

**Curriculum Vitae
Lynne Kiorpes, PhD**

Education

1973 B.S. Honors, Physiological Psychology, Northeastern University, Boston, MA
1982 Ph.D. Physiological Psychology, University of Washington, Seattle, WN

Academic Positions

2018- present Vice Dean, Graduate School of Arts and Science, New York University,
New York, NY
2010-present Collegiate Professor, College of Arts and Science, New York University,
New York, NY
2004-present Professor of Neural Science and Psychology, New York University,
New York, NY
2003-2007 Director of Graduate Studies, Center for Neural Science, New York University,
New York, NY
1991-2004 Associate Professor of Neural Science and Psychology, New York University,
New York, NY
1989-1998 Director of Undergraduate Studies, Center for Neural Science, New York
University, New York, NY
1985-1991 Research Assistant Professor, Department of Psychology, New York University,
New York, NY
1982-1985 Postdoctoral Research Associate, Department of Ophthalmology, University of
Washington, Seattle, WN

Technical Employment

1974-1977 Research Technician, Behavioral Sciences Unit, Eunice Kennedy Shriver
Center for Mental Retardation, Waltham, MA
1973-1974 Research Technician, Department of Psychology, Northeastern University,
Boston, MA

Awards

Golden Dozen Teaching Award (2001), NYU, College of Arts and Science
University Distinguished Teaching Medal (2003), NYU
German Academic Exchange Fellowship (2007), DAAD, Bonn, Germany
James S. McDonnell Foundation Scholar Award (2007)
Executive Leadership in Academic Technology and Engineering Program Fellowship (2015)

Professional Organizations

Association for Research in Vision and Ophthalmology
Society for Neuroscience
Vision Sciences Society
New York Academy of Sciences

Teaching

- Introduction to Psychology
- Tutorial Research (Seminar in Neural Science)
- NYU Core Science Curriculum: Natural Science II
- FSI NSII series: Brain and Behavior
- Behavioral Neurobiology
- Honors in Neural Science
- Collegiate Seminar: Exploring the Mysteries of Behavior

Research Grants

- 1982-1985 Co-investigator, NIH Research grant EY03956, Monkey Models of Strabismus. Total direct costs: \$640,000.
- 1985-1988 Principal Investigator, NIH grant 1 R23 EY05864, Development of Hyperacuity in Infant Monkeys. Total direct costs: \$140,000.
- 1986-1991 Co-investigator, NIH grant EY02017, Quantitative Studies of the Central Visual Pathways. Total direct costs: \$822,751.
- 1987-1988 Principal Investigator, NYU Research Challenge Fund Grant, Development of Sensitivity in the Peripheral Visual Field. Total award: \$15,700.
- 1988-1992 Principal Investigator, NIH grant 2 R01 EY05864, Development of Visual Function in Primates. Total direct costs: \$347,241.
- 1989-1994 Co-Investigator, Howard Hughes Medical Institute, Undergraduate Neuroscience Education. Total direct costs: \$1,200,000.
- 1991-1993 Principal Investigator, NSF ILI program #USE-9151830, Molecular Principles in Undergraduate Neuroscience Education. Total direct costs: \$42,701.
- 1992-1997 Co-investigator, NIH grant 2 RO1 EY02017, Quantitative Studies of Central Visual Development. Total direct costs: \$432,992.
- 1993-1998 Principal Investigator, NIH grant 2 R01 EY05864, Development of Visual Function in Primates. Total direct costs: \$650,056.
- 1994-1998 Principal Investigator, Howard Hughes Medical Institute, Enriching the Undergraduate Laboratory Experience. Total direct costs: \$1,300,000.
- 1998-2001 Co-investigator, NIH grant 2 RO1 EY02017, Quantitative Studies of Central Visual Development. Total direct costs: \$238,730.
- 1999-2003 Principal Investigator, NIH grant 2 R01 EY05864, Development of Visual Function in Primates. Total direct costs: \$880,715.
- 2001-2002 Co-Investigator, NCRR Shared Instrumentation RR159880, OPTOTRAK Motion Measurement System. Total direct costs: \$107,782
- 2004-2008 Principal Investigator, NIH grant 2 R01 EY05864, Development of Visual Function in Primates. Total direct costs: \$1,000,000.
- 2004-2008 Co-investigator, NIH grant 2 RO1 EY02017, Quantitative Studies of Central Visual Development. Total direct costs: \$1,000,000.
- 2005-2010 Principal Investigator, NIMH grant T32 MH19524, Training in Systems and Integrative Neuroscience. Total direct costs: \$1,038,160.
- 2007-2014 Principal Investigator, James S. McDonnell Foundation Scholar Award, Uncovering the Neural Basis of Developmental Disability. Total direct costs: \$600,000.
- 2009-2014 Principal Investigator, NIH grant 2 R01 EY05864, Development of Visual Function in Primates. Total direct costs: \$2,297,568.
- 2011-2016 Principal Investigator, NIMH grant T32 MH19524, Training in Systems and Integrative Neuroscience. Total direct costs: \$1,350,900.

- 2012-2015 Principal Investigator, NIH grant R21 EY021894, Tracking Development of Global Visual Function Using High-Density EEG. Total direct costs: \$275,000.
- 2015-2020 Principal Investigator, NIH grant R01EY024914, Development of function in extrastriate visual cortex. Total direct costs: \$2,446,888.
- 2016-2019 Principal Investigator, NIH grant R01 EY05864, Development of Visual Function in Primates. Total direct costs: \$1,188,411.
- 2016-2021 Principal Investigator, NIMH grant T32 MH19524, Training in Systems and Integrative Neuroscience. Total direct costs: \$1,445,963.
- 2016-2018 Principal Investigator, Research to Prevent Blindness Disney Award for Amblyopia Research. Total direct costs: \$100,000.
- 2020-2023 Principal Investigator, NIH grant R01 EY05864, Development of Visual Function in Primates. Total direct costs: \$1,314,900.
- 2020-2024 Co-Principal Investigator, NIH grant R01EY031446, Development of Visual Object Recognition. Total direct costs: \$1,000,000.

Journal Publications

Kiorpes, L. and Boothe, R.G. The time course for the development of strabismic amblyopia in infant monkeys (*Macaca nemestrina*). Investigative Ophthalmology and Visual Science 19: 841-845, 1980.

Boothe, R.G., Williams, R.A., Kiorpes, L. and Teller, D.Y. Development of contrast sensitivity in infant *Macaca nemestrina* monkeys. Science 208: 1290-1292, 1980.

Kiorpes, L. and Boothe, R.G. Naturally occurring strabismus in monkeys (*Macaca nemestrina*). Investigative Ophthalmology and Visual Science 20: 257-263, 1981.

Williams, R.A., Boothe, R.G., Kiorpes, L. and Teller, D.Y. Oblique effects in normally reared monkeys (*Macaca nemestrina*): Meridional variations in contrast sensitivity measured with operant techniques. Vision Research 21: 1253-1266, 1981.

Boothe, R.G., Kiorpes, L. and Hendrickson, A. Anisometric amblyopia in *Macaca nemestrina* monkeys produced by atropinization of one eye during development. Investigative Ophthalmology and Visual Science 22: 228-233, 1982.

Howland, H., Boothe, R.G. and Kiorpes, L. Accommodative defocus does not limit the development of acuity in infant monkeys (*Macaca nemestrina*). Science 215: 1409-1411, 1982.

Boothe, R.G., Kiorpes, L., Regal, D.M. and Lee, C.P. The development of visual responsiveness in infant monkeys (*Macaca nemestrina*). Developmental Psychology 18: 665-670, 1982.

Kiorpes, L. and Boothe, R.G. Accommodative range in amblyopic monkeys. Vision Research 24: 1829-1834, 1984.

Kiorpes, L., Boothe, R.G., Carlson, M.R. and Alfi, D.A. Frequency of naturally occurring strabismus in monkeys. Journal of Pediatric Ophthalmology and Strabismus 22(2): 60-64, 1985.

Boothe, R.G., Kiorpes, L. and Carlson, M.R. Studies of strabismus and amblyopia in infant monkeys. Journal of Pediatric Ophthalmology and Strabismus 22(5): 206-212, 1985.

Kiorpes, L., Boothe, R.G., Hendrickson, A.E., Movshon, J.A., Eggers, H.M., and Gizzi, M.S. Effects of early unilateral blur on the macaque's visual system: I. Behavioral observations. Journal of Neuroscience 7(5): 1318-1326, 1987.

Hendrickson, A., Movshon, J.A., Boothe, R.G., Eggers, H.M., Gizzi, M.S., and Kiorpes, L. Effects of early unilateral blur on the macaque's visual system: II. Anatomical observations. Journal of Neuroscience 7(5): 1327-1339, 1987.

Movshon, J.A., Eggers, H.M., Gizzi, M.S., Hendrickson, A.E., Kiorpes, L., and Boothe, R.G. Effects of early unilateral blur on the macaque's visual system: III. Physiological observations. Journal of Neuroscience 7(5): 1340-1351, 1987.

Kiorpes, L. Strabismus: Primate models. Comparative Pathology Bulletin 20: 2-4, 1988.

Boothe, R.G., Kiorpes, L., Williams, R.A. and Teller, D.Y. Operant measurements of contrast sensitivity in infant macaque monkeys during normal development. Vision Research 28(3): 387-396, 1988.

Movshon, J.A. and Kiorpes, L. Analysis of the development of spatial contrast sensitivity in monkey and human infants. Journal of the Optical Society of America A 5(12): 2166-2172, 1988.

Kiorpes, L., Carlson, M.R. and Alfi, D. Development of visual acuity in experimentally strabismic monkeys. Clinical Vision Sciences 4(2): 95-106, 1989

Kiorpes, L. The development of spatial resolution and contrast sensitivity in naturally strabismic monkeys. Clinical Vision Sciences 4(4): 279-293, 1989.

Kiorpes, L. and Movshon, J.A. Differential development of two visual functions in primates. Proceedings of the National Academy of Sciences USA 86: 8998-9001, 1989.

Kiorpes, L. The development of vernier acuity and grating acuity in normally-reared monkeys. Visual Neuroscience 9: 243-251, 1992.

Kiorpes, L. The effect of strabismus on the development of vernier acuity and grating acuity in monkeys. Visual Neuroscience 9: 253-259, 1992.

Kiorpes, L., Kiper, D.C. and Movshon, J.A. Contrast sensitivity and vernier acuity in amblyopic monkeys. Vision Research 33(9): 2301-2311, 1993.

Kiper, D.C. and Kiorpes, L. Suprathreshold contrast sensitivity in experimentally strabismic monkeys. Vision Research 34 (12): 1575-1583, 1994.

Kiorpes, L. and Wallman, J. Does experimentally-induced amblyopia cause hyperopia in monkeys? Vision Research 35(9): 1289-1297, 1995.

- Blasdel, G., Obermayer, K. and Kiorpes, L. Organization of ocular dominance and orientation columns in the striate cortex of neonatal macaque monkeys. Visual Neuroscience 12(3): 589-603, 1995.
- Kiper, D.C., Gegenfurtner, K.R. and Kiorpes, L. Spatial frequency channels in experimentally strabismic monkeys revealed by oblique masking. Vision Research 35(19): 2737-2742, 1995.
- Kiorpes, L. and Kiper, D.C. Development of contrast sensitivity across the visual field in macaque monkeys (*Macaca nemestrina*). Vision Research 36(2): 239-247, 1996.
- Kiorpes, L., Walton, P.J., O'Keefe, L.P., Movshon, J.A., and Lisberger, S.G. Effects of early onset strabismus on pursuit eye movements and on neuronal responses in area MT of macaque monkeys. Journal of Neuroscience 16(20): 6537-6553, 1996.
- Horton, J.C., Hocking, D.R., and Kiorpes, L. Pattern of ocular dominance columns and cytochrome oxidase activity in a macaque monkey with naturally occurring anisometropic amblyopia. Visual Neuroscience 14(4): 681-689, 1997.
- Kiorpes, L. and Movshon, J.A. Peripheral and central factors limiting the development of contrast sensitivity in macaque monkeys. Vision Research 38(1): 61-70, 1998.
- Murphy, K.M., Pegado, V.D., Fenstemaker, S.B., Jones, D.G., Kiorpes, L., and Movshon, J.A. Spacing of cytochrome oxidase blobs in normal and strabismic monkeys. Cerebral Cortex 8: 237-244, 1998.
- Kiorpes, L., Kiper, D.C., O'Keefe, L.P., Cavanaugh, J.R., and Movshon, J.A. Neuronal correlates of amblyopia in the visual cortex of macaque monkeys with experimental strabismus and anisometropia. Journal of Neuroscience 18(16): 6411-6424, 1998.
- Kiorpes, L. and McKee, S.P. Neural mechanisms underlying amblyopia. Current Opinion in Neurobiology 9: 480-486, 1999.
- Kiorpes, L., Tang, C., and Movshon, J.A. Factors limiting contrast sensitivity in experimentally amblyopic monkeys. Vision Research 39(25): 4152-4160, 1999.
- Fenstemaker, S.B., Kiorpes, L., and Movshon, J.A. Effects of experimental strabismus on the architecture of macaque monkey striate cortex. Journal of Comparative Neurology 438: 300-317, 2001.
- Kiorpes, L. and Bassin, S.A. Development of contour integration in macaque monkeys. Visual Neuroscience 20, 567-575, 2003.
- Kozma, P. and Kiorpes, L. Contour integration in amblyopic monkeys. Visual Neuroscience 20, 577-588, 2003.
- Kiorpes, L., Tang, C., Hawken, M.J., and Movshon, J.A. Ideal observer analysis of the development of spatial contrast sensitivity in macaque monkeys. Journal of Vision 3(10): 630-641, 2003. <http://journalofvision.org/3/10/6/>, doi:10.1167/3.10.6.
- Kiorpes, L. and Movshon, J.A. Development of sensitivity to visual motion in macaque monkeys. Visual Neuroscience 21(6): 851-859, 2004.

- Movshon, J.A., Kiorpes, L., Hawken, J.A., and Cavanaugh, J.R. Functional maturation of the macaque's lateral geniculate nucleus. Journal of Neuroscience 25(10): 2712-2722, 2005.
- Kiorpes, L. Visual processing in amblyopia: Animal studies. Strabismus 14: 1-10, 2006.
- Kiorpes, L., Tang, C., and Movshon, J.A. Sensitivity to visual motion in amblyopic macaque monkeys. Visual Neuroscience 23: 247-256, 2006.
- Kourtzi, Z., Augath, M., Logothetis, N.K., Movshon, J.A., and Kiorpes, L. Development of visually-evoked cortical activity in infant macaque monkeys studied longitudinally with fMRI. Magnetic Resonance Imaging 24: 359-366, 2006.
- Hall-Haro, C., Johnson, S.P., Price, T.A., Vance, J.A., and Kiorpes, L. Development of object concepts in macaque monkeys. Developmental Psychobiology 50(3) 278-287, 2008. PMID: PMC2662927
- Stavros, K.A. and Kiorpes, L. Behavioral measurements of temporal contrast sensitivity development in macaque monkeys (*Macaca nemestrina*). Vision Research 48: 1335-1344, 2008. PMID: PMC2796546
- Hall-Haro, C. and Kiorpes, L. Normal development of pattern motion sensitivity in macaque monkeys. Visual Neuroscience 25: 675-684, 2008. PMID: PMC2849743
- Feltner, K. and Kiorpes, L. Global visual processing in macaques studied using Kanizsa illusory shapes. Visual Neuroscience 27: 131-138, 2010. PMID: PMC3057122
- El-Shamayleh, Y., Kiorpes, L., Kohn, A. and Movshon, J.A. Visual motion processing by neurons in area MT of macaque monkeys with experimental amblyopia. J Neuroscience 30(36):12198-12209, 2010. PMID: PMC2953773
- El-Shamayleh, Y., Movshon, J.A., and Kiorpes, L. Development of sensitivity to visual texture modulation in macaque monkeys. Journal of Vision 10(11): 1-12, 2010. PMID: PMC3010199
- Rislove, E.M., Hall, E.C., Stavros, K.A. and Kiorpes, L. Scale dependent loss of global form perception in strabismic amblyopia. Journal of Vision 10(12): 1-13, 2010. PMID: PMC21047757
- Kiorpes, L., Price, T., Hall-Haro, C. and Movshon, J.A. Development of sensitivity to global form and motion in macaque monkeys (*Macaca nemestrina*). Vision Research 63: 34-42, 2012. PMID: PMC3374036
- Li, D-P., Hagan, M.A., and Kiorpes, L. Linking structure and function: Development of lateral spatial interactions in macaque monkeys. Visual Neuroscience 30(5/6):263-270, 2013. PMID: PMC4059505
- Ghomashchi, A., Zheng, Z., Majaj, N., Trumpis, M., Kiorpes, L., and Viventi, J. A Low-cost, open-source wireless electrophysiology system. 2014 Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2014.

Nayar, K., Franchak, J., Adolph, K.E., Kiorpes, L. From local to global processing: The development of illusory contour perception. Journal of Experimental and Child Psychology 131: 38-55, 2014. PMID: PMC4383040

Kiorpes, L. Visual development in primates: Neural mechanisms and critical periods. Developmental Neurobiology 75(10): 1080-1090, 2015. PMID:PMC4523497

Shoener, C., Hallum, L.E., Kumbhani, R.D., Ziemba, C.M., Garcia-Marin, V., Kelly, J.G., Majaj, N.J., Movshon, J.A., Kiorpes, L. Population representation of visual information in areas V1 and V2 of amblyopic macaques. Vision Research, 114: 56-67, 2015. PMID:PMC4519437

Kiorpes, L. and Mangal, P. "Global" visual training and extent of transfer in amblyopic macaque monkeys. Journal of Vision, 15(10): 14, 2015. PMID:PMC5077278

Voyles, A.C. and Kiorpes, L. A window into brain development: hdEEG methods to track visual development in nonhuman primates. Developmental Neurobiology, 76: 1342-1359, 2016. PMID:PMC5074916

Roberts, M., Cymerman, R., Smith, T.R., Kiorpes, L., Carrasco, M. Covert spatial attention is functionally intact in amblyopic human adults. Journal of Vision 16(15):30. doi: 10.1167/16.15.30, 2016. PMID:PMC5215291

Kiorpes, L. The puzzle of visual development: Behavior and neural limits. Journal of Neuroscience, 36(45): 11384-11393, 2016. PMID:PMC5125205

Nayar, K., Voyles, A.C., Kiorpes, L., Di Martino, A. Global and local visual processing in autism: an objective assessment approach. Autism Research 10(8): 1392-1404, 2017.

Van Grootel, T.J., Meeson, A., Munk, M.H.J., Kourtzi, Z., Movshon, J.A., Logothetis, N.K. and Kiorpes, L. Development of visual cortical function in infant macaques: a BOLD fMRI study. PLOS ONE 12(11): e0187942, 2017. PMID:PMC5690606

Hallum, L.E., Shoener, C., Kumbhani, R.D., Kelly, J.G., Garcia-Marin, V., Majaj, N.J., Movshon, J.A., Kiorpes, L. Altered balance of receptive field excitation and suppression in visual cortex of amblyopic macaque monkeys. Journal of Neuroscience 37(34): 8216-8226, 2017. PMID:PMC5566869

Shoener, C., Hallum, L.E., Kumbhani, R.D., Garcia-Marin, V., Kelly, J.G., Majaj, N.J., Movshon, J.A., Kiorpes, L. Asymmetric dichoptic masking in visual cortex of amblyopic macaque monkeys. Journal of Neuroscience 37(36): 8734-8741, 2017. PMID:PMC5588465

Pham, A., Carrasco, M., Kiorpes, L. Endogenous attention improves perception in amblyopic macaques. Journal of Vision 18(3):11, 2018. doi: 10.1167/18.3.11 PMID:PMC5868757

Kiorpes, L. and Daw, N. Cortical correlates of amblyopia. Visual Neuroscience 35: e016, 2018. doi:10.1017/S0952523817000232

Acar, K., Kiorpes, L., Movshon, J.A., and Smith, M.A. Altered functional interactions between neurons in primary visual cortex of macaque monkeys with experimental amblyopia. Journal of Neurophysiology 122(6): 2243-2258, 2019. PMID: [PMC6966320](https://pubmed.ncbi.nlm.nih.gov/32069663/)

Kiorpes, L. Understanding the development of amblyopia using macaque monkey models. Proceedings of the National Academy of Sciences 116(52): 26217-26223, 2019. □ PMID: [PMC6936699](#)

Ramesh, P.V., Steele, M.A. and Kiorpes, L. Attention in visually-typical and amblyopic children. Journal of Vision 20(3):11, 2020. doi: 10.1167/jov.20.3.11. PMID: [PMC7405727](#)

Book Chapters

Kiorpes, L. and Movshon, J.A. The behavioral analysis of visual development. In The Development of Sensory Systems in Mammals, J.R. Coleman, Ed., John Wiley and Sons, New York, 1990.

Movshon, J.A. and Kiorpes, L. The role of experience in visual development. In The Development of Sensory Systems in Mammals, J.R. Coleman, Ed., John Wiley and Sons, New York, 1990.

Movshon, J.A. and Kiorpes, L. Biological limits on visual development in primates. In Early Visual Development: Normal and Abnormal, K. Simons, Ed., Oxford University Press, New York, 1993.

Obermayer, K., Kiorpes, L., and Blasdel, G.G. Development of orientation and ocular dominance columns in infant macaques. In Advances in Neural Information Processing Systems 6, J.D. Cowan, G. Tesauro, and J. Alspector, Eds., Morgan Kaufman Publishers, San Francisco, 1994.

Kiorpes, L. Development of contrast sensitivity in normal and amblyopic monkeys. In Infant Vision, F. Vital-Durand, J. Atkinson, and O. Braddick, Eds., Oxford University Press, Oxford, 1996.

Kiorpes, L. and Movshon, J.A. Amblyopia: a developmental disorder of the central visual pathways. In Function and Dysfunction in the Nervous System, Cold Spring Harbor Symposia on Quantitative Biology, LXI, 1997, pgs. 39-48.

Kiorpes, L. Sensory Processing: Animal models of amblyopia. In Amblyopia: a multidisciplinary approach, M. Moseley and A. Fielder. Eds., Butterworth-Heinemann Press, Oxford, 2001, Chapter 1, pages 1-18.

Kiorpes, L. and Movshon, J.A. Neural limitations on visual development in primates. In The Visual Neurosciences, L.M. Chalupa and J.S. Werner, Eds., MIT Press, 2004, Chapter 12, pages 159-173.

Kiorpes, L. Macaque models of visual development and disability. In Nonhuman Primate Models of Children's Health and Developmental disabilities, T.M. Burbacher, G.P. Sackett, and K.S. Grant, Eds., Academic Press, 2008, Chapter 3, pages 45-70.

Kiorpes, L., Dobkins, K., Mendola, J. Linking Hypotheses in Visual Neuroscience. Special issue, Visual Neuroscience, V. 30, Issues 5 & 6., 2013, pages 183-184.

Kiorpes, L. and Movshon, J.A. Neural limitations on visual development in primates: Beyond striate cortex. In The New Visual Neurosciences, Werner, J. and Chalupa, L., Eds., MIT Press, 2014, Chapter 99, pages 1423-1431.

Recent Meeting Abstracts (past 10 years)

- Rislove, E., Hall, E.C., and Kiorpes, L. Global form perception in human amblyopia studied using Glass patterns. Investigative Ophthalmology and Visual Science, 46: E-Abstract 3593, 2005.
- Kiorpes, L., Price, T.A., and Movshon, J.A. Deficits in global form perception in amblyopic monkeys. ARVO abstracts, May, 2005.
- El-Shamayleh, Y., Kiorpes, L., and Movshon, J.A. Different aspects of form perception develop at different rates. Vision Sciences Society abstracts, May, 2005.
- Hall-Haro, C., Johnson, S.P., Price, T.A., Vance, J.A., and Kiorpes, L. Development of object concepts in pigtailed macaque monkeys. International Conference on Infant Studies, Kyoto, Japan, 2006.
- Kiorpes, L. and Stavros, K.A. Development of temporal contrast sensitivity in monkeys. Perception 35 (Suppl): 66, 2006.
- Kiorpes, L., Gavlin, A., and El-Shamayleh, Y. Perception of texture in macaque monkeys: development and amblyopia. Society for Neuroscience abstracts #604.8, 2006.
- Kiorpes, L. and Stavros, K.A. Development of temporal contrast sensitivity in monkeys. Vision Sciences Society abstracts #481, 2007.
- El-Shamayleh, Y. Kohn, A., Movshon, J.A., and Kiorpes, L. Response properties of MT neurons in amblyopic macaques. Vision Sciences Society abstracts #492, 2007.
- Kiorpes, L., Kohn, A., Rust, N.C., Hawken, M.J., and Movshon, J.A. What does MT contribute to the development of sensitivity to visual motion? Perception 36 (Suppl): 10, 2007.
- Feltner, K. A. & Kiorpes, L. Behavioral evidence for the perception of Kanizsa illusory contours in pig-tailed macaque monkeys (*M. nemestrina*). Journal of Vision 8(6): 591, 2008.
<http://www.journalofvision.org/8/6/591/>.
- Kiorpes, L. Effects of strabismus and amblyopia on the development of visual neuronal response properties. ARVO Annual meeting, 2008.
- Kiorpes, L. and Movshon, J.A. What does MT contribute to the perception of visual motion: lessons from development and amblyopia. AREADNE, June 2008.
- Kiorpes, L., Li, D. and Hagan, M. Crowding in primates: a comparison of humans and macaque monkeys. Perception 37 (Suppl): 37, 2008.
- Movshon J.A. and Kiorpes, L. Perceptual learning and the critical period for visual development. Perception 37 (Suppl): 166, 2008.
- Kiorpes, L., Smith, M.A. and Movshon, J.A. Analysis of functional circuitry in primary visual cortex of amblyopic macaque monkeys. Society for Neuroscience abstracts #163.6, 2008.

- Hagan, M.A., Li, D. von Trapp, G. and Kiorpes, L. A developmental approach to studying the neural mechanisms of “crowding”: an animal model for lateral spatial interactions. Society for Neuroscience abstracts #260.1, 2008.
- Feltner, K. and Kiorpes, L. The limits of Kanizsa illusory form perception in macaque monkeys. Society for Neuroscience abstracts #666.14, 2008.
- Li, D., Kiorpes, L. and Movshon, J.A. Development of the short latency ocular following response in macaque monkeys. Society for Neuroscience abstracts #854.18, 2008.
- Feltner, K and Kiorpes, L. Developmental onset of illusory form perception in pigtailed macaque monkeys. *Journal of Vision* 9(8): 908, 2009. <http://journalofvision.org/9/8/908/>
- Li, D., von Trapp, G., Hagan, M.A. and Kiorpes, L. Development of lateral spatial interactions in macaque monkeys. Society for Neuroscience abstracts #756.7, 2009.
- Kiorpes, L. The nature of critical periods in visual development. American Academy of Optometry Annual Meeting, 2009.
- Feltner, K., Nayar, K., Adolph, K.E., and Kiorpes, L. Kanizsa illusory contour perception in children: a novel approach using eye-tracking. *Journal of Vision* 10(7), 1157, 2010.
- Kiorpes, L., von Trapp, G., Pham, A., Lingeman, J., Soska, K., Adolph, K.E., von Hofsten, C., and Rosander, K. Developmental studies of visual-motor integration: A comparative approach. *Journal of Vision* 10(7), 1078, 2010.
- Kiorpes, L. Neurophysiological and psychophysical measurements of amblyopia in an animal model. ARVO Abstracts, May 2011.
- Kiorpes, L. and Mangal, P. Perceptual learning in amblyopes: The good, the bad and the ugly. Perception 40 (Suppl): 42, 2011.
- Kiorpes, L. and Mangal, P. Perceptual learning in amblyopes: A cautionary tale. *Journal of Vision* 12(9), 285, 2012.
- Voyles, A. C. and Kiorpes, L. A comparison of VEP and behavioral responses to global form and motion in infant macaque monkeys. *Journal of Vision* 12(9), 476, 2012.
- Kiorpes, L. Neural correlates of primate visual development: Linking behavior and physiology. VSS Annual Meeting, Naples, FL, 2012.
- Kiorpes, L., Pham, A., Carrasco, M. Effects of attention on visual performance in amblyopic macaque monkeys (*Macaca nemestrina*). Society for Neuroscience Abstracts #469.08, 2012.
- Caruso, M.L., Majaj, N., Movshon, J.A., Kiorpes, L. Decoding of motion information by normal and amblyopic macaque monkeys. Society for Neuroscience Abstracts #672.04, 2012.
- Von Grootel, T.J., Meeson, A., Munk, M.H.J., Kourtzi, Z., Movshon, J.A., Logothetis, N.K., and Kiorpes, L. Longitudinal fMRI study of cortical development in young monkeys. Society for Neuroscience Abstracts #464.14, 2012.

Kiorpes, L. Perceptual learning in amblyopia. Annual Interdisciplinary Conference, 2013.

Voyles, A.C., Nayar, K., Castellanos, X.F., DiMartino, A., Kiorpes, L. Development of Kanizsa illusory contour perception in Autism Spectrum Disorder. VSS Annual Meeting, Naples, FL, 2013.

Kiorpes, L., Pham, A., Carrasco, M. Attention improves visual performance in amblyopic macaque monkeys. VSS Annual Meeting, Naples, FL, 2013.

Kiorpes, L. Postnatal development of form and motion pathways in macaque monkeys. ARVO at VSS Symposium: Visual Development, VSS Annual Meeting, Naples, FL, 2013.

Nayar, K., Voyles, A.C., Castellanos, F.X., Di Martino, A., Kiorpes, L. Global form processing of Kanizsa Illusory Contours in Autism Spectrum Disorders. AACAP's 60th Annual Meeting, Orlando, FL, October, 2013.

Kiorpes, L. Developmental studies of visual-motor integration in macaques. Sackler Winter Conference on Developmental Psychobiology, January, 2014.

Kiorpes, L. Neural correlates of amblyopia. VSS at ARVO Symposium, Orlando, FL., 2014.

Voyles, A., Norcia, A.M., Kiorpes, L. Cortical correlates of global form and motion in infant macaque monkeys: A comparison of hdEEG and behavioral responses. VSS Annual Meeting, St. Pete Beach, FL. 2014.

Carrasco, M., Roberts, M., Cymerman, R., Smith, R.T., Kiorpes, L. Intact functioning of exogenous spatial attention in amblyopic adults. VSS Annual Meeting, St. Pete Beach, FL. 2014.

Kumbhani, R., Majaj, N., Hallum, L., Shooner, C., Ziemba, C., Movshon, J.A., Kiorpes, L. Receptive field properties of V1 and V2 neurons in amblyopic macaque monkeys revealed with local spectral reverse correlation. VSS Annual Meeting, St. Pete Beach, FL. 2014.

Hallum, L., Majaj, N., Shooner, C., Kumbhani, R., Ziemba, C., Movshon, J.A., Kiorpes, L. Abnormal surround suppression in amblyopic macaques. VSS Annual Meeting, St. Pete Beach, FL. 2014.

Shooner, C., Majaj, N., Kumbhani, R., Hallum, L., Ziemba, C., Movshon, J.A., Kiorpes, L. Neural correlates of amblyopia in foveal and parafoveal visual cortex of amblyopic macaque monkeys revealed with local spectral reverse correlation. VSS Annual Meeting, St. Pete Beach, FL. 2014.

Kiorpes, L., Carrasco, M., Pham, A. Attention improves performance in amblyopic macaque monkeys. Perception 43 (Suppl): 8, 2014.

Carrasco, M., Roberts, M., Kiorpes, L. Exogenous spatial attention in intact in amblyopic adults. Perception 43 (Suppl): 8, 2014.

Voyles, A., Ziemba, C.M., Majaj, N., Movshon, J.A., Kiorpes, L. Development of texture perception in infant monkeys: physiology and behavior. Society for Neuroscience Abstracts, #820.04, 2014.

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- Rabadi, M., Majaj, N., Kiorpes, L. Non-human primates behaviorally demonstrate object invariance and categorization. Society for Neuroscience Abstracts, #822.17, 2014.
- Van Grootel, T., Kiorpes, L. Neuronal response properties in area MT of an awake amblyopic monkey. Journal of Vision 15 (12): 651, 2015.
- Shariat Torbaghan, S., Bushnell, B.N., Kiorpes, L. Radial frequency discrimination is impaired in amblyopic non-human primates. Society for Neuroscience Abstracts, #701.09, 2015.
- Van Grootel, T., Movshon, J.A., Kiorpes, L. Binocular imbalance in macaque MT in strabismic amblyopia. Society for Neuroscience Abstracts, #701.08, 2015.
- Kiorpes, L., Voyles, A., Ziamba, C., Movshon, J.A. Perceptual and neural deficits in amblyopic sensitivity to naturalistic image structure. Perception 44 (Suppl): 1, 2015.
- Hallum, L., Shooner, C., Kumbhani, R., Majaj, N., Movshon, J.A., Kiorpes, L. Altered balance between excitation and suppression in visual cortex of amblyopic macaques. Journal of Vision 16 (12): 1123, 2016.
- Kiorpes, L., Voyles, A., Ziamba, C., Movshon, J.A. Perceptual and neural deficits processing naturalistic image structure in amblyopia. Journal of Vision 16 (12): 565, 2016.
- Kiorpes, L., Movshon, J.A. Perceptual and neural deficits processing naturalistic image structure in amblyopia. AREADNE, June 2016.
- Clemens, K., Kiorpes, L., Movshon, J.A., Smith, M.A. Altered functional circuitry in the primary visual cortex of amblyopic macaque monkeys. Society for Neuroscience Abstracts, #241.04, 2016.
- Majaj, N., Seibert, D.D., Movshon, J.A., Kiorpes, L. Development of sensitivity to naturalistic textures in macaque: psychophysics and physiology. Journal of Vision 17 (10): 446, 2017.
- Lee, G.M., Hallum, L.E., Majaj, N.J., Kiorpes, L., Movshon, J.A. Altered sensitivity to naturalistic image statistics in amblyopia. Society for Neuroscience Abstracts, #774.09, 2017.
- Bushnell, B., Majaj, N., Movshon, J.A., Kiorpes, L. Visual Response properties of neurons in V1, V2 and V4 of an amblyopic macaque. J Vis September 2018 18(10):30. doi: 10.1167/18.10.30
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Kiorpes, L. Cortical correlates of amblyopia: what information is lost and why? *J Vis* July 2019 19(8):1. doi:10.1167/19.8.1.

Lee, G.M., Seibert, D., Majaj, N.J., Movshon, J.A., Kiorpes, L. Sensitivity of inferotemporal cortex to naturalistic image statistics in developing macaques. *J Vis* September 2019 19(10):124. doi:10.1167/19.10.124

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Bushnell, B., Majaj, N., Movshon, J.A., Kiorpes, L. Population-level deficits in global form representation in V4 of amblyopic macaques. *Society for Neuroscience Abstracts*, #142.13, 2019.

Pai, J., Bushnell, B., Majaj, N., Movshon, J.A., Kiorpes, L. Population-level deficits in contour representation in V4 of amblyopic macaques. *Society for Neuroscience Abstracts*, #142.12, 2019.

Professional Service

Vision Sciences Society Board of Directors (2016-2020)

BP-ENDURE Joint training program in undergraduate neuroscience: Steering committee (2010-present)

National Institute of Mental Health, Review of Institutional Training Grants, Fall 2006, 2007, 2011.

National Institutes of Health, Division of Research Grants, VisB, CVP, SPC study sections, Ad hoc member (1995-2012); ***NEI/SPC*** permanent member 2016-2020.

National Science Foundation: Panel member (1996 - 1999).

Howard Hughes Medical Institute: Undergraduate Science Development review panel (Spring, 1993).

Associate Editor, *Visual Neuroscience* (2005-2015).

Editor, *Special issues, Visual Neuroscience*, 2013; *Journal of Vision* (2014-2015).

Associate Editor, *Vision Research* (2010-2018).

Section Editor, *Visual Neuroscience* (2003-2005).

Guest Editor, *Investigative Ophthalmology and Visual Science* (1999-2001).

Manuscript Reviews: *Vision Research*, *Investigative Ophthalmology and Visual Science*, *Journal of Vision*, *Visual Neuroscience*, *Developmental Psychobiology*, *Journal of Neuroscience*, *Journal of Neurophysiology*, *Nature*, *Nature Neuroscience*, *Neuroscience*, *eLife*, *eNeuro*, *Communications Biology*, *Current Biology*.

University Service

Vice Dean, Graduate School of Arts and Science (2018 – present)

University Doctoral Affairs Committee (2018 – present)

Global Inclusion Officer's Council (2020 – present)

Committee on Academic Standards (2017 – 2020)

Dean's Committee on Diversity, Graduate Working Group Chair (2014 – 2016)

FAS Faculty Senators Council. Alternate Senator (2014)

Langone Medical Center Special Investigation Committee (2012)

Collegiate Professor (2010 – present)

University Curriculum for training in Responsible Conduct of Research (2010-2014)

GSAS Honors and Awards Committee (2008- 2010)

Faculty Director, CAS Women in Science Initiative (2007- 2013)

Childcare Task Force (2006-2007)

FAS Grievance Committee (2005-2007)

CAS DURF Science Committee (2005-2007)

GSAS Task Force on Graduate Student Teaching (2006-2007)

Undergraduate Curriculum Committee (2002- 2005)

Science Core Curriculum (FSI) steering committee (1990-2002) Chair 2000-2002.

Ad Hoc Committees on Natural Science II; Quantitative Reasoning (2001,2002)

Annual CAS Undergraduate Research Conference: Faculty Director (1993, 1996, 1997).

Dean's Committee on Sexual Harassment (1994-1997).

BA/MD Program Advisory Committee (1995-1999).

CAS Honors Committee (1998-2002)

Hughes Undergraduate Biological Sciences Education Program: Program Director (1989-1999).

Departmental Service

Faculty Assembly Representative; co-Chair (2015-2016)

CNS Executive Committee (2014 – 2016)

Faculty Search Committee (2010-2012, Chair; 2011)

BP-ENDURE Advisory Committee (2010 – present)

NIMH T32 Graduate Training Program Director (2005- present)
Annual Biomedical Research Conference for Minority Students (2006 – present)
Association of Neuroscience Departments and Programs Representative (2003-2008)
Director of Graduate Studies, Center for Neural Science (2003-2007).
Education Committee, Center for Neural Science (1994-1998; 2000-2001; 2003-2007; 2010-present).
Graduate Admissions Committee, Center for Neural Science (1997; 2003-2007).
Director of Undergraduate Studies, Center for Neural Science (1989-1998; 2001).
Faculty Director, Hughes Undergraduate Summer Research Program (1990-1998).
Symposium organizing committee: Development of Brain Function (1992-1993).
Educational Policy Committee, Chair, Department of Psychology (1992-1994).
Steering Committee, Center for Neural Science (1991-1995).

Outreach

Convener, Faculty Resource Network Faculty Enrichment Program, Brain and Behavior (2001)
Consultant, Children's Museum of Manhattan