

Curriculum Vitae

Name Oren Civier
Year of Birth 1976
Contact Address Gonda Multidisciplinary Brain Research Center
Bar-Ilan University
Ramat Gan 52900
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Education

Boston University *Ph.D., Cognitive and Neural Systems*
Boston, MA., USA 2010
Advisor: Prof. Frank Guenther
Dissertation: *Computational Modeling of the Neural Substrates of Stuttering and Inducted Fluency.*

Open University of Israel *B.A. (cum laude), Computer Science*
Tel Aviv, Israel 2002

Positions

Bar-Ilan University *Postdoctoral Fellow*
Neurolinguistics Lab, Dr. Michal Ben-Shachar
Gonda Multidisciplinary Brain Research Center
Ramat Gan, Israel 2011 -

Boston University *Research Assistant*
Speech Lab, Prof. Frank Guenther
Department of Cognitive and Neural Systems
Boston, MA., USA 2003 - 2006, 2008 - 2009

Boston University *Teaching Assistant*
Principles and Methods of Cognitive and Neural Modeling I, Prof. Frank Guenther
Department of Cognitive and Neural Systems
Boston, MA., USA 2003, 2005

Awards

Ministry of Immigrant Absorption, Program for Encouraging Research and Development Personnel to Return to Israel. Postdoctoral Fellow Financial Assistance.
2011

Boston University, Graduate school of Arts and Sciences. Research Assistant scholarship.
2003-2006, 2008-2009

Boston University, Graduate school of Arts and Sciences. Teaching scholarship.
2003, 2005

Boston University. Dean's Fellowship merit-based scholarship.
2002-2003

Journal articles (in the previous 3 years)

Civier, O., Tasko, S. M., and Guenther, F. H. (2010). Overreliance on auditory feedback may lead to sound/syllable repetitions: Simulations of stuttering and fluency-inducing conditions with a neural model of speech production. *Journal of Fluency Disorders*, 35(3), pp. 246-279.

Civier, O., Bullock, D., Max, L., and Guenther, F. H. Computational modeling of stuttering caused by impairments in a basal ganglia thalamo-cortical circuit involved in syllable selection and initiation. *Submitted to the special issue of Brain and Language on the neurobiology of stuttering*.

Civier, O., Bullock, D., Max, L., and Guenther, F. H. Computational modeling of drug-induced fluency enhancement in stuttering. *To be submitted to the Journal of Cognitive Neuroscience*.

Conference papers (in the previous 3 years)

Civier, O., Bullock, D., Max, L., and Guenther, F. H. (2011). Dopamine excess may delay selection of syllabic motor programs: A modeling study of stuttering. *Proceedings of the 17th International Congress of Phonetic Sciences*. Hong Kong, China, 17 to 21 Aug., 2011.

Civier, O., Bullock, D., Max, L., and Guenther, F. H. (2011). Simulations of stuttering and induced fluency by drugs that partially block dopamine action. *The 9th World Congress for People Who Stutter*. Buenos Aires, Argentina, 18 to 21 May, 2011.

Abstracts (in the 3 previous years)

Civier, O., Tasko, S. M., and Guenther, F. H. (2011). Using acoustic and kinematic measures to test a neural model of over-reliance on auditory feedback in stuttering. *Talk at the Junior Researcher Forum of the 9th Oxford Dysfluency Conference*. St. Catherine's College, Oxford, UK, 1 to 4 Sep., 2011.

Civier, O., Bullock, D., Max, L., and Guenther, F. H. (2011). Both dopamine excess and white matter impairment induce dysfluencies in a neural queuing model of multi-syllabic speech. *Talk at the 9th Oxford Dysfluency Conference*. St. Catherine's College, Oxford, UK, 1 to 4 Sep., 2011.

Civier, O., Bullock, D., Max, L., and Guenther, F. H. (2011). Impairment of the basal ganglia thalamo-cortical loop may lead to dysfluencies. *Poster presented at the 6th International Conference on Speech Motor Control*. Groningen, the Netherlands, 8 to 11 June, 2011.

Civier, O., Tasko, S. M., and Guenther, F. H. (2009). Overreliance on auditory feedback control in stuttering: A modeling study. *Talk given at the 6th World Congress on Fluency Disorders*. Rio de Janeiro, Brazil, 5 to 8 Aug., 2009.

Civier, O., Bullock, D., Max, L., and Guenther, F. H. (2009). Simulating neural impairments to syllable-level command generation in stuttering. *Poster presented at the 6th World Congress on Fluency Disorders*. Rio de Janeiro, Brazil, 5 to 8 Aug., 2009.

Participation in research projects

Sequencing and Initiation in Speech Production (NIH R01 DC007683, F. H. Guenther, PI).

- Development of the GODIVA model of sequencing in speech production.
2007-2009

Resulting publication (includes acknowledgment of my participation): Bohland, J. W.,

Bullock, D., and Guenther, F. H. (2010) Neural Representations and Mechanisms for the Performance of Simple Speech Sequences. *Journal of Cognitive Neuroscience*, 22(7), pp. 1504–1529.

- Simulations of the GODIVA model to study white matter impairments in stuttering. 2008-2010
Paper submitted to the special issue of *Brain and Language* on the neurobiology of stuttering.
- Simulations of the GODIVA model to study dopamine excess in stuttering. 2011
Conference paper for the 17th International Congress of Phonetic Sciences.

CELEST: A Center of Excellence for Learning in Education, Science, and Technology. A multi-institution Science of Learning Center (NSF SBE-0354378, F. H. Guenther, CELEST Governing Board).

- Development and simulations of the DIVA model of speech production. 2004-2005
Resulting publication: Guenther, F. H., Ghosh, S. S., and Tourville, J. A. (2006) Neural modeling and imaging of the cortical interactions underlying syllable production. *Brain and Language*, 96(3), pp. 280-301.
- Simulation of the DIVA model to study stuttering. 2007-2010
Article published in *Journal of Fluency Disorders*.

Effects of Hearing Status on Adult Speech Production (NIH R01 DC03007, J. Perkell, PI).

- Simulations of the DIVA model of speech production to study the effect of masking noise on stuttering. 2005
Resulting publication: Civier, O. and Guenther, F. H. (2005) Simulations of feedback and feedforward control in stuttering. *Proceedings of the 7th Oxford Dysfluency Conference*, St. Catherine's College, Oxford, 29 June to 2 July, 2005.

Neural Modeling and Imaging of Speech (NIH R01 DC002852, F. H. Guenther, PI).

- Development of a real-time auditory perturbation (formant shifting) DSP board, and its employment in the MRI scanner at the Athinoula A. Martinos Center for Biomedical Imaging. 2004-2006
Resulting publication (includes acknowledgment of my participation): Tourville, J. A., Reilly, K. J., and Guenther, F. H. (2008) Neural mechanisms underlying auditory feedback control of speech. *NeuroImage*, 39(3), pp. 1429-1443.

Participation in conferences, workshops, and courses (in the previous 3 years)

Poster presentation at the 9th Ein Gedi Conference. Bar-Ilan University, Ramat Gan, Israel, 27 to 29 Feb., 2012.

New Tendencies in Motor Control and Brain Plasticity Course. Universidad de Buenos Aires. Buenos Aires, Argentina, 2 to 5 Nov., 2009.

Poster presentation at the I Reunión Conjunta de Neurociencias. Huerta Grande, Cordoba, Argentina, 4 to 6 Sep., 2009.

Psychotropic Drugs Course. Huerta Grande, Cordoba, Argentina, 2 to 3 Sep., 2009.

SPM8 Workshop. Massachusetts General Hospital. Boston, MA., USA, 7 to 8 Mar., 2009.

fMRI Visiting Fellowship Course. Massachusetts General Hospital. Boston, MA., USA, 2 to 6 Mar., 2009.

Invited talks

Impairment of the basal ganglia thalamo-cortical loop may lead to dysfluencies: A neurocomputational modeling study. Cerebral dynamics group, Laboratory of Neurophysics and Physiology, Paris Descartes University, Paris, France, 28 Apr., 2011.

Neurocomputational modeling of auditory and somatosensory feedback in stuttering. Computational Neuroscience Group, Departament of Technology, Universitat Pompeu Fabra, Barcelona, Spain, 27 Apr., 2011.

Computational modeling of the neural substrates of stuttering and induced fluency. Gonda Multidisciplinary Brain Research Center, Bar-Ilan university, Ramat Gan, Israel, 23 Apr., 2009.

Computational modeling of stuttering and induced fluency: The role of auditory monitoring and feedback control. Department of Cognitive and Neural Systems, Boston University, Boston, MA., USA, 19 Nov., 2007.

Professional positions

Israeli Defense Forces
Israel

Information Technology Project Manager
1998-2001

Language skills

- Hebrew (native)
- English (fluent in speech, reading and writing)
- Spanish (fluent in speech and reading, proficient in writing)