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Department of Psychology  
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## Education & Professional Experience

### **New York University**

2013 – present. Assistant Professor, Psychology and Neural Science. Associate Investigator, Neuroscience Institute, NYU Langone Medical Center.

### **Stanford University**

2012 – 2013. Social Science Research Associate, Psychology

2007 – 2012. 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

1997 – 1999. Research Assistant, Department of Biology, Josh Wallman’s lab

### **Columbia University, Columbia College**

1990 – 1995. BA, Classics, cum laude

## Funded Research

2017 – 2020. R01 EY027401, NIH (NEI). Awarded 2017 for 3 years. Role: Co-PI.  
Linking brain and behavior 'around' the visual field.

2017 – 2020. R01 EY027964, NIH (NEI). Awarded 2017 for 3 years. Role: Co-investigator.  
Studying crowding as a window into object recognition and development and health of visual cortex.

2016 – 2021. R01 MH111417, NIH (NIMH). Awarded 2016 for 5 years. Role: Co-PI.  
Development and validation of empirical models of the neuronal population activity underlying non-invasive human brain measurements.

- 2016 – 2017. Center for Data Science Seed Grant (NYU). Awarded 2016 for 1 year. Role: PI.  
The standard cortical observer.
- 2013 – 2016. R00 EY022116 Career award, NIH (NEI). Awarded 2013 for 3 years. Role: PI.  
Multimodal imaging of spatiotemporal integration in the human visual system.
- 2012 – 2013. K99 EY022116 Career award, NIH (NEI). Awarded 2011 for 2 years. Role: PI.  
Multimodal imaging of spatiotemporal integration in the human visual system.
- 2008 – 2011. F32EY019224 NRSA Postdoctoral fellowship, NIH (NEI). Awarded in 2008 for 3 years.  
The representation of surface appearance in visual cortex.
- 2004 – 2007. NSF Graduate Research Fellowship – awarded in 2002 for 3 years (start 2004).

### Training / Core Grants

- 2016 – 2021 T90-A043219/R99Da043849, NIH. Wang and Ma (PIs). Role: Co-Investigator.  
Training in Computational Neuroscience.
- 2015 – 2020 P30-EY013079, NIH (NEI). Movshon (PI). Role: Other Significant Contributor.  
Core Grant For Vision Research.
- 2015 – 2020 T32- MH096331, NIH (NIMH). Rudy and Klann (PIs). Role: Mentor.  
Training Program in Neuroscience.
- 2014 – 2019 T32-EY007136, NIH (NEI). Movshon (PI). Role: Mentor.  
Training in Visual Neuroscience.

### Publications

*N.B.:* Arrows (➤) indicate submitted after NYU start date (Sep 1, 2013). Underlined authors are current of former trainees (PhD students, postdocs, research assistant).

- Regev T, Winawer J, Gerber E, Nelken I, Knight RT, Parvizi J, Deouell LY. Human posterior parietal cortex responds to visual stimuli as early as peristriate occipital cortex

#### Under review and preprints

- Benson N, Winawer J. (Under review) A Bayesian model of human retinotopic maps.
- Kupers E, Wang H, Kay K, Heeger D, Winawer J. (Under review). Broadband spectral responses in visual cortex revealed by a new MEG denoising algorithm.
- Horiguchi H, Takemura H, Liao J, Wandell BA, Winawer J. (Under review). Responsive visual field maps despite a V1 lesion and quarterfield blindness.
- Witthoft N\*, Long S\*, Winawer J<sup>§</sup>, Kiani K<sup>§</sup>. (Under Review) Sensory and decision-making processes underlying perceptual adaptation. \* equal contribution, co-first authors; <sup>§</sup> equal contribution, co-senior authors.

**Peer-reviewed journal articles**

- Zhou J, Benson N, Kay K, Winawer J. (2017). Compressive Temporal Summation in Human Visual Cortex. *Journal of Neuroscience*. doi: [10.1523/JNEUROSCI.1724-17.2017](https://doi.org/10.1523/JNEUROSCI.1724-17.2017)
- Winawer J, Witthoft N. (2017). Identification of the ventral occipital visual field maps in the human brain. *F1000Res*. doi: [10.12688/f1000research.12364.1](https://doi.org/10.12688/f1000research.12364.1)
- Hermes D, Nyugen M, Winawer J. (2017). Neural synchrony and the relationship between the BOLD response and the Local Field Potential. *PLoS Biology*, 15:e2001461. doi:[10.1371/journal.pbio.2001461](https://doi.org/10.1371/journal.pbio.2001461)
- Mackey WE, Winawer J, Curtis CE. (2017). Visual field maps in human association cortices. *ELife*, 6:e22974. doi:[10.7554/eLife.22974](https://doi.org/10.7554/eLife.22974).
- Hermes D, Kasteleijn-Nolst Trenité K, Winawer J. (2017). Gamma oscillations and photosensitive epilepsy. *Current Biology*. 27:R336-R338. doi:[10.1016/j.cub.2017.03.076](https://doi.org/10.1016/j.cub.2017.03.076)
  - Commentary: Honey C, Valiante T (2017). Neuroscience: When a single image can cause a seizure. *Current Biology*. 27:R394–R397. doi:[10.1016/j.cub.2017.03.067](https://doi.org/10.1016/j.cub.2017.03.067)
- Winawer J, Parvizi J. (2016). Linking electrical stimulation of human primary visual cortex, size of affected cortical area, neuronal population activity, and subjective experience. *Neuron*, 92:1213-1219. doi:[10.1016/j.neuron.2016.11.008](https://doi.org/10.1016/j.neuron.2016.11.008)
- Horiguchi H, Wandell BA, Winawer J (2016). A predominantly visual subdivision of the right temporo-parietal junction (vTPJ). *Cerebral Cortex*, 26:639-46, Epub 2014. doi:[10.1093/cercor/bhu226](https://doi.org/10.1093/cercor/bhu226)
- Winawer J, Witthoft N. (2015). Human V4 and ventral occipital retinotopic maps. *Visual Neuroscience*, 32:e020. doi:[10.1017/S0952523815000176](https://doi.org/10.1017/S0952523815000176)
- Witthoft N, Winawer J, Eagleman D. (2015). Prevalence of learned grapheme-color pairings in a large online sample of synesthetes. *PLoS One*, 10:e0118996. doi:[10.1371/journal.pone.0118996](https://doi.org/10.1371/journal.pone.0118996)
- Wandell BA, Winawer J. (2015). Computational neuroimaging and population receptive fields. *Trends in Cognitive Sciences*, 9:349-357. doi:[10.1016/j.tics.2015.03.009](https://doi.org/10.1016/j.tics.2015.03.009)
- Hermes D, Miller KJ, Wandell BA, Winawer J (2015). Gamma oscillations in visual cortex: the stimulus matters. *Trends in Cognitive Science*, 19:57-58. doi:[10.1016/j.tics.2014.12.009](https://doi.org/10.1016/j.tics.2014.12.009)
- Hermes D, Miller KJ, Wandell BA, Winawer J (2015). Stimulus dependence of gamma oscillations in human visual cortex. *Cerebral Cortex*, 25:2951-9, Epub 2014. doi:[10.1093/cercor/bhu091](https://doi.org/10.1093/cercor/bhu091)
  - Commentary: Mazaheri A, Van Diepen R (2015). Gamma oscillations in a bind? *Cerebral Cortex* 25:4651–4652. doi:[10.1093/cercor/bhu136](https://doi.org/10.1093/cercor/bhu136)
- Takemura H, Rokem A, Winawer J, Wandell BA, Yeatman J, Pestilli F. (2015). A major human white-matter pathway between dorsal and ventral visual cortex. *Cerebral Cortex*, Epub ahead of print. doi:[10.1093/cercor/bhv064](https://doi.org/10.1093/cercor/bhv064)
- Yoon JMD, Witthoft N, Winawer J, Frank MC, Everett D, Gibson E. (2014). Cultural differences in photo-triggered perceptual reorganization. *PLoS One*, 9:e110225. doi:[10.1371/journal.pone.0110225](https://doi.org/10.1371/journal.pone.0110225)
- Kay K, Rokem A, Winawer J, Wandell BA (2013). GLMdenoise: A fast, automated technique for denoising task-based fMRI data. *Frontiers in Brain Imaging Methods*, 7. doi:[10.3389/fnins.2013.00247](https://doi.org/10.3389/fnins.2013.00247)
- Winawer J, Kay KN, Foster BL, Rauschecker AM, Parvizi J, Wandell BA. (2013). Asynchronous broadband signals are the principal source of the BOLD response in human visual cortex. *Current Biology*, 23:1145-53. doi:[10.1016/j.cub.2013.05.001](https://doi.org/10.1016/j.cub.2013.05.001)
- Kay KN, Winawer J, Mezer A, Wandell BA. (2013). Compressive spatial summation in human visual cortex. *Journal of Neurophysiology*, 10:481-94. doi:[10.1152/jn.00105.2013](https://doi.org/10.1152/jn.00105.2013)
- Kay KN, Winawer J, Rokem A, Mezer A, Wandell BA. (2013). A two-stage cascade model of BOLD responses in human visual cortex, *PLoS Computational Biology*. 9:e1003079. doi:[10.1523/JNEUROSCI.4558-12.2013](https://doi.org/10.1523/JNEUROSCI.4558-12.2013)
- Shum J, Hermes D, Foster B, Dastjerdi M, Rangarajan V, Winawer J, Miller K, Parvizi J. (2013). A brain area for visual numerals. *Journal of Neuroscience*, 33:6709-6715. doi:[10.1523/JNEUROSCI.4558-12.2013](https://doi.org/10.1523/JNEUROSCI.4558-12.2013)

- Horiguchi H, Winawer J, Dougherty R, Wandell BA. (2013). Human color sensitivity: Trichromacy revisited. *Proceedings of the National Academy of Science*, 110:E260–E269. doi:10.1073/pnas.1214240110
- Witthoft N, Winawer J. (2013). Learning, memory, and synesthesia. *Psychological Science*, 24:258-65. doi:10.1177/0956797612452573
- Haak KV, Winawer J, Harvey BM, Dumoulin BM, Wandell BA, Cornelissen FW. (2012). Connective field modeling. *NeuroImage*, 66:376-384. doi:10.1016/j.neuroimage.2012.10.037
- Nune G\*, Winawer J\*, Rauschecker A, Foster B, Dastjerdi M, Wandell BA, Parvizi J. (2011). Problem of signal contamination in inter-hemispheric dual-sided electrodes. *Epilepsia*, 52:e176-e180. doi:10.1111/j.1528-1167.2011.03284.x \*Co-first authors.
- Wandell BA & Winawer J. (2011). Imaging retinotopic maps in the human brain. *Vision Research*, 51:718-37. doi:10.1016/j.visres.2010.08.004
- Winawer J, Horiguchi H, Sayres R, Amano K, Wandell BA. (2010). Mapping hV4 and ventral occipital cortex: The venous eclipse. *Journal of Vision*, 10(5). doi:10.1167/10.5.1
- Levin N, Dumoulin SO, Winawer J, Dougherty RF, Wandell BA. (2010). Cortical maps and white matter tracts following long period of visual deprivation and retinal image restoration. *Neuron*, 65:21-31. doi:10.1016/j.neuron.2009.12.006
- Winawer J, Huk A, Boroditsky L. (2010). A motion aftereffect from visual imagery of motion. *Cognition*, 114: 276-284. doi:10.1016/j.cognition.2009.09.010
- Fedorenko E, Patel A, Casasanto D, Winawer J, Gibson E. (2009). Structural integration in language and music: Evidence for a shared system. *Memory & Cognition*, 37:1-9. doi:10.3758/MC.37.1.1
- Anderson BL, Winawer J. (2008). Layered image representations and the computation of surface lightness. *Journal of Vision*, 8:1-22. doi:10.1167/8.7.18
- Winawer J, Huk A, Boroditsky L. (2008). A motion aftereffect from viewing still photographs depicting motion. *Psychological Science*, 19:276-283. doi:10.1111/j.1467-9280.2008.02080.x
- 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*, 104:7780-7785. 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*, 48:957-962. doi:10.1167/iovs.06-0743
- Witthoft N, Winawer J. (2006). Synesthetic colors determined by having colored refrigerator magnets in childhood. *Cortex*, 42:175-183.
- Anderson BL, Winawer J. (2005). Image segmentation and lightness perception. *Nature*, 434:79-83. 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/iovs.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*, 43:447-468. 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

## Book Chapters

- Winawer J and Benson, N. (Forthcoming). Population Receptive Fields in Human Neuroimaging. In M Gazzaniga (Ed.), *The New Cognitive Neurosciences*, 5<sup>th</sup> Ed.
- Winawer J, Horiguchi H. (2017). Visual system architecture. In P. Artal (Ed.), *The new handbook of visual optics*. New York and London: Taylor & Francis Books, Inc.
- Wandell BA, Winawer J, Kay KN (2015). Computational Modeling of Responses in Human Visual Cortex. In A. W. Toga (Ed.), *Brain Mapping* (pp. 651-659). Waltham: Academic Press.
- Winawer J, Witthoft N. (2013) Effects of color terms on color perception and cognition. In R Luo (Ed.), *Encyclopedia of Color Science and Technology*. Berlin & Heidelberg: Springer. [doi:10.1007/978-3-642-27851-8](https://doi.org/10.1007/978-3-642-27851-8).

## Conference Proceedings

- Farrell JE, Jiang H, Winawer J, Brainard DH, Wandell BA. (2014). Modeling Visible Differences: The Computational Observer Model. *Society for Information Display*. Symposium Digest of Technical Papers, 45(1):353-256. [doi:10.1002/j.2168-0159.2014.tb00095.x](https://doi.org/10.1002/j.2168-0159.2014.tb00095.x). §Distinguished Paper of the 2014 SID International Symposium.
- Yoon JMD, Witthoft N, Winawer J, Frank MC, Everett DL, Gibson E, Markman E. (2011). Thinking for seeing: Enculturation of visual-referential expertise as demonstrated by photo-triggered perceptual reorganization of two-tone Mooney images. *Proceedings of the 33rd Annual Meeting of the Cognitive Science Society*, p. 2896-2901.
- 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*, p. 181-186. [doi:10.1109/DEVLRN.2007.4354071](https://doi.org/10.1109/DEVLRN.2007.4354071).
- Davidenko N, Witthoft N, Winawer J. (2007) Gender aftereffects in face silhouettes reveal face-specific processes. *Object Perception, Attention, and Memory, Annual Meeting. Visual Cognition*, 16(1):99-102. [doi:10.1080/13506280701692097](https://doi.org/10.1080/13506280701692097).
- 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*, p. 2468-2468.
- 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*, p. 894-899.
- 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*, p. 1247-1252.
- Wallman J, Winawer J, Zhu X, Park TW. (2000) Might myopic defocus prevent myopia? *Proceedings of the Eighth International Conference on Myopia*, p. 138-142.

## Conference Presentations

*N.B.* Asterisks (\*) indicate that a manuscript is currently in preparation based on the conference presentation.

- Benson NC, Broderick W, Müller H, Winawer J. Toward a standard cortical observer. *Optical Society of America Fall Vision Meeting* (2017).
- Zhou J, Benson NC, Pelli D, Winawer J. Conservation of Crowding Distance in Human V4. *Optical Society of America Fall Vision Meeting* (2017).
- Holdgraf C, Devinsky O, Flinker A, Ramsey N, Petridou N, Winawer J, Hermes D. BIDS-iEEG: A data structure for intracranial EEG that facilitates the integration with other human imaging methods. *Society for Neuroscience Annual Meeting* (2017).
- Kay KN, Winawer J, Zhou JY, Sertel M, Yoshor D, Beauchamp M. The dynamics of top-down modulation in human visual cortex. *Society for Neuroscience Annual Meeting* (2017).

- Jamison KW, Vizioli L, Zhang R, Tao J, Winawer J, Kay. A tool for automatic identification of cerebral sinuses and corresponding artifacts in fMRI. *Vision Sciences Society Annual Meeting* (2017).
- Benson NC, Broderick WF, Müller H, Winawer J. An anatomically-defined template of BOLD response in V1-V3. *Vision Sciences Society Annual Meeting* (2017).
- Zhou J, Choi S, Winawer J. Temporal windows in psychophysical discrimination and in neural responses in human visual cortex. *Vision Sciences Society Annual Meeting* (2017).
- Kupers E, Mackey WE, Curtis CE, Winawer J. The topographical relationship between visual field maps in association cortex and brain areas involved in non-visual cognition. *Vision Sciences Society Annual Meeting* (2017).
- Curtis CE, Mackey WE, Ding X, Wang X, Winawer J. Visual field maps constrain working memory precision. *Society for Neuroscience Annual Meeting* (2016).
- Winawer J, Parvizi J. Quantifying the links between electrical stimulation of the human primary visual cortex, size of affected cortical area, neuronal population activity, and subjective experience. *Society for Neuroscience Annual Meeting* (2016).
- \* Olsson C, Benson N, Winawer J. Towards a standard cortical observer model in human V1-V3. *Society for Neuroscience Annual Meeting* (2016).
- \* Zhou J, Benson N, Kay K, Winawer J. Temporal Summation and Adaptation in Human Visual Cortex. *Vision Sciences Society Annual Meeting* (2016).
- \* Hermes D, Nyugen M, Winawer J. Neural synchrony and the relationship between the BOLD response and the Local Field Potential. *Society for Neuroscience Annual Meeting* (2015).
- \* Winawer J, Kupers E, Chua N, Hermes D, Amano K. Stimulus selectivity of gamma oscillations in human visual cortex measured with magnetoencephalography. *Society for Neuroscience Annual Meeting* (2015).
- \* Benson N, Kay K, Winawer J. An automated tool for parcellating human visual cortex in individual subjects based on functional imaging data. *Society for Neuroscience Annual Meeting* (2015).
- \* Benson N, Aguirre G, Winawer J. Use of a prior to improving the retinotopic maps of individual subjects. *Vision Sciences Society Annual Meeting* (2015).
- \* Olsson C, Kay K, Winawer J. Orientation-tuned surround suppression improves computational models of human visual cortex. *Vision Sciences Society Annual Meeting* (2015).
- \* Kupers E, Wang H, Kay K, Heeger D, Winawer J. Broadband spectral responses in visual cortex revealed by a new MEG denoising algorithm. *Vision Sciences Society Annual Meeting* (2015).
- Nyugen M, Hermes D, Winawer J. Broadband field potentials, but not gamma oscillations, correlate with BOLD fMRI in human visual cortex. *Vision Sciences Society Annual Meeting* (2015).
- \* Winawer J, Parvizi J. Using conscious visual perception to quantify the effect of electrical stimulation of human cerebral cortex. *Society for Neuroscience Annual Meeting* (2014).
- \* Hermes D, Kay KN, Winawer J. A two stage, cascade model of electrocorticographic signals in human visual cortex. *Society for Neuroscience Annual Meeting* (2014).
- \* Curtis CE, Mackey WE, Winawer J. Visual field maps in human association cortices. *Society for Neuroscience Annual Meeting* (2014).
- Horiguchi H, Liao YJ, Wandell BA, Winawer J. Intact extrastriate maps following V1 quarterfield lesion. Association for Research in Vision and Ophthalmology Annual Meeting (2014).
- Hermes D, Kay KN, Winawer J. Stimulus selectivity of broadband field potentials, but not gamma oscillations, matches population responses as measured by BOLD fMRI in human visual cortex. *Vision Sciences Society Annual Meeting* (2014).
- \* Witthoft N, Winawer J, Kiani R. The Behavioral Effects of Adaptation to Facial Expressions are Explained by Changes in the Decision-Making Process. *Vision Sciences Society Annual Meeting* (2013).

- Winawer J, Hermes D, Parvizi J, Wandell BA, Miller J. Gratings elicit narrowband gamma responses in human visual field potentials; Faces, houses, and noise patterns elicit broadband responses. *Society for Neuroscience Annual Meeting* (2013).
- Takemura H, Rokem A, Winawer J, Wandell BA, Yeatman J, Pestilli F. Human white matter fascicles between ventral and dorsal visual field maps. *Society for Neuroscience Annual Meeting* (2013).
- Horiguchi H, Wandell BA, Winawer J. A right temporo-parietal junction region that responds strongly to salient or attended visual stimuli (vTPJ). *Society for Neuroscience Annual Meeting* (2013).
- Kay K, Winawer J, Rokem A, Mezer A, Wandell BA. A two-stage cascade model of BOLD responses in human visual cortex. *Society for Neuroscience Annual Meeting* (2013).
- Witthoft N, Winawer J, Cocjin J, Eagleman DM. Incidence of learned synesthesia in a large online sample of color grapheme synesthetes. *Society for Neuroscience Annual Meeting* (2013).
- Winawer J, Miller J, Hermes D, Parvizi J, Wandell BA. Oriented luminance gratings, but not noise patterns, induce narrow gamma band ECoG responses in human visual cortex. *Vision Sciences Society Annual Meeting* (2013).
- Winawer J. The fourth visual area: a question of homology. *Vision Sciences Society Annual Meeting* (2012).
- Horiguchi H, Winawer J, Dougherty RF, Wandell BA. Peripheral photopic sensitivity to melanopsin and cone photopigments. *Vision Sciences Society Annual Meeting* (2012).
- Hermes D, Winawer J, Rangarajan V, Shum J, Foster BL, Parvizi J. Mapping the ventral occipitotemporal reading network with fMRI and ECoG. *Society for Neuroscience Annual Meeting* (2012).
- Shum J, Dastjerdi M, Foster BL, Winawer J, Rangarajan V, Hermes D, Miller KJ, Parvizi J. A human brain area for seeing numbers. *Society for Neuroscience Annual Meeting* (2012).
- Winawer J, Rauschecker A, Kay K, Parvizi J, Wandell BA. Population receptive fields in human visual cortex measured with subdural electrodes. *Society for Neuroscience Annual Meeting* (2011).
- Kay K, Winawer J, Mezer A, Wandell BA. Compressive spatial summation improves models of extrastriate responses. *Society for Neuroscience Annual Meeting* (2011).
- Nune G, Winawer J, Rauschecker AM, Dastjerdi M, Foster BL, Wandell BA, Parvizi J. Problem of signal contamination in inter-hemispheric dual-sided subdural electrodes. *Society for Neuroscience Annual Meeting* (2011).
- Haak KV, Winawer J, Harvey BM, Dumoulin BM, Wandell BA, Cornelissen FW. Cortico-cortical population receptive field modeling. *European Conference on Visual Perception* (2011).
- Winawer J, Rauschecker AM, Parvizi J, Wandell BA. Population receptive fields in human visual cortex measured with subdural electrodes. *Vision Sciences Society Annual Meeting* (2011).
- Kay K, Winawer J, Mezer A, Wandell BA. Spatial saturation in human visual cortex. *Vision Sciences Society Annual Meeting* (2011).
- Horiguchi H, Winawer J, Wandell BA, Dougherty R. Novel MR Safe Stimulator with Six Color Channels at Accurate High Temporal Frequencies. *Vision Sciences Society Annual Meeting* (2011).
- Witthoft N, Winawer J. Ten Color-grapheme synesthetes with highly similar learned associations. *Vision Sciences Society Annual Meeting* (2010).
- Winawer J, Sayres R, Horiguchi H, Amano K, Wandell BA. Seeing around the veins: Mapping ventral occipital cortex. *Society for Neuroscience Annual Meeting* (2009).
- Bowen RF, Dougherty RF, Rauschecker AM, Perry LM, Winawer J, Wandell BA. Integration of luminance and motion cues to word forms. *Society for Neuroscience Annual Meeting* (2009).
- Winawer J, Sayres R, Amano K, Wandell BA. Visual field coverage of human V4. *Vision Sciences Society Annual Meeting* (2009).

- Yoon JMD, Winawer J, Witthoft, N, Markman, E. Representational requirements for perceptual reorganization. *Biennial Meeting of the Society for Research in Child Development, Denver, CO* (2009).
- Yoon JMD, 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).

**Invited Talks** (since September, 2013)

- 2018 Hebrew University, Jerusalem. Annual workshop of the imaging unit at the Brain Center
- 2018 City College of New York, Biomedical Engineering Departmental Seminars
- 2017 Rutgers University, Center for Cognitive Science
- 2017 NYU Computational Neuroscience Symposium
- 2017 Baylor College of Medicine, Seminar at the Core for Advanced MRI
- 2016 10th International Workshop on Advances in Electrographicography, San Diego, CA
- 2016 University of Pennsylvania, Vision Seminar Series.
- 2016 University of Giessen, Germany, PRISM 6 workshop: Perceptual Representations of Illumination, Shape and Materials
- 2016 SUNY College of Optometry, New York, Schnurmacher Institute for Vision Research Colloquium Series
- 2016 City College of New York, Biology Colloquium
- 2015 Brown University, Perception and Action Seminar
- 2015 Dartmouth University, fMRI Brown Bag
- 2015 University of Utrecht, Netherlands, Experimental Psychology Colloquium
- 2015 EU Innovative Training Network Consortium Workshop, Keynote Address, Utrecht, NL
- 2015 Computational Eye and Brain Workshop, Stanford University
- 2015 Kavli Summer Institute in Cognitive Neuroscience, UC San Diego
- 2014 Columbia Psychology Seminar
- 2014 Jikei University School of Medicine, Tokyo
- 2014 Osaka University, Center for Information and Neural Networks
- 2014 NYU, Workshop on modeling variability in neuronal populations
- 2014 NYU and Weizmann Institute of Science, Conference on Frontiers in Brain and Cognition
- 2013 University of Illinois Urbana Champaign, Neuroscience Seminar

**Teaching**

- 2014 – 2017 NYU, Undergraduate: Introduction to Perception
- 2015 – 2017 NYU, Graduate: Perception and Attention (team taught course; section on *Spatial vision and linear systems theory*)
- 2014 – 2016 NYU, Graduate: Cognitive Neuroscience (1-2 lectures per year on Vision and Human Neuroscience methods)
- 2006 – 2007 Stanford, Graduate: Cognitive Neuroscience (co-instructor with Nathan Witthoft)
- 2006 Stanford, Undergraduate: Sensation & Perception (co-instructor with Nathan Witthoft and Brian Wandell)
- 2005 Stanford, Undergraduate: Introduction to Cognitive Psychology (co-instructor with Nick Davidenko and Adam November)

**Service and University Committees**

- 2018 NIH Study Section, Cognition and Perception (CP)
- 2018 – current Editorial Board Member, Journal of Vision

2017	NYU Center for Data Science, Seed Grant Reviewing
2016 – 2017	NYU Abu Dhabi Psychology Search Committee (Cog Neuro)
2015 – 2016	Cognition & Perception Seminar Committee
2014 – current	Education Policy Committee
2014 – current	Center for Brain Imaging Committee
2013 – 2014	Center for Brain Imaging, Protocol Review Committee
2013 – 2014	Organizer, Conference for Frontiers in Brain and Cognition, NYU-Weizmann Institute of Science (Held at NYU, March 18-21, 2014)
2013 – 2014	NYU Abu Dhabi Psychology Search Committee (Perception; 4 faculty hires)
2007 – 2011	Coordinator of <i>Vision Lunch</i> 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
2002 – current	Ad hoc reviewing: Attention, Perception, and Psychophysics; Cerebral Cortex; Cognition; Current Biology; Developmental Science; Frontiers in Human Neuroscience; Human Brain Mapping; IEEE Transactions on Medical Imaging; Journal of Experimental Psychology, HPP; Journal of Neurophysiology; Journal of Neuroscience; Journal of Vision; Memory and Cognition; Nature; Nature Communications; Neuron; Neuroreport; PNAS; Psychonomic Bulletin and Review; Science; Vision Research

## Student and Postdoctoral Advising

- Primary advising to doctoral students
  - Jingyang Zhou (Psychology, 2014-current)
  - Eline Kupers (Psychology, 2015-current)
  - Serra Favila (Psychology, 2016-current)
  - Catherine Olsson (Neuroscience, 2014-2016, graduated with M Phil)
  - William Broderick (Neuroscience, 2016-current, co-advised with Eero Simoncelli)
- Postdoctoral fellows
  - Dora Hermes (2013-2016; starting assistant professor position in 2018)
  - Noah Benson (2014-current)
  - Iris Groen (2017-current)
- Postbac/predoc: 3 (1 current, 2 former; former postbacs were both admitted to PhD programs)
- Undergraduate: 2 former: 1 Psychology honors student, 1 Neuroscience major
- Doctoral / thesis committees: 21 (Psychology: 7 current, 7 graduated, 3 changed committees; Neuroscience: 2 active, 2 graduated)

## Awards and Honors

- Distinguished Paper of the SID International Symposium (Society for Information Display), 2014
- Visiting teaching award, Stanford Psychology, 2006
- Winner, “Best static visual illusion,” at European Conference on Visual Perception, 2005
- Student travel award, 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
- Marjorie & Gerald Burnett Fellowship, MIT, 2002
- Master's Student Research Award, City College of New York, 2001

### **Professional Organizations**

- Vision Sciences Society (since 2002)
- Society for Neuroscience (since 2008)