

Jonathan Winawer
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Stanford University
Department of Psychology
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Education & Professional Experience

Stanford University

2007 – present. Postdoctoral fellow, Psychology.
Advisor: Brian Wandell.

Massachusetts Institute of Technology

2001 – 2007. PhD, Brain and Cognitive Sciences. Thesis: “Common mechanisms for the representation of real, imagined, and implied visual motion”.
Advisors: Lera Boroditsky, Barton L Anderson.

City College, City University of New York

1999 – 2001. MS, Neurobiology. Thesis: “Temporal integration of defocus in the control of eye growth”.
(Degree awarded May, 2005)
Thesis Advisor: Josh Wallman.

Columbia University, Columbia College

1990 – 1995. BA, Classics, *cum laude*. Dean’s list 1990, 1993, 1994.

Awards and Honors

- Visiting teaching award, Stanford Psychology, 2006.
- Winner, “Best static visual illusion”, at European Conference on Visual Perception, 2005.
- Top 10 Finalist (73 submissions) in “Best Visual Illusion Contest” at European Conference on Visual Perception, 2005.
- Student travel award for one of top 10 abstracts at the Vision Sciences Society Annual Conference, 2005.
- Funded fellow, Dartmouth Summer Institute for Cognitive Neuroscience, 2004.
- UC Davis Center for Mind and Brain Conference Fellowship, 2004.
- Angus MacDonald Award for Excellence in Undergraduate Teaching, MIT, 2003.
- NSF Graduate Research Fellowship – awarded in 2002 for three years.
- Marjorie & Gerald Burnett Fellowship, MIT, 2002.
- Master’s Student Research Award, City College of New York, 2001.

Publications

Papers

- Winawer J, Huk A, Boroditsky L. (2008) [A motion aftereffect from viewing still photographs depicting motion](#). Psychological Science. 19(3):276-83.
- Winawer, J, Witthoft, N, Frank, M, Wu, L, Wade, A, Boroditsky, L. (2007) [The Russian Blues reveal effects of language on color discrimination](#). Proceedings of the National Academy of Science. 104(19): 7780-7785. doi:10.1073/pnas.0701644104
- Kee, CS, Hung, LF, Qiao, Y, Ramamirtham, R, Winawer, J, Wallman, J, Smith, EL. (2007) [Temporal constraints on experimental emmetropization in infant monkeys](#). Investigative Ophthalmology and Vision Science, 48: 957 - 62. doi:10.1167/iops.06-0743
- Witthoft N, Winawer J. (2006) [Synesthetic colors determined by having colored refrigerator magnets in childhood](#). Cortex 42(2):175-183.
- Anderson BL, Winawer J. (2005) [Image segmentation and lightness perception](#). Nature, 434(7029): 79-83. doi:10.1038/nature03271
- Zhu, X, Park, T, Winawer, J, Wallman, J. (2005) In a matter of minutes, the eye can know which way to grow. Investigative Ophthalmology and Vision Science, 46: 2238 - 2241. doi:10.1167/iops.04-0956
- Winawer J, Zhu X, Choi J, Wallman J. (2005) [Ocular compensation for alternating myopic and hyperopic defocus](#). Vision Research, 45:1667-1677. doi:10.1016/j.visres.2004.12.013

- Wallman, J., Winawer, J. (2004) Homeostasis of eye growth and the question of myopia. *Neuron*, 43(4):447-468. doi:10.1016/j.neuron.2004.08.008
- Zhu, X, Winawer, J, Wallman, J. (2003) The potency of myopic defocus in lens-compensation. *Investigative Ophthalmology and Vision Science*. 44: 2818- 2827. doi:10.1167/iovs.02-0606
- Park, TW, Winawer, J, Wallman, J. (2003) Further evidence that chick eyes use the sign of blur in spectacle lens compensation. *Vision Research*, 43:1519-1531. doi:10.1016/S0042-6989(03)00180-9
- Winawer, J, Wallman, J. (2002) Temporal constraints on lens compensation in chicks. *Vision Research*, 42: 2651–2668. doi:10.1016/S0042-6989(02)00300-0

Peer-Reviewed Conference Proceedings

- Yoon, J., Witthoft, N, Winawer, J., Markman, E. (2007) Striking deficiency in top-down perceptual reorganization of two-tone images in preschool children. Proceedings of the 6th IEEE International Conference on Development and Learning.
- Davidenko, N., Witthoft, N., Winawer, J. (2007) Gender aftereffects in face silhouettes reveal face-specific processes. Object Perception, Attention, and Memory, Annual Meeting.
- Davidenko, N, Winawer, J, Witthoft, N, Ramscar, M. (2006). Implicit gender aftereffects in the perception of face silhouettes. Proceedings of the 28th Annual Meeting of the Cognitive Science Society.
- Witthoft, N, Winawer, J, Boroditsky, B. (2006) How looking at someone you don't know can help you to recognize someone you do. Proceedings of the 28th Annual Meeting of the Cognitive Science Society.
- Witthoft, N, Winawer, J. (2005) Adaptation to unknown faces influences recognition of famous faces. Object, Perception, Attention, & Memory, Annual conference.
- Witthoft, N, Winawer, J, Wu, L, Frank, M, Wade, A, Boroditsky, L. (2003) Effects of language on color discriminability. Proceedings of the 25th Annual Meeting of the Cognitive Science Society.
- Wallman, J, Winawer, J, Zhu, X, Park, TW. (2000) Might myopic defocus prevent myopia? Proceedings of the Eighth International Conference on Myopia, 138-142.

Conference Abstracts

- Yoon, J., Winawer, J., Witthoft, N., Markman, E. Mooney image perception in preschool-aged children. Vision Sciences Society Annual Meeting (2007).
- Davidenko, N., Witthoft, N., Winawer, J. Gender aftereffects in face silhouettes depend on face-specific processes. Vision Sciences Society Annual Meeting (2007).
- Fedorenko, E., Patel, A., Casasanto, D., Winawer, J., Gibson, E. Structural integration in language and music: A shared system. CUNY Conference on Human Sentence Processing, UC San Diego (2007).
- Anderson, BL, Winawer, J. Scission and the perception of lightness. Vision Sciences Society Annual Meeting (2006).
- Davidenko, N., Winawer, J, Witthoft, N. Gender aftereffects in the perception of silhouetted face profiles. Vision Sciences Society Annual Meeting (2006).
- Witthoft, N, Winawer, J. An objective measure of the effect of adaptation on recognition of famous faces. Vision Sciences Society Annual Meeting (2006).
- Winawer, J, Witthoft, N, Huk, A, Boroditsky, L. Common mechanisms for processing of perceived, inferred, and imagined visual motion. Vision Sciences Society Annual Meeting (2005).
- Witthoft, N, Winawer, J. Anticolors: Behavioral and neural correlates of the conscious experience of a color-grapheme synesthete. Annual general meeting of the UK Synaesthesia Association (2005).
- Winawer, J, Witthoft, N, Huk, A, Boroditsky, L. The Neural Basis of a Motion Aftereffect from Mental Imagery of Motion. Cognitive Neuroscience Society Annual Meeting (2005).
- Winawer, J, Witthoft, N, Huk, A, Boroditsky, L. Moving Mental Representations. Cognitive Neuroscience Society Annual Meeting (2004).
- Winawer, J, Rosenholtz, R, Witthoft, N, Boroditsky, L. Language, Categorization, and Visual Search. Vision Sciences Society Annual Meeting (2004).
- Winawer, J, Huk, A, Boroditsky, L. Mental imagery of motion causes direction-specific motion adaptation. Cognitive Neuroscience Society Annual Meeting (2003).
- Winawer, J., Witthoft, N. Modulating the synesthetic experience. European Conference on Visual Perception (2003).
- Witthoft, N, Winawer, J. Experience dependent synesthesia: A case study. Cognitive Neuroscience Society Annual Meeting (2003).
- Witthoft, N, Winawer, J. Casting shadows on synesthesia. Vision Sciences Society Annual Meeting, 2003.

- Winawer, J., Witthoft, N, Wu, L, Boroditsky, L. Effects of language on color discriminability. Vision Sciences Society Annual Meeting (2003).
- Anderson, BL, Winawer, J. Layered image representations and the perception of lightness. Vision Sciences Society Annual Meeting (2003).
- Zhu, X, Winawer, J, Choi, J, Wallman, J. The effect of defocusing lenses depends on the temporal integration characteristics of the emmetropization mechanism. Association for Research in Vision and Ophthalmology Annual Meeting (2002).
- Kee, CS, Hung, LF, Qiao, Y, Ramamirtham, R, Winawer, J, Wallman, J, Smith, EL. Temporal constraints on experimental emmetropization in infant monkeys. Association for Research in Vision and Ophthalmology Annual Meeting (2002).
- Winawer, J, Khan, S, Wallman, J. Enduring Responses to Spectacle Lens-Wear in Chicks. Association for Research in Vision and Ophthalmology Annual Meeting (2001).
- Park, TW, Winawer, J, Wallman, J. In a matter of minutes the eye can know which way to grow. Association for Research in Vision and Ophthalmology Annual Meeting (2001).
- Zhu, X, Feldkaemper, M, Winawer, J, Park, TW, Wallman, J. What ocular components underlie the inhibition of myopia or hyperopia by glucagon or its antagonist? Association for Research in Vision and Ophthalmology Annual Meeting (2001).
- Winawer, J, Zhu, X, Park, TW, Wallman, J. Is myopic blur more important than sharp vision for positive-lens compensation? Association for Research in Vision and Ophthalmology Annual Meeting (2000).
- Winawer, J, Wallman, J, Kee, C. Differential responses of ocular length and choroid thickness in chick eyes to brief periods of plus and minus lens-wear. Association for Research in Vision and Ophthalmology Annual Meeting (1999).

Talks

- (2007) University of California, Merced, Mind, Technology, and Society
- (2007) Vision Lunch in Psychology, Stanford
- (2006) UCSF, Forum on Cognitive Neuroscience and Neuroimaging.
- (2005) University of New South Wales, Australia, Department of Psychology.
- (2005) University of Newcastle, Australia, Department of Psychology.
- (2005) Yale Department of Psychology, Perception & Cognition Lab
- (2005) Annual Meeting of the Vision Sciences Society
- (2005) Society for Information Display in Boston, MA (Keynote luncheon address)
- (2005) Vision Lunch in Psychology, Stanford
- (2004) Stanford Cognitive Psychology Friday Seminar, Stanford
- (2004) Harvard - Cognition, Brain, & Behavior Seminar Series
- (2003) New England College of Optometry – Vision Science Colloquium Series
- (2003) CogLunch, Department of Brain & Cognitive Sciences, MIT, Cambridge, MA
- (2002) CogLunch, Department of Brain & Cognitive Sciences, MIT, Cambridge, MA
- (2001) Annual Meeting of the Association for Research in Vision & Ophthalmology
- (2000) City College of New York, Bi-Annual Graduate Student Talk Series
- (1999) Annual Meeting of the Association for Research in Vision & Ophthalmology

Teaching Experience

Course Instructor

- (Spring, 2007) Cognitive Neuroscience (graduate, co-taught with Nathan Witthoft). Dept of Psychology, Stanford University.
- (Spring, 2006) Cognitive Neuroscience (graduate, co-taught with Nathan Witthoft). Dept of Psychology, Stanford University.
- (Summer, 2005) Introduction to Cognitive Psychology (undergraduate, co-taught with Nick Davidenko and Adam November). Dept of Psychology, Stanford University.

Teaching Assistant

- (Winter, 2007) Applied Vision. Dept of Psychology, Stanford University.
- (Fall, 2006) Sensation & Perception. Dept of Psychology, Stanford University.
- (Spring, 2005) Introduction to Learning and Memory. Dept of Psychology, Stanford University.
- (Winter, 2005) Birds to Words: Cognition, Communication, and Language. Dept of Psychology, Stanford University.
- (Fall, 2004) Introduction to Sensation and Perception. Dept of Brain and Cognitive Sciences, MIT.

- (Fall, 2003) Introduction to Psychology. Dept of Brain and Cognitive Sciences, MIT.

Guest Lectures

- (Fall, 2006) Brain & Behavior (Undergraduate). Dept of Psychology, Stanford University.
- (Fall, 2006) Psychology I (Undergraduate). Dept of Psychology, Stanford University.
- (Winter, 2006) Graduate Research Methods. Dept of Psychology, Stanford University.
- (Fall, 2005) From Birds to Words: Cognition, Communication, and Language (Undergraduate). Dept of Psychology, Stanford University.
- (Fall, 2005) Introduction to Cognitive Psychology (Graduate). Dept of Psychology, Stanford University.
- (Fall, 2004) Introduction to Cognitive Psychology (Graduate). Dept of Psychology, Stanford University.
- (Spring, 2004) Foundations of Cognitive Science (Graduate). Dept of Brain and Cognitive Sciences, MIT.
- (Winter, 2003) From Perception to Cognition and Back Again (Undergraduate). Dept of Brain and Cognitive Sciences, MIT.

Administrative functions

- (2007-2008) Coordinator of “Vision Lunch” talk series, Department of Psychology, Stanford.
- (2005) Graduate admissions committee, Department of Psychology, Stanford.
- (2003 – 2004) Graduate representative to the Department of Brain & Cognitive Sciences, MIT.