unit, Diagnostic Imaging Department of Sheba Medical Center, Ramat Gan, Israel

**Ishay Levy¹, Orly Fox¹,², Yaron Dagan¹, Maria Korman³, Avi Karni¹,⁴**

*Motor Skill Acquisition in ADHD: Training in the Evening Results in More Effective Consolidation and Better Retention than Training in the Morning*

¹Human Brain & Learning Laboratory and Motor Skills and Motor Disabilities Laboratory, Edmond J. Safra Brain Research Center for the Study of Learning Disabilities, Department of Learning Disabilities, University of Haifa, Israel
²The Zinman College of Physical Education & Sport Sciences, the Wingate Institute, Israel.
³Department of Occupational Therapy, Faculty of Social Welfare & Health Sciences, University of Haifa, Israel.
⁴The Sagol Department of Neurobiology & Ethology and Department of Human Biology, University of Haifa, Israel.

**Waleed Jarjoura¹,² and Avi Karni³**

*A Novel Tactile Braille Stroop test (TBSt): Investigating Automaticity in Standard Arabic Braille Reading*

¹Human Brain & Learning Laboratory and Motor Skills and Motor Disabilities Laboratory, Edmond J. Safra Brain Research Center for the Study of Learning Disabilities, University of Haifa, Israel
²The “Convent of Nazareth” - School for the blind, Nazareth, Israel
³The Sagol Department of Neurobiology, University of Haifa, Israel

**The Neurocognitive Laboratory for the Study of Bilingualism**

**Asaid Khateb, Michael Nevat, Anat Prior**

*When the First Language is not the First: An fMRI Investigation of the Neural Basis of Diglossia in Arabic*

The Neurocognitive Laboratory for the Study of Bilingualism, Edmond J. Safra Brain Research Center for the Study of Learning Disabilities, Department of Learning Disabilities, University of Haifa, Israel
Michael Nevat, Anat Prior, Asaid Khateb
*Imaging Word Recognition in Literary Arabic, Spoken Arabic and Hebrew: an Event-Related fMRI Investigation Using Lexical Decision Tasks*

The Neurocognitive Laboratory for the Study of Bilingualism, Edmond J. Safra Brain Research Center for the Study of Learning Disabilities, Department of Learning Disabilities, University of Haifa, Israel

Shalhoub-Awwad Yassmin and Leikin Mark
*The Lexical Status of the Root in Processing Morphologically Complex Words in Arabic*

The Neurocognitive Laboratory for the Study of Bilingualism, Edmond J. Safra Brain Research Center for the Study of Learning Disabilities, University of Haifa, Israel

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The Unit of Arabic Language Research
at The Neurocognitive Laboratory for the Study of Bilingualism

Abeer Hellow, Raphiq Ibrahim, Zohar Eviatar
*The effect of Arabic Orthography on Retrieval Times and Automatic Reading in Adult Skilled Readers*

The Unit of Arabic Language Research, at The Neurocognitive Laboratory for the Study of Bilingualism, Edmond J. Safra Brain Research Center for the Study of Learning Disabilities, Department of Learning Disabilities, University of Haifa, Israel

Asaid Khateb and Mariam Shehadi-Haj
*Semantic Processing in Literary and Spoken Arabic: An Event-Related Potential Study*

The Unit of Arabic Language Research, at The Neurocognitive Laboratory for the Study of Bilingualism, Edmond J. Safra Brain Research Center for the Study of Learning Disabilities, Department of Learning Disabilities, University of Haifa, Israel

Maany Krayem, Asaid Khateb, Raphiq Ibrahim
*Diglossia in Auditory Lexical Decision: An ERP Study*

The Unit of Arabic Language Research, at The Neurocognitive Laboratory for the Study of Bilingualism, Edmond J. Safra Brain Research Center for the Study of Learning Disabilities, Department of Learning Disabilities, University of Haifa, Israel

Shiraz Habashi, Sebastian P. Korinth, Asaid Khateb
*Morphological Parafoveal Preview Benefit Effects in Visual Word Recognition in Arabic*

The Unit of Arabic Language Research, at The Neurocognitive Laboratory for the Study of Bilingualism, Edmond J. Safra Brain Research Center for the Study of Learning Disabilities, Department of Learning Disabilities, University of Haifa, Israel
Suha Musa, Zohar Eviatar, Raphiq ibrahim
Language Effects on Processing Verbal Numbers in Arabic – Hebrew Bilinguals: The case of Inversion in the Arabic Number System
The Unit of Arabic Language Research, at The Neurocognitive Laboratory for the Study of Bilingualism, Edmond J. Safra Brain Research Center for the Study of Learning Disabilities, Department of Learning Disabilities, University of Haifa, Israel

Haitham Taha and Asaid Khateb
Resolving Orthographic Ambiguity during Visual Word Processing in Arabic: An Event-Related Potential Investigation
The Unit of Arabic Language Research, at The Neurocognitive Laboratory for the Study of Bilingualism, Edmond J. Safra Brain Research Center for the Study of Learning Disabilities, Department of Learning Disabilities, University of Haifa, Israel

Haitham Taha, Raphiq Ibrahim, Asaid Khateb
Exploring the phenotype of phonological reading disability: Evidence from the error analysis paradigm in Arabic
The Unit of Arabic Language Research, at The Neurocognitive Laboratory for the Study of Bilingualism, Edmond J. Safra Brain Research Center for the Study of Learning Disabilities, Department of Learning Disabilities, University of Haifa, Israel

The Laboratory for Brain, Mind and Reading Research

Ronen Kasperski, Tami Katzir, Michal Shany
Changes in Reading Self-Concept and Calibration of Comprehension Among Struggling 4th Grade Children, as a Result of a Fluency Based Intervention
The Laboratory for Brain, Mind and Reading Research, Edmond J. Safra Brain Research Center for the Study of Learning Disabilities, Department of Learning Disabilities, University of Haifa, Israel

Einat Klieder, Tami Katzir, Michal Shany
Calibration of Comprehension and Response to Feedback in LA and AA University Students
The Laboratory for Brain, Mind and Reading Research, Edmond J. Safra Brain Research Center for the Study of Learning Disabilities, Department of Learning Disabilities, University of Haifa, Israel

Yael Weiss¹, Tami Katzir¹, Tali Bitan²
Morphological Segmentation and Orthographic Transparency in Typical and Dyslexic Hebrew Readers: Evidence from Brain and Behavior
¹ The Laboratory for Brain, Mind and Reading Research, Edmond J. Safra Brain Research center for the study of Learning Disabilities, Department of Learning Disabilities, University of Haifa, Israel
² Department of Communication Sciences & Disorders, University of Haifa, Israel
Laboratory for Neurocognitive Research

Nahal Binur¹,², Oded Zehavi², Zvia Breznitz¹
Is Playing Music Beneficial for Dyslexic Readers? A Behavioral and ERP Study
¹The Laboratory for Neurocognitive research, Edmond J. Safra Brain Research Center for the Study of Learning Disabilities, Department of Learning Disabilities, University of Haifa, Israel
²The Music Department, Faculty of Humanities, University of Haifa, Israel

Sigalit Brande and Zvia Breznitz
The Effect of Reading Acceleration Training on the Reading Ability of Young Dyslexics as Compared to Regular Readers
The Laboratory for Neurocognitive Research, Edmond J. Safra Brain Research Center for the Study of Learning Disabilities, Department of Learning Disabilities, University of Haifa, Israel

Mirit Barzillai and Zvia Breznitz
Exploring the Effects of the Reading Acceleration Program among Adolescent Readers
The Laboratory for Neurocognitive Research, Edmond J. Safra Brain Research Center for the Study of Learning Disabilities, Department of Learning Disabilities, University of Haifa, Israel

Alex Frid and Zvia Breznitz
Processing Information during a Lexical Decision Task as an Indication of Brain Region Synchronization: Differences between Dyslexic and Regular Readers
The Laboratory for Neurocognitive Research, Edmond J. Safra Brain Research Center for the Study of Learning Disabilities, Department of Learning Disabilities, University of Haifa, Israel

Hedva Meiri
Analyzing the EEG Profile of Dyslexic Readers during an Implicit Learning Task
The Laboratory for Neurocognitive Research, Edmond J. Safra Brain Research Center for the Study of Learning Disabilities, Department of Learning Disabilities, University of Haifa, Israel

Hedva Meiri¹, Pearla Nesher², Zvia Breznitz¹
Mathematics / Arithmetic Assessment Program (MAAP): Assessing Early Mathematical Fluency Using an Adaptive Computerized Program
¹The Laboratory for Neurocognitive Research, Edmond J. Safra Brain Research Center for the Study of Learning Disabilities, Department of Learning Disabilities, University of Haifa, Israel
²Department of Mathematics Education, University of Haifa, Haifa, Israel
Einat Nevo and Zvia Breznitz

*The Relationships between Working Memory Abilities and Reading Skills: A Follow up Study from Kindergarten to Fifth Grade*

The Laboratory for NeuroCognitive Research, Edmond J. Safra Brain Research Center for the Study of Learning Disabilities, The Department of Learning Disabilities, University of Haifa, Israel

Pablo Sarcusti and Zvia Breznitz

*Neurocognitive Aspects of Oral and Silent Reading among Adult Dyslexic and Typical Readers: An fNIR Experiment*

The Laboratory for Neurocognitive Research, Edmond J. Safra Brain Research Center for the Study of Learning Disabilities, The Department of Learning Disabilities, University of Haifa, Israel

Itamar Sela¹, Lisbeth Højkjær Larsen²

*Differences in Learning a Volitional Non-Linguistic Fine Hand Motor Skill in Young Adult Dyslexic and Skilled Readers: An fNIR Pilot Study*

¹ The Laboratory for Neurocognitive Research, Edmond J. Safra Brain Research Center for the Study of Learning Disabilities, The Department of Learning Disabilities, University of Haifa, Israel
² Department of Public Health & Department of Nutrition, Exercise and Sports, University of Copenhagen, Denmark

Noa Weizman and Zvia Breznitz

*Multi-Session Training of Word, Sentence, and Passage Reading Fluency in Third and Fourth Grade, Using the Reading Acceleration Program (RAP) among Hebrew-Speaking Dyslexics*

The Laboratory for Neurocognitive Research, Edmond J. Safra Brain Research Center for the Study of Learning Disabilities, The Department of Learning Disabilities, University of Haifa, Israel

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**The Laboratory for Clinical Research**

Keren Elkayam and Michal Shany

*Developmental Profiles of Reading Accuracy and Reading Rate Disabled Subtypes among Elementary School Hebrew Readers: A Cross Grade Analysis*

The Laboratory for Clinical Research, Edmond J. Safra Brain Research Center for the Study of Learning Disabilities, Department of Learning Disabilities, University of Haifa, Israel
The Laboratory for Attention

Klodin Alali and Liat Goldfarb
Improving the Attention System: The Benefit of Practicing Automatic Inhibition
The Laboratory for Attention, Edmond J. Safra Brain Research Center for the Study of Learning Disabilities, Department of Learning Disabilities, University of Haifa, Israel

Katrine Sabah and Liat Goldfarb
Semantic Processing of Multidimensional Objects: Neural Synchrony Theory Revisited
The Laboratory for Attention, Edmond J. Safra Brain Research Center for the Study of Learning Disabilities, Department of Learning Disabilities, University of Haifa, Israel

Sharon Sadan and Liat Goldfarb
The Effect of Number of Distracters on Perception of Items Within the Subitizing Range
The Laboratory for Attention, Edmond J. Safra Brain Research Center for the Study of Learning Disabilities, Department of Learning Disabilities, University of Haifa, Israel

The Laboratory for Numerical Cognition

Furman Tamar and Orly Rubinsten
Symbolic and Non-Symbolic Numerical Representation in Adults with and without Developmental Dyscalculia
The Laboratory for Numerical Cognition, Edmond J. Safra Brain Research Center for the Study of Learning Disabilities, Department of Learning Disabilities, University of Haifa, Israel

Hila Kanner and Orly Rubinsten
The Ability to Automatically Process Different Numerical Ranges: A New Cognitive Tool to Differentiate Between Attention Deficit Hyperactivity Disorder and Developmental Dyscalculia
Laboratory for Numerical Cognition, Edmond J. Safra Brain Research Center for the Study of Learning Disabilities, Department of Learning Disabilities, University of Haifa, Israel

Dana Sury¹, Marie-Pascale Noel², Myrte Reniers², Orly Rubinsten¹
Processing Symbolic and Non-Symbolic Ordinal Information: Is it an Acquired Ability?
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²The Center of Cognitive Neuroscience, Institute of Psychology, Catholic University of Louvain, Belgium
The Neurocognite Laboratory for Early Childhood

Shelly Shaul and Orr Pelleg
*Visual Perception of Letters by Kindergarten, 1*st *Grade and 4*th *Grade School Children*

The Neurocognitive Laboratory for Early Childhood, Edmond J. Safra Brain Research Center for the Study of Learning Disabilities, Department of Learning Disabilities, University of Haifa, Israel