

Phone: +972-54-4490012

Email: tbitan@research.haifa.ac.il

Education

- 1992 BA (Magna cum Laude), Department of Behavioral Sciences, Ben Gurion University, Be'er Sheva
- 1996 MA (Summa cum Laude, Neuropsychology, Department of Psychology, Hebrew University of Jerusalem
- 2004 Ph.D, Brain Research Center, Department of Neurobiology, Weizmann Institute of Science, Rehovot
- 2003-2006 Post-doctoral fellow, Department of Communication Sciences and Disorders, Northwestern University, IL USA

Professional Diplomas

- 1997 - Registered Psychologist, Israel Ministry of Health
- 2003 - Registered specialist in Rehabilitation Psychology, Israel Ministry of Health

Professional affiliations

- 2015 - present Senior Lecturer (tenured), Department of Psychology, University of Haifa
- 2014 - 2015 Visiting Scientist, Rotman Research Institute, Baycrest, Toronto
- 2013 - 2015 Visiting Professor, Department of Speech Language Pathology, University of Toronto
- 2011 - 2015 Senior Lecturer (tenured), Department of Communication Sciences and Disorders, University of Haifa
- 2006-2011 Lecturer, Department of Communication Sciences and Disorders, University of Haifa
- 2003-2006 Post doctoral fellow, James Booth's lab, Dept. of Communication Sciences and Disorders, Northwestern University, IL USA

1995-2003 Neuropsychologist, The neuropsychological unit for treatment and rehabilitation, Tel Aviv
Internship in Rehabilitation Psychology. Cognitive, emotional, and vocational evaluation and interventions of adults and children, following traumatic brain injury, neurological diseases and developmental deficits

Research Grants

2011 -2014 (co-PI) with Katzir T. (co-PI). Israeli Science Foundation (ISF).
Compensatory morphological processing in brains of dyslexic adults.
\$150,000

2011-2013 (PI). Israeli Foundation Trustees (IFT). Developmental changes in the
brain involved in morphological and phonological processing during
reading of Hebrew words. \$20,000

2011-2013 (PI). The National Institute for Psychobiology in Israel. Effects of age and
sleep on learning regular and irregular morphological rules. \$50,000

2009-2011 (PI) with Banai K. Attias J and Shemesh R. (CIs). Ministry of Health
feasibility studies. Brain plasticity induced by auditory training and
fitting of hearing aids in hearing impaired individuals. 25,000 NIS.

2008 - 2011 (CI) with Eviatar Z & Peleg O. (PIs). Israeli Science Foundation (ISF).
Inter-hemispheric integration during reading comprehension: an
experimental, computational, and imaging stud: \$120,000.

2008 -2011 (Co-PI) with Ullman MT (co-PI). Binational Science Foundation (BSF)
start-up program. The role of procedural and declarative memory
systems in learning morphological inflections in a novel language: an
effective connectivity fMRI study. \$60,000

2007-2009 (PI). Rich Foundation grant for returning scientists. Acquisition of
linguistic skills, \$60,000

Fellowships and awards

1998-2003 – PhD fellowship - \$90,000 Feinberg graduate school, Weizmann Institute

Teaching

2015 - 2015 Literacy and reading disorders, BA, University of Toronto, St. George
2014 - 2014 Psychology of Language, BA, University of Toronto, Mississauga

Teaching at the University of Haifa:

2012 - 2013 Brain plasticity in development and rehabilitation, M.A.
2010 - 2013 Brain and Language, M.A.
2006 - 2013 Introduction to Cognitive Neuroscience, B.A.
2006 - 2013 Introduction to Neuroanatomy B.A.
2006 - 2013 Research Seminar B.A.
2007 - 2013 Research methods & scientific writing B.A.

2006 - 2011 Neuropsychology and assessment, B.A.

2006 - 2012 Cognitive rehabilitation, B.A.

Supervision of Graduate Students

Ph.D.

Daphna Ben-Zion, Effects of Sleep on learning and consolidation of morphological inflection in adults with Dyslexia. Direct PhD program.

In progress. Co-Advisor: Anat Prior, Dept. of Learning Disabilities

Yael Weiss, Morphology and orthographic transparency in typical & dyslexic Hebrew readers: fMRI study. Direct PhD program.

Submitted. Co-Advisor Tami Katzir, Dept. of Learning Disabilities.

Hanin Karawani, Auditory training in hearing impaired individuals. Direct PhD program.

In progress. Co-Advisor: Karen Banai, Dept. of Commun. Sci. & Disorders.

Michael Nevat, Procedural and declarative memory in learning morphological rules.

Completed 2013. Co-advisor: Zohar Eviatar, Dept. of Psychology

M.A.

Qamar Daher, Effects of sleep on learning an artificial language in adults.

In progress.

Karin Levenberg, Effects of sleep on learning an artificial language in children.

In progress. Co-Advisor: Zohar Eviatar, Dept. of Psychology

Laurice Haddad, Morphology and orthographic transparency in children.

Completed 2013.

Jasmeen Mansour, Effects of practice variability on learning to read.

Completed 2013.

Adi Leib, Inter-hemispheric connectivity in homograph reading.

Completed 2012. Co-advisor: Zohar Eviatar, Dept. of Psychology

Asaf Kaftory, Hemispheric asymmetry in homograph reading.

Completed: 2011. Co-Advisor: Zohar Eviatar, Dept. of Psychology

Einav Yehezkel, Effects of morphology and diacritics of reading during development,

Completed: 2010. Co-Advisor: Tami Katzir, Dept. of Learning Disabilities

Adi Morag, Effects of word length and diacritic on reading in children.

Completed: 2010. Co-Advisor: Tami Katzir, Dept. of Learning Disabilities

Adi Lifshitz, Effective connectivity in the auditory rhyming task in children.

Completed: 2009. Co-Advisor: Zvia Breznitz, Dept. of Learning Disabilities

Osnat Mussel, Effective connectivity of priming processes in visual rhyming.

Completed: 2009. Co-Advisor: Asaf Gilboa, Dept. of Psychology

Training of other graduate student

Ron Chu, Department of Psychology, University of Toronto, and Rotman Institute, Torontono. Inter-hemispheric connectivity in post-stroke patients with Aphasia.

Advisor: Jed Meltzer, Rotman Research Institute

Tijana Simic, Department of Speech-Language Pathology, University of Toronto. Effects of Executive control processes on Treatment outcomes in Aphasia. Advisor: Elizabeth Rochon, Dept. of Speech Language Pathology, University of Toronto.

Talya Sadeh, Department of Psychology, Tel-Aviv University. Effective connectivity analysis of recall and recognition. Advisor: Yonatan Goshen-Gottstein, Department of Psychology, Tel Aviv University. Completed; 2013.

Publications

IF- journal Impact factor

Weiss, Y. Katzir, T. and **Bitan, T.** (2015). Many ways to read your vowels - neural processing of diacritics and vowel letters in Hebrew. *NeuroImage*, 121, 10-19 .

Dronjic V. and **Bitan T.** (in press). Reading Brain and Cognition. In: X. Chen, V. Dronjic and R. Helms-Park (Eds.). *Reading in a second language: Cognitive and psycholinguistic issues*. Routledge.

Weiss, Y., Katzir, T. and **Bitan, T.** (2015). The effects of orthographic transparency and familiarity on reading Hebrew words in adults with and without dyslexia. *Annals of Dyslexia*, 65(2), 84-102.

Bitan T. and Booth J.R. (2012) Offline improvement in learning to read a novel orthography depends on direct letter instruction. *Cognitive Science*, 36(5).

Sadeh, T., Maril, A. **Bitan, T.** and Goshen-Gottstein, Y. (2012). Putting Humpty Together and Pulling Him Apart: Accessing and Unbinding the Hippocampal Item-Context Engram. *NeuroImage*, 60, 808-817. IF=5.937 (selected by the Member of the Faculty of 1000 (F1000), as one of the top 2% of published articles in biology and medicine. <http://f1000.com>)

Liu L., Vira,A., Friedman, E.B., Minus, J. Bolger, D.J. **Bitan, T.** Booth, J.R.. (2010) Children with reading disability show brain differences in effective connectivity for reading, but not listening comprehension. *PLoS One* 5(10). e13492. 1-11.

Cao, F., Khalid, K., Zaveri, R., Bolger, D. J., **Bitan, T.**, & Booth, J. R. (2010). Neural correlates of priming effects in children during spoken word processing with orthographic demands. *Brain and Language*, 114(2), 80-89.

Desroches, A.S., Cone, N.E., Bolger, D.J., **Bitan, T.**, Burman, D.D., & Booth, J.R. (2010). Children with reading difficulties show differences in brain regions associated with orthographic processing during spoken language processing. *Brain Research* 1356, 73-84.

Bitan, T., Lifshits A., Breznitz Z., and Booth, J.R. (2010) Bidirectional connectivity between hemispheres occur at multiple levels in language processing, but depends on sex. *Journal of Neuroscience*, 30(35):11576 –11585

Bitan, T., Cheon, J., Lu, D., Burman, D.D., and Booth, J.R. (2009) Developmental increase in top-down and bottom-up processing in a phonological task: An effective connectivity, fMRI study. *Journal of Cognitive Neuroscience* 21, 6, 1-11.

Cao, F., **Bitan, T.**, Booth, J.R., (2008) Effective brain connectivity in children with reading difficulties during phonological processing. *Brain and Language*, 107, 91-101.

Cone, N. E. Burman, D.D. **Bitan T.** and Booth J.R. (2008) Neural correlates of the interaction of phonological and orthographic processing in children during an auditory rhyme decision task. *NeuroImage*, 41, 623-35

Burman, D.D. **Bitan T.** and Booth J.R. (2008) Sex differences in neural processing of language among children. *Neuropsychologia*, Vol 46/5 p 1349-1362.

Booth, J.R. Mehdiratta, N., Burman D.D. and **Bitan T.** (2008) Developmental increases in effective connectivity to brain regions involved in phonological processing during tasks with orthographic demands. *Brain research*, 1189, 78-89.

Bitan T., Cheon J., Lu, D., Burman, D.D., Gitelman, D.R. Mesulam M.M., and Booth J.R. (2007). Developmental changes in activation and connectivity in phonological processing *NeuroImage* 38, 564-575.

Bitan T., Burman D., Chou T., Lu D., Cone, N.E. Cao, F. Bigio J.D. and Booth J.R., (2007). The interaction between orthographic and phonological information in children: an fMRI study. *Human Brain Mapping*, 28 (9), 880-892.

Booth J.R., Cho S., Burman D.D. and **Bitan T.** (2007). Neural correlates of mapping from phonology to orthography in children performing an auditory spelling task. *Developmental Science*, 10 (4): 441-51.

Booth, J.R., Wood L., Lu D., Houk J.C. and **Bitan T.** The role of the basal ganglia and cerebellum in language processing (2007). *Brain Research*, 1133, 136-144.

Booth, J.R., Bebko, G., Burman, D.D. and **Bitan T.** (2007). Children with reading disorder show modality independent brain abnormalities during semantic tasks. *Neuropsychologia*, 45, 775-783. IF=3.630

Chou T., Booth J.R., **Bitan T.**, Burman D., Bigio J.D. Cone N.E., Lu D., and Cao F. (2006) Developmental and skill effects on the neural correlates of semantic processing to visually presented words. *Human Brain Mapping*, 27 (11) 915-924.

Bitan T., Burman D.D., Lu D., Cone, N.E. Gitelman D. R. and Mesulam M-M. Booth J.R., (2006). Weaker top-down modulation from the left inferior frontal gyrus in children. *NeuroImage* 33, 991-998.

Cao F. Booth J.R., **Bitan T.**, Burman D., and Chou T. (2006) Deficient Orthographic and phonological representations in developmental dyslexics, revealed by brain activation patterns. *Journal of Child Psychology and Psychiatry* 47:10, 1041-1050.

Chou T., Booth J.R., Burman D., **Bitan T.**, Lu D., Cone N.E. and Bigio J.D, (2006). Developmental changes in the neural correlates of semantic processing. *NeuroImage* 29, 1141-1149.

Bitan T., Booth J.R., Choy J.J. Burman D.D., Gitelman D. R. and Mesulam M-M. (2005). Shifts of Effective Connectivity within a Language Network during Rhyming and Spelling. *Journal of Neuroscience*, 25 (22) 5397-5403.

Bitan T., Manor D., Morocz I.A. and Karni A. (2005). Effects of alphabeticality, practice and type of instructions on reading artificial script: an fMRI study, *Cognitive Brain Research*, 25 (1) 90-106.

Karni A., Morocz I.A., **Bitan T.**, Shaul S., Kushnir T. & Breznitz Z. (2005) An fMRI study of the differential effects of word presentation rates ("reading acceleration") on dyslexic readers' brain activity patterns. *Journal of Neurolinguistics*, 18(2) 197-219.

Bitan T. and Karni A. (2004). Procedural and declarative knowledge of word recognition and letter decoding in reading an artificial script. *Cognitive Brain Research*, 19 (3) 229-243.

Bitan T. and Karni A. (2003). Alphabetical knowledge from whole words training: effects of explicit instruction and implicit experience on learning script segmentation. *Cognitive Brain Research*, 16, 325-339.

Submitted Manuscripts

Nevat, M., Eviatar, Z., Ullman, M. and **Bitan, T.** Morphological inflections in an artificial language: Factors affecting acquisition and generalization (In revision).

Bitan, T. Kaftory, A., Leib, A., Eviatar, Z. and Peleg, O. Phonological ambiguity modulates resolution of semantic ambiguity during reading: An fMRI study (submitted).

Manuscripts in preparation

Weiss, Y. Katzir, T. and **Bitan, T.** Effects of orthographic transparency on the brains of dyslexic adult Hebrew readers.

Nevat, M., Eviatar, Z. Ullman, M. and **Bitan, T.** Morphological inflections in an artificial language: the neural basis.

Bitan, T., Nevat, M., Daher, Q. and Levenberg, K. Effects of sleep on learning novel morphological inflections in adults and children.

Karawani, H. Attias, J. **Bitan T.** and Banai, K.. Auditory perceptual learning in adults with and without age-related hearing loss. Abstract accepted for a special issue of *Frontiers in Psychology*

Aduan, J. and **Bitan, T.** Effects of training variability in learning to read an artificial script.

Chu, R. **Bitan, T.** and Meltzer J. The role of right to left hemisphere connectivity in sentence processing in post-stroke aphasia.

Katzir, T., Weiss, Y., Hadad, L. and **Bitan, T.** Effects of diacritics, vowel letters and morphological complexity on reading Hebrew words in 2nd and 5th grade children.

Invited presentations in conferences

Bitan, T. (March 2013) *Annual meeting of the Israeli Neuropsychological Association*. Domain general mechanisms in language learning.

Bitan, T., Weiss, Y. and Katzir, T. (Feb. 2012) *15th International Morphology Meeting, Vienna*. Morphological segmentation and orthographic transparency in typical and dyslexic adult Hebrew readers: fMRI study.

Bitan, T. (June 2011) *Imaging Language Workshop, Bar Ilan University*. Effects of development, skill and orthographic transparency on brain representations during reading.

Bitan, T. (June 2010) *Human Brain Mapping, Barcelona*. Effects of age and skill on effective connectivity in language tasks– symposium on connectivity in development.

Bitan, T. (Sept. 2008) *Literacy and Language (Script), University of Haifa*. Age and gender affect top-down and bottom-up connectivity in processing phonology and orthography.

Bitan, T. (July 2008) "From the Brain to the Notebook: research Learning Disabilities", *University of Haifa*. The effect of reading instruction on learning mechanisms involved in reading artificial script.

Bitan, T. (Apr. 2008) *Annual Feitelson Symposium, University of Haifa*. Developmental changes in brain connectivity in language processing.

Bitan, T. (Nov. 2007) *Translational Research Sensory Processing, University of Haifa*.
Plasticity of sensory and motor representations in functional brain imaging.

Invited seminar talks

Bitan, T. (Nov. 2014), *Linguistics Seminar, University of Toronto, Scarborough*. Many ways to read your vowels: fMRI studies of reading.

Bitan, T. (Dec. 2013), *Speech Language Pathology colloquium, University of Toronto*. Domain General Mechanisms in Language Learning.

Bitan, T. (Oct. 2013), *Rotman Rounds, Baycrest Hospital, Toronto*. Domain General Mechanisms in Language Learning.

Bitan, T. (Jan. 2013), *Linguistics Colloquium, Ben-Gurion University, Be'er-Sheva*. Effects of development, skill and orthographic transparency on brain representations during reading.

Bitan, T. (Jan 2012), *Interdisciplinary language colloquium, Tel-Aviv University*. Neural processing of orthographic, phonologic, morphological and semantic aspects in reading Hebrew words.

Bitan, T. (Nov. 2011), *Center for Cognitive Neuroscience, U. of Pennsylvania, Philadelphia*. Development & skill related changes in brain connectivity during language processing.

Bitan, T. (Feb. 2011), *Rambam Hospital Neuropsychological Unit, Haifa*. Development & skill related changes in brain connectivity during language processing

Bitan, T. (Feb. 2011), *Unit of Advanced Studies, Workshop on Executive Functions, University of Haifa Haifa*. Assessment of Executive Functions.

Bitan, T. (May 2010), *Askolot program, Open University, Jerusalem*. Typical and atypical reading in patients and functional imaging.

Bitan, T. (March 2010), *Psychology dept. colloquium, Tel Aviv University*. Brain plasticity in learning and development.

Bitan, T. (June 2009), *Linguistics department colloquium, Bar-Ilan University*. Connectivity within and between hemispheres in phonological processing in children.

Bitan, T. (June 2009), *Safra Brain Research Center Inauguration Conference, Haifa*, Inter-hemispheric connectivity during phonological processing in children.

Bitan, T. (Feb. 2008), *Neuroimaging seminar of Tel Aviv University & Sourasky Medical Center, Tel Aviv*. Developmental Changes in Top-down and Bottom-up Effective Connectivity during Language tasks.

Bitan, T. (Dec. 2007), *Center for Brain Research Learning & Learning Disabilities, University of Haifa*. Developmental changes in functional connectivity in phonological processing.

Bitan, T. (May 2007), *Neurocomputation Laboratory and CRI, Computation Cognition seminar, University of Haifa*. Brain plasticity of the language system in learning and development.

- Bitan, T. (Apr. 2006), *Cognitive Neurology and Alzheimer's Disease Center Seminar, Northwestern University Medical School, IL*. Developmental changes in effective connectivity during language tasks in fMRI.
- Bitan, T. (Mar. 2006), *Education department seminar, Ben Gurion University, Beer Sheva*. Brain plasticity of the language system in learning and development.
- Bitan, T. (Mar. 2006), *Psychology department colloquium, Hebrew University, Jerusalem*. Developmental changes in effective connectivity during language tasks in fMRI.
- Bitan, T. (Mar. 2006), *Neuroimaging Seminar, Souraski Medical Center, Tel Aviv*. Developmental changes in effective connectivity during language tasks in fMRI.
- Bitan, T. (May 2005), *Cognitive Brain Mapping Group seminar, Northwestern University, IL*. Orthographic and phonological representations in children: an fMRI study.
- Bitan, T. (Nov. 2004), *Cognitive Brain Mapping Group seminar, Northwestern University, IL*. Effective connectivity shows differential convergence zones in spelling and rhyming tasks.
- Bitan, T. (Aug. 2004), *Psychology dept. seminar, Ben Gurion University, Beer Sheva*. Effects of alphabeticality, experience and type of instruction on reading an artificial script: an fMRI study.
- Bitan, T., (Dec. 2003), *Cognitive Brain Mapping Group seminar, Northwestern University, IL*. Effects of alphabeticality, experience and type of instruction on reading an artificial script: an fMRI study.
- Bitan, T. (Dec. 2003), *Communication Sciences and Disorders, Departmental colloquium, Northwestern University, IL*. Effects of alphabeticality, experience and type of instruction on reading an artificial script: fMRI study.
- Bitan, T. (Jun, 2003), *Brain and Language Laboratory, Georgetown University, Washington DC*. Procedural and declarative learning in reading an artificial script.

Conferences Participation

International conferences:

- Ben Zion, D. Nevat, M. and Bitan, T. (2015) *Multiple perspectives on bilingualism and the brain*. Montreal. Effects of sleep and phonological abilities on learning morphological inflections in an artificial language.
- Bitan, T., Nevat, M., Daher, Q. and Levenberg, K. (Oct. 2013). *Neurobiology of Language, San Diego*. Effects of age and sleep on learning morphological inflections in an artificial language. (Oral presentation)
- Bitan, T., Nevat, M., Daher, Q. and Levenberg, K. (Oct. 2013). *International conference on multi-lingualism, Montreal, Canada*. Effects of age and sleep on learning morphological inflections in an artificial language.
- Weiss, Y., Katzir T. and Bitan, T. (May, 2013). *IWORDDD, San Sebastian, Spain*. Morphological segmentation and orthographic transparency in typical and dyslexic Hebrew readers: evidence from brain and behavior

- Bitan, T. Weiss, Y. Katzir T. (Oct. 2012) *Neurobiology of Language, San Sebastian, Spain*. Morphological segmentation and orthographic transparency in typical and dyslexic Hebrew readers.
- Bitan, T., Nevat, M. Eviatar, Z. and Ullman M. (Feb. 2012) *15th International Morphology Meeting, Vienna*. Acquisition and generalization of inflections in an artificial language (oral presentation).
- Bitan, T. Kaftory, A. Leib, A. Eviatar, Z. and Peleg O. (Nov 2011) *Neurobiology of Language, Annapolis, MD*. Orthographic, phonological and semantic dynamics during ambiguity resolution -an fMRI investigation.
- Bitan, T. Kaftory, A. Leib, A. Eviatar, Z. and Peleg O. (June 2011) *Human Brain Mapping (HBM), Quebec*. Hemispheric involvement in the resolution of semantic ambiguity depends on phonological ambiguity.
- Bitan, T. Morag, A. Yehezkel E. Katzir, T. (July 2010) *Society for Scientific Studies of Reading, Berlin*. Does the mode of phonological representations make a difference: Vowel letters and diacritics in different developmental stages.
- Bitan, T., Mussel, A. Gilboa, A. and Booth J.R. (June 2010) *Human Brain Mapping (HBM) Barcelona*. Changes in effective connectivity underlying Repetition Suppression in visual words.
- Bitan, T. Chou, TL Burman D Booth JR (June 2009) *Human Brain Mapping (HBM) San Francisco*. Inter-hemispheric connectivity during phonological processing- greater in girls compared to boys.
- Bitan, T. Burman D Booth JR (June 2008) *Human Brain Mapping (HBM) Melbourne*. Girls show more top-down influence on Fusiform during reading, effective connectivity fMRI study.
- Bitan, T. Chou, TL Burman D Booth JR (June 2007) *Human Brain Mapping (HBM) Chicago*. Age-dependent top-down control in children reconciling orthographic and phonological information.
- Bitan, T. Burman D Chou, TL Booth JR (Apr. 2006) *Cog. Neuroscience Society (CNS) San Francisco*. Developmental changes in effective connectivity in a phono judgment task.
- Bitan, T. Booth JR (June 2005) *Human Brain Mapping (HBM) Toronto*. 1) Left IFG in children is less effective in coordinating task-dependent shifts in effective connectivity. 2) Developmental changes in neural correlates of phonological judgment.
- Bitan, T. Booth JR (Apr. 2005) *Cognitive Neuroscience Society (CNS) New York*. 1) Shifts of Effective Connectivity within a Language Network during Rhyming and Spelling. 2) Ortho and phonological representations in children: an fMRI study.
- Bitan, T. Booth, JR (Oct. 2004) *Society for Neuroscience (SfN) San Diego*. Interaction of orthography and phonology during word reading in children: an event related fMRI study.
- Bitan, T. Karni A. (June 2003) *Human Brain Mapping (HBM) New York*. Phonological decoding of new and trained words in an artificial script: an fMRI study. (Oral presentation).
- Bitan, T., Karni A. (Apr. 2002) *Cognitive Neuroscience Society (CNS) San Francisco*. Word segmentation abilities and letter knowledge after prolonged training on whole words.

Conferences in Israel

- Weiss, Y., Katzir T. and Bitan, T. (Feb, 2014) *ISCOP*. Morphological segmentation and orthographic transparency in typical and dyslexic Hebrew readers: evidence from brain and behavior.
- Aduan J. and Bitan T. (Feb. 2014). *Learning Symposium, Annual meeting of the Israeli Association for Speech and Language, Tel Aviv*. Effects of Variability on the learning and generalization of an artificial script.
- Weiss, Y., Katzir T. and Bitan, T. (May, 2013) *Script Society for language and reading Kiryat Ono*. Morphological segmentation and orthographic transparency in typical and dyslexic Hebrew readers: evidence from brain and behavior
- Aduan J. and Bitan T. (Feb. 2013). *Annual meeting of the Israeli Association for Speech and Language, Tel Aviv*. Effects of Variability on the learning and generalization of an artificial script.
- Hadad, L., Weiss, Y., Katzir, T. and Bitan, T. (Feb. 2013). *Annual meeting of the Israeli Association for Speech and Language, Tel Aviv*. The contribution of morphological structure to reading Hebrew words in 2nd and 5th grade children.
- Bitan, T. Kaftory, A. Leib, A. Eviatar, Z. and Peleg O. (July 2012) *Script Society for language and reading Kiryat Ono*. Interaction of orthographic, phonological and semantic aspects in reading ambiguous words. (Oral presentation).
- Bitan, T. Kaftory, A. Leib, A. Eviatar, Z. and Peleg O. (Dec. 2011) *Israeli Society for Neuroscience (ISFN) Eilat*. Orthographic, phonological and semantic dynamics during ambiguity resolution -an fMRI investigation. (Oral presentation).
- Bitan, T. Weiss, Y. Katzir T. (Dec. 2010) *Israeli Society for Neuroscience (ISFN) Eilat*. The interplay of phonological, orthographic and morphological information in reading Hebrew words by adult dyslexic and skilled readers.
- Bitan, T. Lifshitz A. Booth JR (Oct. 2010) *Israel Society for Auditory Research Tel Aviv*. Bidirectional connectivity between hemispheres occurs at multiple levels in auditory language processing, but depends on sex. (Oral presentation).
- Bitan, T. Lifshitz A. Booth JR (July 2010) *Literacy and Language (Script) Haifa* Bidirectional connectivity between hemispheres occur at multiple levels in language processing, but depends on sex. (Oral presentation).
- Bitan, T. Booth JR (Feb. 2009) *Israeli Speech Hearing & Language Assoc. Ramat Gan*. 1) Developmental changes in Top-down and Bottom-up connectivity during reading; 2) Inter-hemispheric connectivity during auditory rhyming task in children. (Oral presentation).
- Bitan, T. (Dec. 2008) *Israeli Society for Neuroscience (ISFN) Eilat* . 1) Developmental changes in effective connectivity during language tasks; 2) Inter-hemispheric connectivity during auditory rhyming task in children. (Oral presentations).
- Bitan, T. (Jan 2008) *Israeli Neuropsychological Society, Haifa*. Developmental changes in functional connectivity in phonological processing. (Oral presentation).
- Bitan, T. (Oct. 2007) *Israeli Society for Auditory Research, Tel Aviv*. Developmental changes in functional connectivity in phonological processing. (Oral presentation).

Bitan, T. (Jan. 2007) *Israeli Speech Hearing & Lang. Assoc. Jerusalem*. Procedural learning of artificial script occurs with direct instruction on letters. (Oral presentation).

Bitan, T. (Jan. 1999) *Israeli Society for Neurosc. (ISfN) Eilat*. Reading acquisition: What is learnt in implicit training on grapheme decoding. (Oral presentation).

Organization and chairing of Conferences or Sessions

Script Society for language and reading (2013) Kiryat Ono. Session Chair
Annual meeting of the Israeli Neuropsychological Association, University of Haifa (Feb. 2013). Co-Organizer.

Inter-departmental Seminar Communication Disorders and the Brain Behavior Center University of Haifa (Nov. 2006), Seminar by Prof. Michael Ullman, Georgetown University, DC. Organizer.

Workshop on Executive functions, at the Unit of Advanced Studies, University of Haifa (2011). Scientific advisor.

Ad-hoc reviewer

Journals

Proceedings of the National Academy of Science (PNAS), Journal of Neuroscience, Brain, NeuroImage, Human Brain Mapping, Journal of Cognitive Neuroscience, Cerebral Cortex, Developmental Sciences, Brain & Language, Ear and Hearing, Neurocase, Annals of Dyslexia, Brill's Annual of Afroasiatic Languages and Linguistics, Applied Psycholinguistics, Brain and Behavior, Developmental Cognitive Neuroscience

Grant Foundations

The National Science Foundation (NSF), US; The Wellcome Trust, UK; Aix-Marseille Rising Stars Program, France; Biotechnology and Biological Sciences Research Council (BBSRC), UK; Israel-US Binational Science Foundation (BSF); Israel Science Foundation (ISF); The National Institute for Neurobiology (NiPi), Israel.

Conference abstracts

Society of the Neurobiology of Language (SNL); Human Brain Mapping (HBM)

University Academic Administration

2007 - 2013	Organizer of the departmental colloquium
2008 – 2013	Head of the department Committee of Student Affairs
2008 – 2013	Member of the department committee of Student Admission
2008 – 2009	Member in the committee for the Faculty Research Fair.

Membership in Professional Societies

2011 Member, Society for the Neurobiology of Language (SNL)
2010 Member, Society for the Scientific Studies of Reading (SSSR)

- 2006 Member, Israeli Society for Neuroscience (ISFN).
- 2004 Member, Society for Neuroscience (SfN)
- 2003 Member, Cognitive Neuroscience Society (CNS)
- 2003 Member, Organization for Human Brain Mapping (OHBM)