

CURRICULUM VITAE

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PERSONAL INFORMATION

Birthplace: Cambridge, England.
Citizenship: American.

EDUCATION

1995 University of California at Santa Cruz, Santa Cruz, CA.
B.A. in Psychobiology.

2001 Northeastern University, Boston, MA.
Ph.D. in Experimental Psychology.

AWARDS

2001-present National Research Service Award, NIH individual post-doctoral fellowship.

LABORATORY EXPERIENCE

1993-1995 **Research Assistant**, University of California at Santa Cruz,
Department of Psychology, Supervisor: Melanie J. Mayer.

1996-1998 **Graduate Research Assistant**, Northeastern University,
Department of Psychology, Supervisor: Alexander A. Skavenski.

1998-2001 **Graduate Research Assistant**, Northeastern University,
Department of Psychology, Supervisor: Rhea T. Eskew, Jr.

2001-present **Post-Doctoral Fellow**, Massachusetts Institute of Technology,
Department of Brain and Cognitive Sciences, Supervisor: Mriganka Sur.

TEACHING EXPERIENCE

- Winter 1997** **Teaching Assistant**, Human Feeding Behavior and Eating Disorders, Northeastern University.
- Spring 1997, 1998** **Teaching Assistant**, Laboratory in Psychobiology, Northeastern University.
- Fall 1997, 1998, 1999** **Teaching Assistant**, Introduction to Psychology, Northeastern University.
- Winter 1999, 2000** **Teaching Assistant**, Behavioral Statistics I, Northeastern University.
- Summer 2000** **Instructor**, Behavioral Statistics I, Northeastern University.
- Winter 2001** **Teaching Assistant**, Laboratory in Sensation and Perception, Northeastern University.

PUBLICATIONS

Articles

- R.T. Eskew, J.R. Newton and F. Giulianini (2001). Chromatic detection and discrimination analyzed by a Bayesian classifier. *Vision Res.* 41: 893-909.
- J.R. Newton, R.W. Sikes and A.A. Skavenski (2002). Cross-modal plasticity after monocular enucleation of the adult rabbit. *Exp. Brain Res.* 144: 423-429.
- J.R. Newton and R.T. Eskew (2003). Chromatic detection and discrimination in the periphery: a post-receptoral loss of color sensitivity. *Vis. Neurosci.* 20: 1-11.
- J.R. Newton and M. Sur (2003). Plasticity of cerebral cortex in development. In: *Encyclopedia of Neuroscience, Third Edition*, ed., G. Adelman and B.H. Smith (in press).
- J.R. Newton and M. Sur (2004). Rewiring cortex: functional visual plasticity in the auditory cortex during development. In: *Plasticity of the central auditory system and processing of complex acoustic signals*, ed., J. Syka and M.M. Merzenich (in press).
- J.R. Newton, C. Ellsworth, T. Miyakawa, S. Tonegawa and M. Sur (2004). Acceleration of visual cued fear conditioning through the auditory pathway. (under revision).

Abstracts

- J.R. Newton, R.W. Sikes, A.A. Skavenski and C. Trempe (1997). Plasticity of visual receptive fields in V1 of adult rabbits following retinal lesions. *Soc. Neurosci. Abs.*, Vol. 23, 2058.

J.R. Newton, R.W. Sikes and A.A. Skavenski (1998). Cross-modal plasticity in V1 of alert adult rabbits following monocular enucleation. *Soc. Neurosci. Abs.*, Vol. 24, 646.

R.T. Eskew and J.R. Newton (1999). Counting color mechanisms: implications from threshold-level discriminations. *OSA Annual Meeting Program*, 96.

J.R. Newton and R.T. Eskew (2000). Spatial integration differences for the detection of “red” and “green” in the periphery. *Inv. Opt. Vis. Sci.*, Vol. 41, S810.

R.T. Eskew, J.R. Newton and J.S. McLellan (2000). S-cone response dynamics studied using “time-locked psychophysics”. *Inv. Opt. Vis. Sci.*, 41, S101.

J.R. Newton and R.T. Eskew (2000). Peripheral color detection mechanisms. *OSA Annual Meeting Program*, 79.

J.R. Newton and R.T. Eskew (2000). Color detection mechanisms in the periphery. *Soc. Neurosci. Abs.*, Vol. 26, 138.

J.R. Newton and R.T. Eskew (2001). Peripheral chromatic contrast sensitivity functions differ for S cone increment, S cone decrement, red and green patterns. *Inv. Opt. Vis. Sci.*, Vol. 42, S533.

J.R. Newton, C. Ellsworth, T. Miyakawa, S. Tonegawa and M. Sur (2002). Retinal axons directed to the auditory pathway accelerate visual cued fear conditioning in mice. *Program No. 820.2. 2002 Abstract Viewer/ItineraryPlanner. Washington, DC: Society for Neuroscience, Online.*

J.R. Newton, C. Ellsworth, T. Miyakawa, S. Tonegawa and M. Sur (2003). C-fos expression and accelerated visual cued fear conditioning in mice with visual input directed to the auditory thalamus. [Abstract]. *J. Vision*, Vol. 3.

J.R. Newton, J. Sharma, H. Yu and M. Sur (2003). Optical imaging of intrinsic signals reveals visual organization in mouse V1 and V2. *Program No. 266.9. 2003 Abstract Viewer/ItineraryPlanner. Washington, DC: Society for Neuroscience, Online.*

A.K. Majewska, J.R. Newton and M. Sur (2003). Comparison of in vivo dendritic spine motility in different cortical modalities during development. *Program No. 266.10. 2003 Abstract Viewer/ItineraryPlanner. Washington, DC: Society for Neuroscience, Online.*

PROFESSIONAL AFFILIATIONS, ACTIVITIES

Member, Society for Neuroscience.

Member, Association for Research in Vision and Ophthalmology (ARVO).

Elected Student Representative to the Graduate Committee (1997-1999).