

Barak Shechter

Curriculum Vitae

Baltimore, MD 21201

Education

- | | |
|---------------------|--|
| Aug 2004 - Present | Doctor of Philosophy Candidate
University of Maryland School of Medicine
Baltimore, MD
Advisor: Didier A. Depireux |
| Jan 1998 - May 2001 | Bachelor of Arts in Computer Science
The Open University of Israel
Ramat Aviv, Israel |

Skills

- | | |
|------------------|--|
| Computer | Programming: C/C++/Visual C++, Matlab, Latex, Java, Prolog, Pascal, Assembly, Visual Basic, Ada, HTML
Systems: UNIX, Windows XP, Mac OS X |
| Languages | Fluent English and Hebrew. Basic Portuguese |

Awards and Honors

- | | |
|------|--|
| 2007 | Eleventh International Conference on Cognitive and Neural Systems Student Fellowship |
| 2000 | The Open University of Israel - Dean's list for academic excellence |
| 1999 | The Open University of Israel - Dean's list for academic excellence |
| 1999 | The Open University of Israel - Academic scholarship |

Peer Reviewed Journal Articles

1. **B. Shechter**, H.D. Dobbins, P. Marvit, D.A. Depireux. Dynamics of spectro-temporal tuning in primary auditory cortex of the ferret, *J Neurophysiol*, accepted.
2. **B. Shechter** and D.A. Depireux. Nonlinearity of coding in primary auditory cortex of the awake ferret, *Eur J Neurosci*, accepted.
3. H.D. Dobbins, P. Marvit, **B. Shechter**, D.A. Depireux. Spectro-temporal tuning during spectro-temporal transients in primary auditory cortex of the awake ferret, *J Neurophysiol*, accepted.
4. **B. Shechter** and D.A. Depireux. Stability of spectro-temporal tuning over several seconds in primary auditory cortex of the awake ferret, *Neuroscience*, **148**(3):806-814, Sep 2007.

5. **B. Shechter** and D.A. Depireux. Response adaptation to broadband sounds in primary auditory cortex of the awake ferret, *Hear Res.*, **221**(1-2):91-103, Nov 2006.
6. G. Shechter, **B. Shechter**, J.R. Resar, and R. Beyar. Prospective motion correction of x-ray images for coronary interventions, *IEEE Trans. Medical Imaging*, Special Issue on Vascular Imaging, **24**(4):441-450, Apr 2005.

Refereed Conference Proceedings

1. D. A. Depireux, H. D. Dobbins and **B. Shechter**. On the dynamics of Spectro-Temporal Tuning in Auditory Cortex, proceedings of ICCN07, Shanghai, Nov 2007.

Conference Abstracts

2. **B. Shechter** and D. A. Depireux. Non-classical Effects and Nonlinear Coding Schemes in Primary Auditory Cortex of the Awake Ferret, 31st MidWinter Meeting of the Association for Research in Otolaryngology, Phoenix, AZ, Feb 2008.
3. D. A. Depireux, Y. Ji, E. M. Powell, **B. Shechter**. Changes in Inferior Colliculus Activity of the Awake Rat Related to Tinnitus, 31st MidWinter Meeting of the Association for Research in Otolaryngology, Phoenix, AZ, Feb 2008.
4. D. A. Depireux, H. D. Dobbins, and **B. Shechter**. On the dynamics of Spectro-Temporal Tuning in Auditory Cortex, 1st International Conference on Cognitive Neurodynamics, Shanghai, China, Nov 2007.
5. D. A. Depireux, Y. Ji, E. M. Powell, **B. Shechter**. Changes in Inferior Colliculus Activity of the Rat Induced by Tinnitus, Advances in tinnitus assessment, treatment and neuroscience basis, Grand Island, NY, Jun 2007.
6. **B. Shechter**, H. D. Dobbins, P. Marvit, Y. Ji, D. A. Depireux. The Dynamics of Spectro-Temporal Tuning in Primary Auditory Cortex of the Awake Ferret, 10th Annual Program in Neuroscience Retreat, Taneytown, MD, Jun 2007.
7. **B. Shechter** and D. A. Depireux. Non-classical effects and nonlinear coding schemes in primary auditory cortex of the awake ferret, 11th International Conference on Cognitive and Neural Systems, Boston, MA, May 2007.
8. **B. Shechter** and D. A. Depireux. Higher Order Spectrotemporal Coding in Primary Auditory Cortex of the Awake Ferret, 9th Annual Program in Neuroscience Retreat, Taneytown, MD, Jun 2006.
9. **B. Shechter**, H. D. Dobbins, M.K.N. Afghan, P. Marvit, Y. Ji, and D. A. Depireux. Spectro-temporal tuning in long duration stimuli for AI of the awake ferret. 29th MidWinter Meeting of the Association for Research in Otolaryngology, Baltimore, MD, Feb 2006.
10. P. Marvit, H. D. Dobbins, **B. Shechter**, M.K.N. Afghan, Y. Ji, and D. A. Depireux. A simple extension to the STRF that accounts for rate-level non-linearities. 29th MidWinter Meeting of the Association for Research in Otolaryngology, Baltimore, MD, Feb 2006.

11. P. Marvit, H. D. Dobbins, **B. Shechter**, M.K.N. Afghan, Y. Ji, and D. A. Depireux. Spectrotemporal response-field dependence on broadband stimulus amplitude modulation depth and level in the inferior colliculus. Society for Neuroscience 35th Annual Meeting, Washington, DC, Nov 2005.
12. H. D. Dobbins, P. Marvit, **B. Shechter**, Y. Ji, and D. A. Depireux. Dynamics of spectrotemporal tuning in the primary auditory cortex. Society for Neuroscience 35th Annual Meeting, Washington, DC, Nov 2005.
13. **B. Shechter**, S. Kalluri, P. Marvit, H. D. Dobbins, Y. Ji, and D. A. Depireux. Response Modulation to Ongoing Broadband Sounds in Primary Auditory Cortex. 28th MidWinter Meeting of the Association for Research in Otolaryngology, New Orleans, LA, Feb 2005.
14. H. D. Dobbins, P. Marvit, **B. Shechter**, S. Kalluri, Y. Ji, and D. A. Depireux. On the Spectro-Temporal Representation of Feature Onsets in AI. 28th MidWinter Meeting of the Association for Research in Otolaryngology, New Orleans, LA, Feb 2005.