#### **BIOGRAPHICAL SKETCH**

NAME	DOCITION TITLE
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Elyse Suzanne Sussman	Professor of Neuroscience and
eRA COMMONS USER NAME	Otorhinolaryngology-HNS
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**EDUCATION/TRAINING** 

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Hofstra University, Hempstead, NY	Bs.Ed.	1975-79	Music Education
Harvard University, Cambridge, MA	Ed.M.	1979-80	Psychology/Reading
Graduate Center of the City Univ of NY	Ph.D.	1994-1998	Psychology
Albert Einstein College of Medicine, NY	Postdoc	1998-1999	ERPs, Cog Neuro
Graduate Center of the City Univ of NY	Postdoc	1999-2000	ERPs, Cog Neuro

## A. Personal Statement

My research, in the area of cognitive neuroscience, is focused on understanding the neurobiological basis of auditory scene perception, from infancy to adulthood. One of the main goals of this research is to link markers of brain function with standard behavioral measures of perception and attention during the development of auditory perceptual abilities.

## **B. Positions and Honors**

# **Positions and employment**

1995-1996	Adjunct Instructor, City College, City University of New York,
1995-1997	Research Assistant Albert Einstein College of Medicine, Bronx, NY
1998-1999	Research Associate Albert Einstein College of Medicine, Bronx, NY
1999-2000	Postdoctoral Fellow, NIH-NIDCD, City University of New York, NY
1998-2001	Visiting Researcher, Cognitive Brain Research Unit, Helsinki University, Finland
2000-2005	Assistant Professor, Albert Einstein College of Medicine, Bronx, NY
2005-2010	Associate Professor, Albert Einstein College of Medicine, Bronx, NY
2005-	Adjunct, Program in Speech-Language-Hearing Sciences, Graduate Center of the City
	University of New York, NY
2008-	Adjunct, Department of Otolaryngology, New York University, New York, NY
2010-	Professor, Departments of Neuroscience and Otorhinolaryngology, Albert Einstein College of
	Medicine, Bronx, NY

### Professional memberships and activities

2000-pres	Member, Cognitive Neuroscience Society
2004-pres	Member, Society for Neuroscience
2002-pres	Senate of the Albert Einstein College of Medicine (AECOM)
2002-pres	Steering Committee, Institute for Human Communications, Montefiore Medical Center
2009-pres	Senate Council, AECOM
2010-2016	Member, NIH Mechanisms of Sensory, Perceptual, and Cognitive Processes (SPC)
	Study Section

#### **Honors and awards**

- 1994 Teacher-As-Researcher Award, Northeastern Educational Research Association
- Human Frontier Science Program Fellow "Developing an attention-free indicator of auditory streaming". Hungarian Academy of Sciences, Budapest, Hungary.
- James A. Shannon Director's Award, National Institute on Deafness and Other Communication Disorders.
- National Institutes of Health (Grant R13DC012029, PI: E. Sussman), Sixth Conference on Mismatch Negativity and its Clinical and Scientific Applications. May 1-4, 2012, CUNY, New York
- C. Selected Peer Review Publications (selected from 60 peer-reviewed publications)

### Most relevant to the current application

- 1. Sussman, E. (2007). A new view on the MMN and attention debate: Auditory context effects. <u>Journal of Psychophysiology</u>, 21(3-4), 164-175.
- 2. Sussman, E. (2005). Integration and segregation in auditory scene analysis. *Journal of the Acoustical Society of America*, 117(3), 1285-1298.
- 3. Sussman, E. & Steinschneider, M. (2006). Neurophysiological evidence for context-dependent encoding of sensory input in human auditory cortex. *Brain Research*, 1075(1), 165-174.
- 4. Rahne, T. & Sussman, E. (2009). Neural representations of auditory input accommodate to the context in a dynamically changing acoustic environment. *European Journal of Neuroscience*, 29(1), 205-11.
- 5. Sussman, E., Bregman, A. S., Wang, W.J., & Khan, F.J. (2005). Attentional modulation of electrophysiological activity in auditory cortex for unattended sounds in multistream auditory environments. *Cognitive, Affective, & Behavioral Neuroscience*, 5(1), 93-110.

# Additional recent publications of importance to the field (in chronological order)

- 1. Sussman, E. & Winkler, I. (2001). Dynamic sensory updating in the auditory system. *Cognitive Brain Research*. *12*, 431-439.
- 2. Sussman, E., Sheridan, K., Kreuzer, J., & Winkler, I. (2003). Representation of the standard: Stimulus context effects on the process generating the mismatch negativity component of event-related brain potentials. *Psychophysiology*, 40, 465-471.
- 3. Sussman, E., Ritter, W., & Vaughan, H.G., Jr. (1998). Attention affects the organization of auditory input associated with the mismatch negativity system. *Brain Research*, 789, 130-38.
- 4. Sussman, E., Ritter, W., & Vaughan, H.G., Jr. (1999). An investigation of the auditory streaming effect using event-related brain potentials. *Psychophysiology*, *36*, 22-34.
- 5. Rimmele, J., Jolsvai, H., & Sussman, E. (2011). Auditory target detection is affected by implicit temporal and spatial expectations. *Journal of Cognitive Neuroscience*, 23(5), 1136–1147.
- 6. Näätänen, R., Tervaniemi, M., Sussman, E., Paavilainen, & Winkler, I. (2001). "Primitive intelligence" in the auditory cortex. *Trends in Neuroscience*, *24*, 283-288.
- 7. Winkler, I., Kushnerenko, H., Horváth, J., Čeponienė, R., Fellman, V., Huotilainen, M., Näätänen, R. & Sussman, E. (2003). Newborn infants can organize the auditory world. *Proceedings of the National Academy of Sciences*, 100 (20), 1182-1185.
- 8. Sussman, E., Winkler, I., & Schröger, E. (2003). Top-down control over involuntary attention-switching in the auditory modality. *Psychonomic Bulletin & Review*, *10*(3), 630-637.