

Curriculum Vitae

Patrick J. Bennett

September 3, 2019

1 Personal Information

Date of Birth: October 6, 1959

Citizenship: USA & Canada

2 Address

Professor & Chair

Department of Psychology, Neuroscience & Behaviour

McMaster University

1280 Main Street West

Hamilton, Ontario, Canada L8S 4K1

(905) 525-9140 extension 23012

Email: bennett@mcmaster.ca

Website: www.psychology.mcmaster.ca/bennett/

3 Education

PhD: Psychology, University of California, Berkeley, USA, 1988

BSc: Psychology, Tufts University, Medford, Mass., USA, 1981

4 Employment

| | | | |
|--------------|--------------------------------------|--|-----------------------|
| 2001-present | Professor & Canada Research Chair | Dept. of Psychology, Neuroscience & Behaviour | McMaster University |
| 2000-present | Adjunct Member | Centre for Vision Research | York University |
| 1993-2001 | Associate Professor | Dept. of Psychology | University of Toronto |
| 1988-93 | Assistant Professor | Dept. of Psychology | University of Toronto |

5 Current Research Support

| Period | Agency | Title | Budget (per year) | Role |
|---------|------------|---|----------------------|------------------------|
| 2014-19 | CIHR | The effects of aging on the perception of visual motion | \$93,066 | Principal Investigator |
| 2013-19 | NSERC | Psychophysical analyses of perceptual learning | \$47,000 | Principal Investigator |
| 2015-22 | Tier I CRC | Vision Science | \$200,000 | Principal Investigator |

6 Publications

The names of students and post-doctoral fellows who were under my supervision at the time the data were collected are printed in boldface type.

100. **Slugocki M**, Sekuler AB, Bennett PJ (accepted). Sensitivity to Curvature Deformations Along Closed Contours. *Journal of Vision*. Accepted on August 26, 2019.
99. **Creighton SE**, Bennett PJ, Sekuler AB (2019). Classification images characterize age-related deficits in face discrimination. *Vision Research*, Apr, 157:97-104. doi: 10.1016/j.visres.2018.07.002
98. **Hashemi A**, Pachai MV, Bennett PJ, Sekuler AB (2019). The role of horizontal facial structure on the N170 and N250. *Vision Research*, Apr, 157:12-23. doi: 10.1016/j.visres.2018.02.006
97. **Pachai MV**, Bennett PJ, Sekuler AB (2019). The effect of training with inverted faces on the selective use of horizontal structure. *Vision Research*, Apr, 157:24-35. doi: 10.1016/j.visres.2018.04.003
96. **Slugocki M**, **Duong CQ**, Sekuler AB, Bennett PJ (2019). Evaluating spatiotemporal interactions between shapes. *Journal of Vision*, Apr, 1; 19(4):30. doi: 10.1167/19.4.30
95. **Slugocki M**, Sekuler AB, Bennett PJ (2019). BayesFit: A tool for modeling psychophysical data using Bayesian inference. *Journal of Open Research Software*, 7(1), p.2. doi:10.5334/jors.202
94. **Slugocki M**, Sekuler AB, Bennett PJ (2019). Phase-selective masking with radial frequency contours. *Vision Research*, Jan; 154:1-13. doi: 10.1016/j.visres.2018.10.013
93. **Banks PJ**, Tata MS, Bennett PJ, Sekuler AB, Gruber AG (2018). Implicit Valuation of the Near-Miss is Dependent on Outcome Context. *Journal of Gambling Studies*, 34(1), 181-97. doi: 10.1007/s10899-017-9705-3
92. **Pachai MV**, Bennett PJ, & Sekuler AB (2018). The bandwidth of diagnostic horizontal structure for face identification. *Perception*. 47(4), 397-413. doi: 10.1177/0301006618754479
91. Pachai MV, Sekuler AB, Bennett PJ, Schyns PG, Ramon M (2017). Personal familiarity enhances sensitivity to horizontal structure during processing of face identity. *Journal of Vision*, Jun 1, 17(6):5, Jul 1. doi: 10.1167/17.6.5.
90. **Lass JW**, Bennett PJ, Peterson MA, Sekuler AB (2017). Effects of aging on figure-ground perception: Convexity context effects and competition resolution. *Journal of Vision*, Feb 1, 17(2):15, 1-16. doi: 10.1167/17.2.15

89. Sekuler R, Huang J, Sekuler AB, Bennett PJ (2017). Online modulation of selective attention is not impaired in healthy aging. *Experimental Aging Research*, May-June, 43(3) 217-32. doi: 10.1080/0361073X.2017.1298954
88. Bieniek MM, Bennett PJ, Sekuler AB, Rousselet GA (2016). A robust and representative lower bound on object processing speed in humans. *European Journal of Neuroscience*, July, 44(2):1804-14. doi:10.1111/ejn.13100,
87. **Hashemi A**, Pino LJ, Moffat G, Mathewson KJ, Aimone C, Bennett PJ, Schmidt LA, Sekuler AB (2016). Characterizing population EEG dynamics throughout adulthood. *eNeuro*, Dec 12; 3(6), 1-13. doi: 10.1523/ENEURO.0275-16.2016
86. **Spencer JM**, Sekuler AB, Bennett PJ, Giese MA, Pilz KS (2016). Effects of aging on identifying emotions conveyed by point-light walkers. *Psychology & Aging*, Feb; 31(1):126-38, doi: 10.1037/a0040009
85. Jefferies LN, **Roggeveen AB**, Enns JT, Bennett PJ, Sekuler AB, Di Lollo V (2015). On the time course of attentional focusing in older adults. *Psychological Research*, 79(1), 28-41.
84. Mathewson KJ, **Hashemi A**, Sheng B, Sekuler AB, Bennett PJ, Schmidt LA (2015). Regional electroencephalogram (EEG) alpha power and asymmetry in older adults: a study of short-term test-retest reliability. *Frontiers in Aging Neuroscience*, 7:177, doi:10.3389/fnagi.2015.00177.
83. Taylor JET, Chan D, Bennett PJ, Pratt J (2015). Attentional cartography: mapping the distribution of attention across time and space. *Attention, Perception, & Psychophysics*, 77(7):2240-46, doi: 10.3758/s13414-015-0943-0
82. **Taylor, CP**, Bennett, PJ, & Sekuler, AB (2014). Evidence for adjustable bandwidth orientation channels. *Frontiers in Psychology*, 5:578, doi:10.3389/fpsyg.2014.00578.
81. **Roudaia, E**, Sekuler, AB, & Bennett, PJ (2014). Aging and the integration of orientation and position in shape perception. *Journal of Vision*, 14(5):12, doi:10.1167/14.5.12.
80. **Spencer JMY**, Sekuler AB, Bennett PJ & Christensen BK (2013). Contribution of coherent motion to the perception of biological motion among persons with schizophrenia. *Frontiers in Psychology*, 4:507. doi: 10.3389/fpsyg.2013.00507
79. Christensen BK, **Spencer JMY**, King JP, Sekuler AB & Bennett PJ (2013). Noise as a mechanism of anomalous face processing among persons with Schizophrenia. *Frontiers in Psychology*, 4:401. doi: 10.3389/fpsyg.2013.00401.
78. **Konar Y**, Bennett PJ & Sekuler AB (2013). Effects of aging on face identification and holistic face processing. *Vision Research*, 88, 38-46. doi:10.1016/j.visres.2013.06.003.
77. **Roudaia E**, Bennett PJ & Sekuler AB (2013). Contour integration and aging: the effects of element spacing, orientation alignment and stimulus duration. *Frontiers in Psychology*, 4:356. doi: 10.3389/fpsyg.2013.00356.
76. **Roudaia E**, Sekuler AB, Bennett PJ & Sekuler RW (2013). Aging and audio-visual and multi-cue integration in motion. *Frontiers in Psychology*, 4:267. doi:10.3389/fpsyg.2013.00267.
75. **Pachai MV**, Sekuler AB & Bennett PJ (2013). Sensitivity to information conveyed by horizontal contours is correlated with face identification accuracy. *Frontiers in Psychology*, 4:74. doi: 10.3389/fpsyg.2013.00074.
74. **Fiacconi CM**, **Harvey EC**, Sekuler AB & Bennett PJ (2013). The influence of aging on audio-visual temporal order judgments. *Experimental Aging Research*, 39(2), 179-93.
73. Nagai M, Bennett PJ, Rutherford MD, Gaspar CM, Kumada T & Sekuler AB (2013). Comparing face processing strategies between typically-developed observers and observers with autism using sub-sampled-pixels presentation in response classification technique. *Vision Research*, 79, 27-35.
72. **Hussain Z**, McGraw PV, Sekuler AB & Bennett PJ (2012). The rapid emergence of stimulus specific perceptual learning. *Frontiers in Psychology*, 3:226, doi:10.3389/fpsyg.2012.00226.

71. **Hussain Z**, Bennett PJ & Sekuler AB (2012). Versatile perceptual learning of textures after variable exposures. *Vision Research*, 61, 89-94.
70. Re DE, O'Connor JJM, Bennett PJ & Feinberg DR (2012). Preferences for very low and very high voice pitch in humans. *PLoS ONE* 7(3): e32719. doi:10.1371/journal.pone.0032719.
69. **Betts LR**, Sekuler AB & Bennett PJ (2012). Spatial characteristics of motion-sensitive mechanisms change with age and stimulus spatial frequency. *Vision Research*, 53(1), 1-14.
68. **Pilz KS, Roggeveen AB, Creighton SE**, Bennett PJ & Sekuler AB (2012). How prevalent is object-based attention? *PLoS ONE* 7(2): e30693. doi:10.1371/journal.pone.0030693
67. Hidaka S, Nagai M, Sekuler AB, Bennett PJ & Gyoba J (2011). Inhibition of target detection in apparent motion trajectory. *Journal of Vision*, 11(10):2, 1-12. doi: 10.1167/11.10.2
66. **Hussain Z**, Sekuler AB & Bennett PJ (2011). Superior identification of familiar visual patterns a year after learning. *Psychological Science*. 22(6), 724-30. doi:10.1177/0956797611409591
65. **Pilz KS, Konar Y**, Vuong QC, Bennett PJ & Sekuler AB (2011). Age-related changes in matching novel objects across viewpoints. *Vision Research*, 51(17), 1958-65.
64. **Roudaia E, Farber LE**, Bennett PJ, Sekuler AB (2011). The effects of aging on contour discrimination in clutter. *Vision Research*, 51(9), 1022-32.
63. **Govenlock SW, Taylor CP**, Sekuler AB & Bennett PJ (2010). The effect of aging on the spatial frequency selectivity of the human visual system. *Vision Research*, 50(17), 1712-9.
62. **Konar Y**, Bennett PJ & Sekuler AB (2010). Holistic processing does not predict face identification. *Psychological Science*, 21(1), 38-43.
61. **Pilz KS**, Bennett PJ & Sekuler AB (2010). Effects of aging on biological motion discrimination. *Vision Research*, 50(2), 211-19.
60. **Roudaia E**, Bennett PJ, Sekuler AB & **Pilz KS** (2010). Spatiotemporal properties of apparent motion perception and aging. *Journal of Vision*, 10(14):5, 1-15.
59. Rousselet GA, Gaspar CM, Pernet CR, **Husk JS**, Bennett PJ & Sekuler AB (2010). Healthy aging delays scalp EEG sensitivity to noise in a face discrimination task. *Frontiers in Perception Science*, 1, Article 19, 1-14. doi:10.3389/fpsyg.2010.00019
58. **Betts LR**, Sekuler AB & Bennett PJ (2009). Spatial characteristics of center-surround antagonism in younger and older adults. *Journal of Vision*, 9(1), 1-15.
57. **Govenlock* SW, Taylor CP**, Sekuler AB & Bennett PJ (2009). The effect of aging on the orientational selectivity of the human visual system. *Vision Research*, 49(1), 164-72. (*Winner of a CIHR AgePlus Prize in recognition of excellence in research on aging carried out in Canada by graduate and postdoctoral students.)
56. **Hussain Z**, Sekuler AB & Bennett PJ (2009). How much practice is needed to produce perceptual learning? *Vision Research*, 49(21), 2624-34.
55. **Hussain Z**, Sekuler AB & Bennett PJ (2009). Perceptual learning modifies inversion effects for faces and textures. *Vision Research*, 49(18), 2273-84.
54. **Hussain Z**, Sekuler AB & Bennett PJ (2009). Contrast-reversal abolishes perceptual learning. *Journal of Vision*, 9(4):20, 1-8.
53. Rousselet GA, **Husk JS**, Pernet CR, Gaspar CM, Bennett PJ & Sekuler AB (2009). Age-related delay in information accrual for faces: Evidence from a parametric, single-trial EEG approach. *BMC Neuroscience*, 10:114.
52. **Taylor CP**, Bennett PJ & Sekuler AB (2009). Spatial frequency summation in visual noise. *Journal of the Optical Society of America A*, 26(11), B84-B93.
51. **Gaspar CM**, Bennett PJ & Sekuler AB (2008). The effects of face inversion and contrast reversal on efficiency and internal noise. *Vision Research*, 48(8), 1084-95.

50. **Gaspar CM**, Sekuler AB & Bennett PJ (2008). Spatial frequency tuning of upright and inverted face identification. *Vision Research*, 48(28), 2817-26.
49. **Hussain Z**, Sekuler AB & Bennett PJ (2008). Robust perceptual learning in the absence of sleep. *Vision Research*, 48(28), 2785-92.
48. **Nagai M**, Bennett PJ & Sekuler (2008). Exploration of vertical bias in perceptual completion of illusory contours: Threshold measures and response classification. *Journal of Vision*, 8(7), 1-17. doi:10.1167/8.7.25
47. **Roudaia* E**, Bennett PJ & Sekuler AB (2008). The effect of aging on contour integration. *Vision Research*, 48(28), 2767-74. (* Winner of a CIHR AgePlus Prize in recognition of excellence in research on aging carried out in Canada by graduate and postdoctoral students.)
46. **Rousselet GA**, **Husk JS**, Bennett PJ & Sekuler AB (2008). Time course and robustness of ERP object and face differences. *Journal of Vision*, 8(12), 1-18. doi:10.1167/8.12.3
45. Rousselet GA, Pernet CR, Bennett PJ, & Sekuler AB (2008). Parametric study of EEG sensitivity to phase noise during face processing. *BMC Neuroscience*, 9:98, www.biomedcentral.com/1471-2202/9/98, doi:10.1186/1471-2202-9-98.
44. Bennett, P.J., Sekuler, R., & Sekuler, A.B. (2007). The effects of aging on motion detection and direction identification. *Vision Research*, 47(6), 799-809.
43. **Betts, L.R.**, Sekuler, A.B., & Bennett, P.J. (2007). The effects of aging on orientation discrimination. *Vision Research*, 47(13), 1769-1780.
42. **Husk, J.S.**, Bennett, P.J., & Sekuler, A.B. (2007). Inverting houses and textures: Investigating the characteristics of learned inversion effects. *Vision Research*, 47(27), 3350-3359.
41. **Nagai, M.**, Bennett, P.J., & Sekuler, A.B. (2007). Spatiotemporal templates for detecting orientation-defined targets. *Journal of Vision*, 7(8), 1-16.
40. **Rousselet, G.A.**, **Husk, J.S.**, Bennett, P.J., & Sekuler, A.B. (2007). Single-trial EEG brain dynamics of object and face visual processing. *NeuroImage*, 36(3), 843-862.
39. **Richards, E.**, Bennett, P.J., & Sekuler, A.B. (2006). Age related differences in learning with the useful field of view. *Vision Research*, 46, 4217-4231.
38. **Gold, J.M.**, **Murray, R.F.**, Sekuler, A.B., Bennett, P.J., & Sekuler, R. (2005). Visual memory decay is deterministic. *Psychological Science*, 16(10), 769-774.
37. **Rousselet, G.A.**, **Husk, J.S.**, Bennett, P.J., & Sekuler, A.B. (2005). Spatial scaling factors explain eccentricity effects on face ERPs. *Journal of Vision*, 5(10), 755-763.
36. **Murray, R.F.**, Bennett, P.J., & Sekuler, A.B. (2005) Classification images predict absolute efficiency. *Journal of Vision*, 5(2), 139-149.
35. **Betts, L.R.**, **Taylor, C.P.**, Sekuler, A.B., & Bennett, P.J. (2005). Aging reduces centre-surround antagonism in visual motion processing. *Neuron*, 45, 361-366.
34. Sekuler, A.B., **Gaspar, C.M.**, Gold, J.M., & Bennett, P.J. (2004). Inversion leads to quantitative changes in faces processing. *Current Biology*, 14(5), 391-396.
33. **Gold, J.M.**, Sekuler, A.B., & Bennett, P.J. (2004). Characterizing perceptual learning with external noise. *Cognitive Science*, 28(2), 167-207.
32. Sole, L.M., Shettleworth, S.J., & Bennett, P.J. (2003). Uncertainty in pigeons. *Psychonomic Bulletin and Review*, 10(3), 738-745.
31. **Murray, R.F.**, Sekuler, A.B., & Bennett, P.J. (2003). A linear cue-combination framework for understanding selective attention. *Journal of Vision*, 3(2), 116-145.
30. **Murray, R.F.**, Bennett, P.J., & Sekuler, A.B. (2002). Optimal methods for calculating classification images: weighted sums. *Journal of Vision* 2(1), 79-104.
29. Bennett, P.J. (2002). Vision: early psychological processes. In L. Nadel (Ed.), *Encyclopedia of Cognitive Science*. London: Macmillan Publishers.

28. **Murray, R.F.**, Sekuler, A.B., Bennett, P.J. (2001). Time course of amodal completion revealed by a shape discrimination task. *Psychological Bulletin and Review*, 8(4), 713-720.
27. Sekuler, A.B. & Bennett, P.J. (2001). Uncommon common fate: Grouping by common luminance changes. *Psychological Science*, 12(6), 437-444.
26. Sekuler, A.B. & Bennett, P.J. (2001). Visual neuroscience: Resonating to natural images. *Current Biology*, 11, R733-R736.
25. Wells, E.F., Bernstein, G.M., Scott, B.W., Bennett, P.J., & Mendelson, J. R. (2001). Critical flicker frequency responses in visual cortex. *Exp Brain Res*, 139(1), 106-110.
24. Bennett, P.J., Sekuler, A.B., McIntosh, A.R., Della-Maggiore, V. (2001). The effects of aging on visual memory: Evidence for functional reorganization of cortical networks. *Acta Psychologica*, 107, 249-273.
23. Bennett, P.J. & Pratt, J. (2001). The spatial distribution of inhibition of return. *Psychological Science*, 12(1), 76-80.
22. Della-Maggiore, V., Sekuler, A.B., Bennett, P.J., Grady, C.L., Sekuler, R. & McIntosh, A.R. (2000). Corticolimbic interactions associated with visual perceptual memory are modified by age. *Journal of Neuroscience*, 20(22), 8410-8416.
21. Sekuler, A.B., **Gold, J.M.**, **Murray, R.F.**, & Bennett, P.J. (2000). Visual completion of partly occluded objects: Insights from behavioral studies. *Neuro-ophthalmology*, 23 (3-4), 165-168.
20. Sekuler, A.B. & Bennett, P.J. (2000). Teaching the brain to see. *Neuron*, 27(1), 8-10.
19. **Gold, J.M.**, **Murray, R.F.**, Bennett, P.J., & Sekuler, A.B. (2000). Deriving behavioural receptive fields for visually completed contours. *Current Biology*, 10, 663-666.
18. Sekuler, A. B., Bennett, P. J., & Mamelak, M. D. (2000). Effects of aging on the useful field of view. *Experimental Aging Research*, 26, 103-120.
17. **Gold, J.**, Bennett, P. J., & Sekuler, A. B. (1999). Signal but not noise changes with perceptual learning. *Nature*, 402, 6758(Nov), 176-178.
16. McIntosh, A. R., Sekuler, A. B., **Penpeci, C.**, Rajah, M. N., Grady, C. L., Sekuler, R., & Bennett, P. J. (1999). Recruitment of unique neural systems supporting visual memory in normal aging. *Current Biology*, 9, 1275-1278.
15. **Gold, J.**, Bennett, P. J., & Sekuler, A. B. (1999). Identification of band-pass filtered letters and faces by human and ideal observers. *Vision Research*, 39, 3537-3560.
14. Sekuler, A. B., & Bennett, P. J. (1999). Shape perception. In R. A. Wilson & F. C. Keil (Eds.), *The MIT Encyclopedia of Cognitive Science* (pp. 753-756). Cambridge, Mass.: MIT Press.
13. Bennett, P. J., Sekuler, A. B., & **Ozin, L.** (1999). Effects of aging on calculation efficiency and equivalent noise. *Journal of the Optical Society of America [A]*, 16(3), 654-668.
12. Potts, A. J., Bennett, P. J., Kennedy, S. H., & Vaccarino, F. J. (1997). Depressive symptoms and alterations in sucrose taste perception: cognitive bias or a true change in sensitivity? *Canadian Journal of Experimental Psychology*, 51(1), 57-60.
11. Bennett, P. J., & **Cortese, F.** (1996). Masking of spatial frequency in visual memory depends on distal, not retinal, frequency. *Vision Research*, 36(2), 233-238.
10. Sekuler, A. B., & Bennett, P. J. (1996). Spatial phase differences can drive apparent motion. *Perception and Psychophysics*, 58(2), 174-190.
9. Bennett, P. J., & **Jaye, P. D.** (1995). Letter localization, not discrimination, is constrained by attention. *Canadian Journal of Experimental Psychology*, 49(4), 460-504.
8. Kahana, M. J., & Bennett, P. J. (1994). Classification and perceived similarity of compound gratings that differ in relative spatial phase. *Perception and Psychophysics*, 55(6), 642-656.
7. Bennett, P. J. (1993). The harmonic bandwidth of phase-reversal discrimination. *Perception and Psychophysics*, 53(3), 292-304.

6. Allen, D., Bennett, P. J., & Banks, M. S. (1992). The effects of luminance on FPL and VEP acuity in human infants. *Vision Research*, 32(11), 2005-2012.
5. Bennett, P. J., & Banks, M. S. (1991). The effects of contrast, spatial scale, and orientation on foveal and peripheral phase discrimination. *Vision Research*, 31(10), 1759-1786.
4. Banks, M. S., & Bennett, P. J. (1991). Anatomical and physiological constraints on neonatal visual sensitivity and determinants of fixation behavior. In M. J. Weiss & P. R. Zelazo (Eds.), *Newborn attention: Biological constraints and the influence of experience* (pp. 177-217). Norwood, N.J.: Ablex.
3. Banks, M. S., & Bennett, P. J. (1988). Optical and photoreceptor immaturities limit the spatial and chromatic vision of human neonates. *Journal of the Optical Society of America [A]*, 5(12), 2059-2079.
2. Bennett, P. J., & Banks, M. S. (1987). Sensitivity loss in odd-symmetric mechanisms and phase anomalies in peripheral vision. *Nature*, 326(6116), 873-876.
1. Banks, M. S., Geisler, W. S., & Bennett, P. J. (1987). The physical limits of grating visibility. *Vision Research*, 27(11), 1915-1924.

7 Articles Currently Under Review

2. **Cali JN**, Bennett PJ, Sekuler AB (submitted). The effect of local noise on illusory global motion. Submitted to *Vision Research* on December 17, 2018. Currently under review.
1. **Cali JN**, **Pachai MV**, Sekuler AB, Bennett PJ (submitted). Phase Integration Bias in a Motion Grouping Task. Submitted to the *Journal of Vision* on December 3, 2018. Currently under review.

8 Conference Presentations

193. **Slugocki M**, Sekuler AB, Bennett PJ (2018). Effect of Signal Alteration on Learning Shape Identity using Sparse Representations. Poster presented at the Conference on Cognitive Computational Neuroscience, September 5-8, Philadelphia, PA, USA.
192. **Banks PJ**, Gutoskie R, Sekuler AB, Bennett PJ (2018). Perceptual learning in police fingerprint detectives. Paper presented at the Vision Sciences Society Conference, St. Petersburg Beach.
191. **Cali JN**, Bennett PJ, Sekuler AB (2018). Size and Aspect Ratio Judgments in Younger and Older Adults. Poster presented at the Vision Sciences Society Conference, St. Petersburg Beach.
190. Sekuler AB, **Roudaia E**, **Hashemi A**, **Cali JN**, Bennett PJ (2018). EEG Correlates of Contour Integration in Younger and Older Adults. Poster presented at the Vision Sciences Society Conference, St. Petersburg Beach.
189. **Hashemi A**, Pachai MV, Bennett PJ, Sekuler AB (2018). The effect of practice with inverted faces on behavioural and ERP horizontal bias. Poster presented at the Vision Sciences Society Conference, St. Petersburg Beach.
188. Davis H, **Hashemi A**, Milliken B, Bennett PJ (2018). Perceptual blurring and recognition memory: A differential memory effect in pupil responses. Poster presented at the Vision Sciences Society Conference, St. Petersburg Beach.

187. **Slugocki M**, Sekuler AB, Bennett PJ (2018). Evaluating Shape Representations using Machine Learning Systems. Poster presented at the Vision Sciences Society Conference, St. Petersburg Beach.
186. **Song J**, Sun HJ, Bennett PJ, Sekuler AB (2018). Effect of background texture on target detection: masking or differential processing for near and far pictorial depth? Poster presented at the Vision Sciences Society Conference, St. Petersburg Beach.
185. **Creighton SE**, Bennett PJ, Sekuler AB (2018). The role of response inconsistency in older adults' face discrimination ability. Poster presented at the Vision Sciences Society Conference, St. Petersburg Beach.
184. **Banks P**, Sekuler A, Bennett P (2017). Cognitive bias and reward affect contrast and response gain. Poster presented at the Vision Sciences Society Conference, St. Petersburg Beach, FL. *Journal of Vision*, 17(10):510. doi: 10.1167/17.10.510
183. **Beers A**, Sekuler A, Bennett P (2017). Interocular grouping during binocular rivalry in younger and older adults. Poster presented at the Vision Sciences Society Conference, St. Petersburg Beach, FL. *Journal of Vision*, 17(10):1219. doi: 10.1167/17.10.1219
182. **Cali J**, Bennett P, Sekuler A (2017). Amodal completion requires more time in older adults. Poster presented at the Vision Sciences Society Conference, St. Petersburg Beach, FL. *Journal of Vision*, 17(10):1167. doi: 10.1167/17.10.1388
181. **Creighton S**, Bennett P, Sekuler A (2017). Contribution of internal noise and efficiency to older adults' face discrimination. Poster presented at the Vision Sciences Society Conference, St. Petersburg Beach, FL. *Journal of Vision*, 17(10):612. doi: 10.1167/17.10.612
180. **Elliott A**, **Hashemi A**, **Creighton S**, Bennett P, Sekuler A (2017). Age-related decline in face identification can be trained away, and is explained by horizontal bias. Poster presented at the Vision Sciences Society Conference, St. Petersburg Beach, FL. *Journal of Vision*, 17(10):613. doi: 10.1167/17.10.613
179. **Hashemi A**, Sekuler A, Bennett P (2017). Extensive training of orientation filtered textures increases generalization of learning. Poster presented at the Vision Sciences Society Conference, St. Petersburg Beach, FL. *Journal of Vision*, 17(10):509. doi: 10.1167/17.10.509
178. Sekuler A, **Lass J**, **Hashemi A**, Bennett P, Peterson M (2017). Aging alters neural processing underlying figure-ground organization. Poster presented at the Vision Sciences Society Conference, St. Petersburg Beach, FL. *Journal of Vision*, 17(10):305. doi: 10.1167/17.10.305
177. **Serrano A**, **Hashemi, A**, Sekuler A, Bennett P (2017). Ruling out task difficulty in the context-generalization of texture perceptual learning. Poster presented at the Vision Sciences Society Conference, St. Petersburg Beach, FL. *Journal of Vision*, 17(10):504. doi: 10.1167/17.10.504
176. **Song J**, Bennett P, Sekuler A, Sun HJ (2017). Effect of apparent depth in peripheral target detection in driving under focused and divided attention. Paper presented at the Vision Sciences Society Conference, St. Petersburg Beach, FL. *Journal of Vision*, 17(10):388. doi: 10.1167/17.10.388
175. **Banks P**, Bennett PJ, Sekuler AB (2016). Psychophysics of Fingerprint Identification. Paper presented at the Vision Sciences Society Conference, St. Petersburg Beach, FL. *Journal of Vision*, 16(12):1404. doi: 10.1167/16.12.1404
174. **Beers A**, Sekuler A, Bennett P (2016). Classifying Mixed Percepts During Binocular Rivalry in Younger and Older Adults. Paper presented at the Vision Sciences Society Conference, St. Petersburg Beach, FL. *Journal of Vision*, 16(12):1325. doi: 10.1167/16.12.1325

173. **Cali J, Song J**, Sekuler A, Bennett P (2016). Dual task costs in surround motion integration. Paper presented at the Vision Sciences Society Conference, St. Petersburg Beach, FL. Dual Task Costs in Surround Motion Integration. *Journal of Vision*, 16(12):1025. doi: 10.1167/16.12.1025
172. **Hashemi A, Pachai MV**, Sekuler A, Bennett PJ (2016). Learning to generalize stimulus-specific learning across contexts. Paper presented at the Vision Sciences Society Conference, St. Petersburg Beach, FL. *Journal of Vision*, 16(12):1110. doi: 10.1167/16.12.1110
171. **Lass J**, Bennett P, Peterson M, & Sekuler A (2016). Reduced convexity context effects in elderly not attributable to reduced presumption of depth. Paper presented at the Vision Sciences Society Conference, St. Petersburg Beach, FL. *Journal of Vision*, 16(12):302. doi: 10.1167/16.12.302
170. **Pachai MV**, Sekuler A, Bennett P, Schyns P, Ramon M (2016). Personal familiarity enhances sensitivity to horizontal structure during face identification. Paper presented at the Vision Sciences Society Conference, St. Petersburg Beach, FL. *Journal of Vision*, 16(12):912. doi: 10.1167/16.12.912
169. **Slugocki M, Duong C**, Sekuler A, Bennett P (2016). Evaluating Temporal Interactions Between Pairs of Shapes. Paper presented at the Vision Sciences Society Conference, St. Petersburg Beach, FL. *Journal of Vision*, 16(12):796. doi: 10.1167/16.12.796
168. **Beers A, Slugocki M**, Lewis T, Sekuler A, & Bennett P (2015). Characterizing perceptual alternations during binocular rivalry in children. Paper presented at the Vision Sciences Society Conference, St. Petersburg Beach, FL.
167. Bennett P, **Hashemi A**, & Sekuler A (2015). Position-specific learning in a texture identification task. Poster presented at the Vision Sciences Society Conference, St. Petersburg Beach, FL.
166. **Cali J, Pachai M**, Bennett P, & Sekuler A (2015). Phase integration bias predicts performance in a motion binding task. Poster presented at the Vision Sciences Society Conference, St. Petersburg Beach, FL.
165. **Hashemi A, Pachai M**, Sekuler A, & Bennett P (2015). Stimulus-specificity of training with explicit or ambiguous diagnostic structure. Paper presented at the Vision Sciences Society Conference, St. Petersburg Beach, FL.
164. **Lass J**, Bennett P, Peterson M, & Sekuler A (2015). The effects of motion cues on figure-ground perception across the lifespan. Poster presented at the Vision Sciences Society Conference, St. Petersburg Beach, FL.
163. **Pachai M**, Sekuler A, & Bennett P (2015). Measuring the flexibility of orientation selectivity in face processing by varying task demands. Poster presented at the Vision Sciences Society Conference, St. Petersburg Beach, FL.
162. **Parpia R, Hashemi A**, Bennett P, & Sekuler A (2015). Effects of aging on the horizontal selectivity of behavioural and ERP measures of face identification. Poster presented at the Vision Sciences Society Conference, St. Petersburg Beach, FL.
161. Sekuler A, **Pachai M, Hashemi A**, & Bennett P (2015). Effects of size, fixation location, and inversion on face identification. Poster presented at the Vision Sciences Society Conference, St. Petersburg Beach, FL.
160. **Slugocki M**, Sekuler A, & Bennett P (2015). Evaluating phase dependent masking with radial frequency contours. Poster presented at the Vision Sciences Society Conference, St. Petersburg Beach, FL.

159. Taylor E, Chan D, Bennett P, & Pratt J (2015). Attentional cartography: Mapping the distribution of attention across time and space. Poster presented at the Vision Sciences Society Conference, St. Petersburg Beach, FL.
158. Sekuler AB, **Pachai MV**, **Creighton SE**, & Bennett PJ (2014). Age-related effects on selective processing of horizontal structure in whole-face context. Vision Sciences Society Conference, St. Petersburg Beach, FL.
157. **Pachai MV**, Sekuler AB, & Bennett PJ (2014). The time course of horizontal tuning during face identification. Vision Sciences Society Conference, St. Petersburg Beach, FL.
156. Hussain Z, & Bennett PJ (2014). Perceptual learning of detection of band-limited noise patterns. Vision Sciences Society Conference, St. Petersburg Beach, FL.
155. **Beers AM**, Sekuler AB, & Bennett PJ (2014). The effects of inter-ocular contrast differences on binocular rivalry in younger and older observers. Vision Sciences Society Conference, St. Petersburg Beach, FL.
154. **Hashemi A**, **Pachai MV**, Bennett PJ & Sekuler AB (2014). The N170 is driven by the presence of horizontal facial structure. Vision Sciences Society Conference, St. Petersburg Beach, FL.
153. **Creighton SE**, Bennett PJ, & Sekuler AB (2014). Classification images characterize age-related deficits in face discrimination. Vision Sciences Society Conference, St. Petersburg Beach, FL.
152. **Cali J**, Bennett PJ, & Sekuler AB (2014). The effect of noise on motion binding is similar in younger and older adults. Vision Sciences Society Conference, Sarasota, FL.
151. **Lass JW**, **Hashemi A**, Bennett PJ, Peterson MA & Sekuler AB (2014). Neural signals underlying the convexity context effect. Vision Sciences Society Conference, St. Petersburg Beach, FL.
150. **Slugocki, M**, Sekuler AB, & Bennett PJ (2014). Local perturbations to a global radial frequency masker alleviate lateral masking effects. Vision Sciences Society Conference, St. Petersburg Beach, FL.
149. Greenberg AS, Hayes D, **Roggeveen A**, **Creighton S**, Bennett PJ, Sekuler A, & **Pilz K** (2014). Object-based attention is modulated by shifts across the meridians. Vision Sciences Society Conference, St. Petersburg Beach, FL.
148. **Creighton SE**, Sekuler AB & Bennett PJ (2013). The Whole-Part Effect is Modulated by Spatial Cues. Vision Sciences Society Conference, Sarasota, FL. *Journal of Vision*, 13(9): 103, doi:10.1167/13.9.103
147. **Rosen LE**, Sekuler AB & Bennett PJ (2013). Aging does not decrease spatial suppression in a motion step task. Vision Sciences Society Conference, Sarasota, FL. *Journal of Vision*, 13(9): 372; doi:10.1167/13.9.372
146. **Spencer JMY**, Sekuler AB, Bennett PJ, Giese MA & Christensen BK (2013). Discriminating implicit and explicit emotions from point-light walkers in persons with schizophrenia. Vision Sciences Society Conference, Sarasota, FL. *Journal of Vision*, 13(9): 189, doi:10.1167/13.9.189
145. **Pachai MV**, Sekuler AB & Bennett PJ (2013). Masking of individual facial features reveals the use of horizontal structure in the eyes. Vision Sciences Society Conference, Sarasota, FL. *Journal of Vision*, 13(9): 411, doi:10.1167/13.9.411

144. **Hashemi A, Lass JW, Truong D**, Sekuler AB & Bennett PJ (2013). The time-course of rapid stimulus-specific perceptual learning. Vision Sciences Society Conference, Sarasota, FL. *Journal of Vision*, 13(9): 1090, doi:10.1167/13.9.1090
143. **Beers AM**, Bennett PJ & Sekuler AB (2013). Age-related effects of size and contrast on binocular rivalry. Vision Sciences Society Conference, Sarasota, FL. *Journal of Vision*, 13(9): 546, doi:10.1167/13.9.546
142. **Lass JW**, Bennett PJ, Peterson MA & Sekuler AB (2013). The effects of aging on figure/ground perception: Reduced competition resolution in older observers. Vision Sciences Society Conference, Sarasota, FL. *Journal of Vision*, 13(9): 719, doi:10.1167/13.9.719
141. **Creighton SE**, Sekuler AB & Bennett PJ (2012). The effect of orientation and stimulus duration on older and younger adults' ability to identify facial expressions. Vision Sciences Society Conference, Sarasota, FL. *Journal of Vision*, 12(9): 964, doi:10.1167/12.9.964
140. **Farber LE**, Sekuler AB & Bennett PJ (2012). Aging reduces surround suppression effects in a perceived speed task. Vision Sciences Society Conference, Sarasota, FL. *Journal of Vision*, 12(9): 750, doi:10.1167/12.9.750
139. **Hashemi A, Pachai, MV**, Bennett PJ & Sekuler AB (2012). Exploring the relationship between the N170 inversion effect and horizontal tuning. Vision Sciences Society Conference, Sarasota, FL. *Journal of Vision*, 12(9): 624, doi:10.1167/12.9.624
138. **Harvey EC, Sirek P**, Sekuler AB & Bennett PJ (2012). The effects of spatial cues on age-related changes in audio-visual temporal order judgments. Vision Sciences Society Conference, Sarasota, FL. *Journal of Vision*, 12(9): 1033, doi:10.1167/12.9.1033
137. **Lass JW**, Bennett PJ, Peterson MA & Sekuler AB (2012). The Effect of Context and Convexity on Figure Ground Perception in Aging. Vision Sciences Society Conference, Sarasota, FL. *Journal of Vision*, 12(9): 1302, doi:10.1167/12.9.1302
136. **Lu C**, Bennett PJ & Sekuler AB (2012). Effect of context on the N170 for low spatial frequency filtered faces. Vision Sciences Society Conference, Sarasota, FL. *Journal of Vision*, 12(9): 1178, doi:10.1167/12.9.1178
135. **Pachai MV**, Sekuler AB & Bennett PJ (2012). Practice with inverted faces selectively increases the use of horizontal information. Vision Sciences Society Conference, Sarasota, FL. *Journal of Vision*, 12(9): 975, doi:10.1167/12.9.975
134. **Roudaia E**, Sekuler AB & Bennett PJ (2012). Contour integration and aging: effects of inter-element distance, distracter density, and stimulus duration. Vision Sciences Society Conference, Sarasota, FL. *Journal of Vision*, 12(9): 475, doi:10.1167/12.9.475
133. Sekuler R, **Roudaia, E**, Bennett PJ, Pragya J & Sekuler AB (2012). Effects of aging on the integration of inter- and intra-modal motion cues. Vision Sciences Society Conference, Sarasota, FL. *Journal of Vision*, 12(9): 147, doi:10.1167/12.9.147
132. **Spencer JMY**, Sekuler AB, Bennett PJ, Giese MA & Christensen BK (2012). Discrimination emotions from point-light walkers in persons with Schizophrenia. Vision Sciences Society Conference, Sarasota, FL. *Journal of Vision*, 12(9): 647, doi:10.1167/12.9.647
131. **Tsotsos LE**, Sekuler AB & Bennett PJ (2011). The effect of aging on directional tuning when making judgments about horizontal and vertical motion. Vision Sciences Society Conference, Sarasota, FL. *Journal of Vision*, 11(11): 468; doi:10.1167/11.11.468
130. **Spencer JMY**, Sekuler AB, Bennett PJ & Christensen BK (2011) Biological motion perception among persons with schizophrenia. Vision Sciences Society Conference, Sarasota, FL. *Journal of Vision*, 11(11): 442; doi:10.1167/11.11.442

129. **Roudaia E, Pilz KS**, Sekuler AB & Bennett PJ (2011). The correspondence problem in apparent motion perception and aging. Vision Sciences Society Conference, Sarasota, FL. *Journal of Vision*, 11(11): 467; doi:10.1167/11.11.467
128. **Pachai MV**, Sekuler AB & Bennett PJ (2011). The use of horizontal information underlies face identification accuracy. Vision Sciences Society Conference, Sarasota, FL. *Journal of Vision*, 11(11): 619; doi:10.1167/11.11.619
127. **Konar Y**, Bennett PJ & Sekuler AB (2011). Multiple indices of holistic processing are uncorrelated with each other and with face identification. Vision Sciences Society Conference, Sarasota, FL. *Journal of Vision*, 11(11): 659; doi:10.1167/11.11.659
126. **Fiacconi CM, Harvey EC**, Sekuler AB & Bennett PJ (2011). The Influence of Aging on Audio-Visual Temporal Order Judgments. Vision Sciences Society Conference, Sarasota, FL. *Journal of Vision*, 11(11): 802; doi:10.1167/11.11.802
125. **Farber LE**, Sekuler AB & Bennett PJ (2011). The effect of mask contrast on spatiotemporal masking in younger and older subjects. Vision Sciences Society Conference, Sarasota, FL. *Journal of Vision*, 11(11): 1181; doi:10.1167/11.11.1181
124. Huang J, Sekuler AB, Bennett PJ & Sekuler R (2011). Short-term visual recall is preserved in aging. Vision Sciences Society Conference, Sarasota, FL. *Journal of Vision*, 11(11): 1268; doi:10.1167/11.11.1268
123. **Pilz KS, Roggeveen AB, Creighton SE**, Bennett PJ & Sekuler AB (2011). Individual differences in object-based attention effects in discrimination and detection tasks. Vision Sciences Society Conference, Sarasota, FL. *Journal of Vision*, 11(11): 128; doi:10.1167/11.11.128
122. **Farber LE**, Sekuler AB & Bennett PJ (2010). The effects of aging on surround modulation of backward contrast masking. Vision Sciences Society Conference, Sarasota, FL. *Journal of Vision*, 10(7): 1397; doi:10.1167/10.7.1397.
121. **Hussain Z**, Sekuler AB & Bennett PJ (2010). Task-specific perceptual learning of texture identification. Vision Sciences Society Conference, Sarasota, FL. *Journal of Vision*, 10(7): 1148; doi:10.1167/10.7.1148.
120. **Govenlock SW**, Sekuler AB & Bennett PJ (2010). Assessing the effect of aging on spatial frequency selectivity selectivity of visual mechanisms with the steady state visually evoked potential (ssVEP). Vision Sciences Society Conference, Sarasota, FL. *Journal of Vision*, 10(7): 481; doi:10.1167/10.7.481.
119. **Konar Y**, Bennett PJ & Sekuler AB (2010). Face identification and the evaluation of holistic indexes: CFE and the whole-part task. Vision Sciences Society Conference, Sarasota, FL. *Journal of Vision*, 10(7): 678; doi:10.1167/10.7.678.
118. **Pachai MV**, Sekuler AB & Bennett PJ (2010). The influence of horizontal structure on face identification as revealed by noise masking. Vision Sciences Society Conference, Sarasota, FL. *Journal of Vision*, 10(7): 683; doi:10.1167/10.7.683
117. **Pilz KS, Roudaia E**, Bennett PJ & Sekuler AB (2010). Aging and common fate. Vision Sciences Society Conference, Sarasota, FL. *Journal of Vision*, 10(7): 490; doi:10.1167/10.7.490.
116. **Spencer JMY**, Sekuler, A.B, Bennett PJ, Giese MA & **Pilz KS** (2010). Effects of aging on discriminating emotions from point-light walkers. Vision Sciences Society Conference, Sarasota, FL. *Journal of Vision*, 10(7): 480; doi:10.1167/10.7.480
115. **Farber LE**, Sekuler AB & Bennett PJ (2009). Evidence for no increased surround modulation in the aging visual system. Vision Sciences Society Conference, Sarasota, FL. *Journal of Vision*, 9(8):1064, 1064a, <http://journalofvision.org/9/8/1064/>, doi:10.1167/9.8.1064.

114. **Fiacconi CM**, Sekuler AB & Bennett PJ (2009). The effects of aging on contrast discrimination. Vision Sciences Society Conference, Sarasota, FL. *Journal of Vision*, 9(8):1073, 1073a, <http://journalofvision.org/9/8/1073/>, doi:10.1167/9.8.1073.
113. **Govenlock S**, Sekuler AB & Bennett PJ (2009). The effect of aging on the spatial pooling of local orientation signals. Vision Sciences Society Conference, Sarasota, FL. *Journal of Vision*, 9(8):1069, 1069a, <http://journalofvision.org/9/8/1069/>, doi:10.1167/9.8.1069.
112. Hidaka S, Nagai M, Bennett PJ, Sekuler AB & Gyoba J (2009). Impaired luminance detection in apparent motion trajectory. Vision Sciences Society Conference, Sarasota, FL. *Journal of Vision*, 9(8):687, 687a, <http://journalofvision.org/9/8/687/>, doi:10.1167/9.8.687.
111. **Hussain Z**, Sekuler AB & Bennett PJ (2009). Versatile perceptual learning of textures after variable exposures. Vision Sciences Society Conference, Sarasota, FL. *Journal of Vision*, 9(8):879, 879a, <http://journalofvision.org/9/8/879/>, doi:10.1167/9.8.879.
110. **Konar Y**, Bennett PJ & Sekuler AB (2009). Does holistic processing predict face identification? The effect of aging. Vision Sciences Society Conference, Sarasota, FL. *Journal of Vision*, 9(8):563, 563a, <http://journalofvision.org/9/8/563/>, doi:10.1167/9.8.563.
109. **Pilz K**, Bennett PJ & Sekuler AB (2009). Aging disrupts the processing of point-light walkers presented in noise. Vision Sciences Society Conference, Sarasota, FL. *Journal of Vision*, 9(8):616, 616a, <http://journalofvision.org/9/8/616/>, doi:10.1167/9.8.616.
108. Sekuler AB, Betts LR, **Roudaia E**, **Konar Y** & Bennett PJ (2009). Surround suppression in visual cortex: Effects of spatial frequency. Vision Sciences Society Conference, Sarasota, FL. *Journal of Vision*, 9(8):977, 977a, <http://journalofvision.org/9/8/977/>, doi:10.1167/9.8.977.
107. **Roggeveen A**, **Pilz K**, Bennett PJ & Sekuler AB (2009). Individual differences in object based attention. Vision Sciences Society Conference, Sarasota, FL. *Journal of Vision*, 9(8):143, 143a, <http://journalofvision.org/9/8/143/>, doi:10.1167/9.8.143.
106. **Roudaia E**, **Pilz KS**, Sekuler AB & Bennett PJ (2009). Spatiotemporal properties of apparent-motion perception in aging. Vision Sciences Society Conference, Sarasota, FL. *Journal of Vision*, 9(8):695, 695a, <http://journalofvision.org/9/8/695/>, doi:10.1167/9.8.695.
105. Rousselet G, **Husk J**, Pernet C, Gaspar C, Bennett PJ & Sekuler AB (2009). Age-related delay in information accrual for faces: Evidence from a parametric, single-trial EEG approach. Vision Sciences Society Conference, Sarasota, FL. *Journal of Vision*, 9(8):545, 545a, <http://journalofvision.org/9/8/545/>, doi:10.1167/9.8.545.
104. **Tsotsos LE**, Sekuler AB & Bennett PJ (2009). Impairment of peripheral motion perception in the elderly. Vision Sciences Society Conference, Sarasota, FL. *Journal of Vision*, 9(8):653, 653a, <http://journalofvision.org/9/8/653/>, doi:10.1167/9.8.653.
103. **Spencer J**, King JP, Bennett PJ, Sekuler AB & Christensen B (2009). Effects of face inversion and noise in persons with schizophrenia. Vision Sciences Society Conference, Sarasota, FL. *Journal of Vision*, 9(8):486, 486a, <http://journalofvision.org/9/8/486/>, doi:10.1167/9.8.486.
102. **Hussain Z**, Bennett P & Sekuler A (2008). Contrast-reversal abolishes perceptual learning. Vision Sciences Society Conference, Sarasota, FL, *Journal of Vision*, 8(6), abstract 1135, doi:10.1167/8.6.1135.
101. **Husk JS**, Betts LR, O'Craven KM, Bennett PJ & Sekuler AB (2008). House training modifies activity in PPA, RSC, but not FFA. Vision Sciences Society Conference, Sarasota, FL, *Journal of Vision*, 8(6), abstract 1134, doi:10.1167/8.6.1134.

100. **Tsotsos LE**, Sekuler AB & Bennett PJ (2008). The effects of aging on the bandwidths of directionally-selective mechanisms. Vision Sciences Society Conference, Sarasota, FL, *Journal of Vision*, 8(6), abstract 1023, doi:10.1167/8.6.1023.
99. Bennett P, **Pachai M** & Sekuler A (2008). Classification images measured in a same/different face discrimination task. Vision Sciences Society Conference, Sarasota, FL, *Journal of Vision*, 8(6), abstract 893, doi:10.1167/8.6.893.
98. **Kealy R**, Sekuler AB & Bennett PJ (2008). Effects of viewing condition and age on the functionality of eye movements for face recognition memory. Vision Sciences Society Conference, Sarasota, FL, *Journal of Vision*, 8(6), abstract 892, doi:10.1167/8.6.892.
97. **Konar Y**, Bennett PJ & Sekuler AB (2008). The composite face effect is still not correlated with face identification accuracy. Vision Sciences Society Conference, Sarasota, FL, *Journal of Vision*, 8(6), abstract 891, doi:10.1167/8.6.891.
96. **Govenlock S**, **Kliegl K**, Sekuler A & Bennett PJ (2008). Assessing the effect of aging on orientation selectivity of visual mechanisms with the steady state visually evoked potential. Vision Sciences Society Conference, Sarasota, FL, *Journal of Vision*, 8(6), abstract 424, doi:10.1167/8.6.424.
95. **Roudaia E**, Bennett PJ & Sekuler AB (2008). High-contrast contour integration and aging. Vision Sciences Society Conference, Sarasota, FL, *Journal of Vision*, 8(6), abstract 418, doi:10.1167/8.6.418.
94. Rousselet G, Pernet C, Bennett P & Sekuler A (2008). Rapid extraction of stimulus phase information during complex object processing. Vision Sciences Society Conference, Sarasota, FL, *Journal of Vision*, 8(6), abstract 398, doi:10.1167/8.6.398.
93. Lewis, T, Bennett P & Sekuler A (2008). Psychophysical measurements of surround suppression in 5-year-olds. Vision Sciences Society Conference, Sarasota, FL, *Journal of Vision*, 8(6), abstract 388, doi:10.1167/8.6.388.
92. Nagai M, Kazai K, Bennett P, Katayose H, Yagi A, Rutherford MD & Sekuler A (2008). The influence of eye and mouth position on judgments of face orientation. Vision Sciences Society Conference, Sarasota, FL, *Journal of Vision*, 8(6), abstract 149, doi:10.1167/8.6.149.
91. **Roggeveen A**, Jefferies L, Sekuler A, Bennett P & DiLollo V (2008). The creaky attentional gate: Temporal changes in the spatial extent of attention in elderly and young observers. Vision Sciences Society Conference, Sarasota, FL, *Journal of Vision*, 8(6), abstract 147, doi:10.1167/8.6.147.
90. Bennett, PJ, Nagai, M, Honma, M, Rutherford, MD, **Gaspar, CM**, **Carbone, D**, Nara, M, Ishii, H, Kumada, T, & Sekuler, AB (2007). Two-element classification images for the discrimination of emotional expression in upright and inverted faces. Vision Sciences Society Conference, Sarasota, FL, *Journal of Vision*, 7(9), abstract 937, doi:10.1167/7.9.937.
89. **Hussain, Z**, Bennett, PJ, & Sekuler, AB (2007). Superior identification of familiar visual stimuli a year after learning. Vision Sciences Society Conference, Sarasota, FL, *Journal of Vision*, 7(9), abstract 797, doi:10.1167/7.9.797.
88. **Husk, J**, **Sergi, M**, **Gora, T**, **Rousselet, G**, Bennett, PJ, & Sekuler, AB (2007). Face discrimination performance is not reflected in the N170. Vision Sciences Society Conference, Sarasota, FL, *Journal of Vision*, 7(9), abstract 620, doi:10.1167/7.9.620.
87. **Roudaia, E**, Bennett, PJ, & Sekuler, AB (2007). The effect of aging on contour integration. Vision Sciences Society Conference, Sarasota, FL, *Journal of Vision*, 7(9), abstract 604, doi:10.1167/7.9.604.

86. **Konar, Y**, Bennett, P.J., & Sekuler, AB (2007). The composite face effect is not correlated with face identification accuracy. Vision Sciences Society Conference, Sarasota, FL, Journal of Vision, 7(9), abstract 501, doi:10.1167/7.9.501.
85. **Gaspar, CM**, Bennett, P.J., & Sekuler, AB (2007). The ecological utility of inter-feature distances for human face discrimination. Vision Sciences Society Conference, Sarasota, FL, Journal of Vision, 7(9), abstract 500, doi:10.1167/7.9.500.
84. Nagai, M, Bennett, P.J Rutherford, MD, **Gaspar, CM**, **Carbone, D**, Nara, M, Ishii, H, Kumada, T, & Sekuler, AB (2007). Classification images for sampled stimuli: Comparing face processing in typical and autistic observers. Vision Sciences Society Conference, Sarasota, FL, Journal of Vision, 7(9), abstract 498, doi:10.1167/7.9.498.
83. **Govenlock, SW**, Bennett, P.J, Sekuler, AB (2007). An absence of orientation selectivity for visual masking. Vision Sciences Society Conference, Sarasota, FL, Journal of Vision, 7(9), abstract 251, doi:10.1167/7.9.251.
82. Bennett, P.J., **Taylor, C.P.**, & Sekuler, A.B. (2006). Preservation of position-encoding mechanisms across the life span. Vision Sciences Society Conference, Sarasota, FL, Journal of Vision, 6(6), abstract 106, doi:10.1167/6.6.106.
81. **Betts, L.R.**, Sekuler, A.B., & Bennett, P.J. (2006). Spatiotemporal characteristics of center-surround antagonism in motion discrimination. Vision Sciences Society Conference, Sarasota, FL, Journal of Vision, 6(6), abstract 1055, doi:10.1167/6.6.1055.
80. **Govenlock, S.W.**, **Taylor, C.P.**, Sekuler, A.B., & Bennett, P.J. (2006). Orientation tuning channels in old and young observers. Vision Sciences Society Conference, Sarasota, FL, Journal of Vision, 6(6), abstract 196, doi:10.1167/6.6.196.
79. **Gaspar, C.M.**, Bennett, P.J., & Sekuler, A.B. (2006). (2006). Orientation congruence judgments in faces and words. Vision Sciences Society Conference, Sarasota, FL, Journal of Vision, 6(6), abstract 276, doi:10.1167/6.6.276.
78. **Husk, J.S.**, **Betts, L.R.**, O'Craven, K.M., Bennett, P.J., & Sekuler, A.B. (2006). House training: neural correlates of object learning. Vision Sciences Society Conference, Sarasota, FL, Journal of Vision, 6(6), abstract 664, doi:10.1167/6.6.664.
77. **Hussain, Z.**, Bennett, P.J., & Sekuler, A.B. (2006). Face inversion effects flex with perceptual learning. Vision Sciences Society Conference, Sarasota, FL, Journal of Vision, 6(6), abstract 153, doi:10.1167/6.6.153.
76. **Richards, E.D.**, Bennett, P.J., & Sekuler, A.B. (2006). The effects of task switching on age-related differences in shape perception. Vision Sciences Society Conference, Sarasota, FL, Journal of Vision, 6(6), abstract 325, doi:10.1167/6.6.325.
75. **Taylor, C.P.**, Bennett, P.J., & Sekuler, A.B. (2006). Narrow-band channels optimally sum a broad band of spatial frequency information. Annual Vision Sciences Society Conference, Sarasota, FL, Journal of Vision, 6(6), abstract 115, doi:10.1167/6.6.115.
74. Bennett, P.J., **Rousselet, G.A.**, & Sekuler, A.B. (2005). Symmetry perception: a high-density ERP approach. Journal of Vision, 5(8), abstract 487, doi:10.1167/5.8.487
73. Christensen, B.K., King, J.P., Sekuler, A.B., & Bennett, P.J. (2005). Dissociating dorsal and ventral visual stream functions via working memory performance in schizophrenia. Schizophrenia Bulletin, 31(2), 363.
72. **Gaspar, C.M.**, Sekuler, A.B., & Bennett, P.J (2005). Upright and inverted face recognition relies on the same, narrow band of spatial frequencies. Vision Sciences Society Conference, Sarasota, FL, Journal of Vision, 5(8), abstract 821, doi:10.1167/5.8.821.

71. **Husk, J.S., Rousselet, G.A.,** Bennett, P.J., & Sekuler, A.B. (2005). Eccentricity effects on the N170 face ERP component can be eliminated by size scaling. Annual Vision Sciences Society Conference, Sarasota, FL. *Journal of Vision*, 5(8), abstract 820, doi:10.1167/5.8.820.
70. **Hussain, Z.,** Bennett, P. J. & Sekuler, A. B. (2005). Perceptual learning of faces and textures is tuned to trained identities. European Conference on Visual Perception, A Coruña, Spain, August 20-26, 2005. *Perception*, 34 (Supplement).
69. **Hussain, Z.,** Bennett, P. J. & Sekuler, A. B. (2005). The role of sleep in perceptual learning of face-identification. Vision Sciences Society Conference, Sarasota, FL. *Journal of Vision*, 5(8), abstract 818, doi:10.1167/5.8.818.
68. **Nagai, M.,** Bennett, P.J., & Sekuler, A.B. (2005). Spatiotemporal templates for detecting 1st- and 2nd-order orientation- and luminance-defined targets. Vision Sciences Society Conference, Sarasota, FL. *Journal of Vision*, 5(8), abstract 481, doi:10.1167/5.8.481.
67. **Rousselet, G.A., Husk, J.S.,** Bennett, P.J., & Sekuler, A.B. (2005). 200 ms of controversies: a high-density ERP study of face processing. Vision Sciences Society Conference, Sarasota, FL. *Journal of Vision*, 5(8), abstract 819, doi:10.1167/5.8.819.
66. **Taylor, C.P.,** Bennett, P.J., & Sekuler (2005). Noise detection: summation of high spatial frequency information. Vision Sciences Society Conference, Sarasota, FL. *Journal of Vision*, 5(8), abstract 482, doi:10.1167/5.8.482.
65. Bennett, PJ, **Nagai, M,** Sekuler, AB (2004). Perceptual completion is not better within than across hemispheres. Vision Sciences Society Conference, Sarasota, FL. *Journal of Vision*, 4(8), abstract 718, doi:10.1167/4.8.718
64. **Betts, LR, Taylor, C.P.,** Bennett, PJ, Sekuler, AB (2004). Evidence for reduced inhibition in the aging visual system revealed by a motion discrimination task. Vision Sciences Society Conference, Sarasota, FL. *Journal of Vision*, 4(8), abstract 206, doi:10.1167/4.8.206
63. **Betts, L.R., Taylor, C.P.,** Sekuler, A. B., and Bennett, P. J. (2004). Reduced inhibition in the aging human visual cortex facilitates coarse motion direction discrimination. Meeting of the Society for Neuroscience, San Diego, CA (October)
62. **Gaspar, CM, Husk, JS,** Bennett, PJ, Sekuler, AB (2004). The spatial spread of information constrains face discrimination. Vision Sciences Society Conference, Sarasota, FL. *Journal of Vision*, 4(8), abstract 433, doi:10.1167/4.8.433
61. **Husk, JS,** Sekuler, AB, Bennett, PJ (2004). Specificity of inversion effects in perceptual learning. Vision Sciences Society Conference, Sarasota, FL. *Journal of Vision*, 4(8), abstract 299, doi:10.1167/4.8.299
60. **Hussain Z,** Bennett PJ & Sekuler AB (2004) Specificity of rapid visual learning: Faces versus textures. Meeting of Society for Neuroscience (San Diego; Society for Neuroscience Abstracts) and the Vision Sciences Society Conference, Sarasota, FL. *Journal of Vision*, 4(8), abstract 303, doi:10.1167/4.8.303
59. **Nagai, M,** Sekuler, AB, Bennett, PJ (2004). Representational momentum with different target's contrast. Vision Sciences Society Conference, Sarasota, FL. *Journal of Vision*, 4(8), abstract 572, doi:10.1167/4.8.572
58. **Richards, ED, Demiglio, L,** Sekuler, AB, Bennett, PJ (2004). Age-related differences in shape perception. Vision Sciences Society Conference, Sarasota, FL. *Journal of Vision*, 4(8), abstract 517, doi:10.1167/4.8.517

57. **Rousselet GA, Husk JS**, Bennett PJ & Sekuler AB (2004) Discriminating faces from houses in the periphery: A high-density EEG study of the N170. Society for Neuroscience Abstracts.
56. **Rousselet, GA, Husk, JS**, Bennett, PJ, Sekuler, AB (2004). Differential effects of eccentricity on N170 for faces and houses. Vision Sciences Society Conference, Sarasota, FL. Journal of Vision, 4(8), abstract 913, doi:10.1167/4.8.913
55. **Taylor, CP**, Bennett, PJ, Sekuler, AB (2004). Noise detection: Optimal summation of orientation information. Vision Sciences Society Conference, Sarasota, FL. Journal of Vision, 4(8), abstract 50, doi:10.1167/4.8.50
54. **Betts, L.R.**, Bennett, P.J., & Sekuler, A.B. (2003). Age-related changes in orientation discrimination: Calculation efficiency or equivalent in put noise? Vision Sciences Society Conference, Journal of Vision, 3(9), abstract 218.
53. **Gaspar, C.M., Husk, J.S.**, Sekuler, A.B., & Bennett, P.J. (2003). The effect of information-spread on face discrimination. Vision Sciences Society Conference, Journal of Vision, 3(9), abstract 824.
52. **Hussain, Z.H.**, Bennett, P.J., & Sekuler, A.B. (2003). How much practice is needed to produce perceptual learning? Vision Sciences Society Conference, Journal of Vision, 3(9), abstract 256.
51. King, J.P., Christensen, B.K., Sekuler, A.B., & Bennett, P.J. (2003). Patterns of visual processing in schizophrenia: Selective dorsal pathway impairment. Schizophrenia Research, 60(1), 173.
50. **Murray, R.F.**, Sekuler, A.B., & Bennett, P.J. (2003) A linear cue combination framework for understanding selective attention. Vision Sciences Conference, Journal of Vision, 3(9), abstract 184.
49. **Richards, E.D.**, Bennett, P.J., & Sekuler, A.B. (2003). The time course of the useful field of view: The effects of aging and learning. Vision Sciences Society Conference, Journal of Vision, 3(9), abstract 721.
48. **Taylor, C.P.**, Bennett, P.J., & Sekuler, A.B. (2003). Noise detection: bandwidth uncertainty and adjustable channels. Annual Vision Sciences Society Conference, Journal of Vision, 3(9), abstract 9.
47. **Betts, L.R.**, Bennett, P.J., & Sekuler, A.B. (2002). Perceptual learning of spatial frequency information in faces. Vision Sciences Society Conference, Journal of Vision 2(7), abstract 622.
46. **Gaspar, C. M.**, Bennett, P. J., & Sekuler, A. B. (2002). Isolating the causes of internal noise. Vision Sciences Society Conference, Journal of Vision 2(7), abstract 211.
45. **Gold JM**, Sekuler AB, & Bennett PJ (2002). Visualizing perceptual learning. Vision Sciences Society Conference, Journal of Vision 2(7), abstract 559.
44. **Murray, R.F.**, Bennett, P. J., & Sekuler, A. B. (2002). Predicting absolute efficiency from classification images. Perception ECVP2002 Supplement, 31, 110.
43. Bennett, P.J., Sekuler, A.B., & McIntosh, A.R. (2001). The effects of aging on visual memory: Evidence for functional reorganisation of cortical networks. Perception ECVP2001 Supplement.
42. Sekuler, A.B., **Gaspar, C., Gold, J.M.**, & Bennett, P.J. (2001). The efficiency of face recognition: effects of inversion and contrast reversal. Perception ECVP2001 Supplement.

41. **Gold, J.M.**, Sekuler, R., BaerVELdt, A., Murray, R.F., Sekuler, A.B., & Bennett, P.J. (2001). Decay of visual memory is due to decreased signal not increased noise. *ARVO. Investigative Ophthalmology & Visual Science (Supplement)*, 42.
40. Bennett, P.J., **Till, C.**, **Betts, L.R.**, & Sekuler, A.B. (2001). Multiplicative internal noise is higher in old observers. *ARVO. Investigative Ophthalmology & Visual Science (Supplement)*, 42.
39. **Najemnik, J.**, **Knill, D.C.**, Bennett, P.J., & Sekuler, A.B. (2001). Perception of completely occluded moving targets. *ARVO. Investigative Ophthalmology & Visual Science (Supplement)*, 42.
38. **Murray, R.F.**, **Gold, J.M.**, Sekuler, A.B., & Bennett, P.J. (2001). Reverse correlation reveals behavioural effects of perceptual organization. *ARVO. Investigative Ophthalmology & Visual Science (Supplement)*, 42.
37. Sekuler, A.B., **Gold, J.M.**, **Gaspar, C.M.**, & Bennett, P.J. (2001). The efficiency of upright and upside down face identification. *ARVO. Investigative Ophthalmology & Visual Science (Supplement)*, 42.
36. **Gold, J.M.**, **Murray, R.F.**, Sekuler, A.B., & Bennett, P.J. (May 2000). Snapshots of visual completion. *ARVO. Investigative Ophthalmology & Visual Science (Supplement)*, 41.
35. **Murray, R.F.**, Bennett, P.J., Sekuler, A.B., & **Gold, J.M.** (May 2000). Effect of visual completion on calculation efficiency. *ARVO. Investigative Ophthalmology & Visual Science (Supplement)*, 41.
34. **Najemnik, J.**, Sekuler, A.B., & Bennett, P.J. (May 2000). Local vs. global factors in temporal binding from synchronous luminance changes. *ARVO. Investigative Ophthalmology & Visual Science (Supplement)*, 41.
33. **Taylor, C.P.**, Bennett, P.J., & Sekuler, A.B. (May 2000). The categorical perception of relative spatial phase. *ARVO. Investigative Ophthalmology & Visual Science (Supplement)*, 41.
32. **Murray, R.F.**, Sekuler, A.B., & Bennett, P.J. (April 1999). Grouping of partially occluded contours for symmetry judgement. *Investigative Ophthalmology & Visual Science (Supplement)*, 40.
31. **Ozin, L.A.**, & Bennett, P.J. (April 1999). The effects of aging on the visual detection of noise. *Investigative Ophthalmology & Visual Science (Supplement)*, 40.
30. **Gold, J.M.**, Bennett, P.J., & Sekuler, A.B. (April 1999). Learning improves calculation efficiency for complex pattern identification. *Investigative Ophthalmology & Visual Science (Supplement)*, 40.
29. Sekuler, A.B., Bennett, P.J., & **Protzner, A.B.** (April, 1999). Temporal binding from synchronous luminance changes. *Investigative Ophthalmology & Visual Science (Supplement)*, 40.
28. **Taylor, C.P.**, Sekuler, A.B., & Bennett, P.J. (April 1999). The temporal properties of modal and amodal completion in noise. *Investigative Ophthalmology & Visual Science (Supplement)*, 40.
27. **Dengis, C.A.**, Sekuler, A.B., Bennett, P.J., & Sekuler, R. (May, 1998). Aging affects perceived direction of motion and detection of global flow in random dot cinematograms. *Investigative Ophthalmology & Visual Science (Supplement)*, 39.

26. **Gold, J.**, Bennett, P.J., & Sekuler, A.B. (May, 1998). Identification efficiency for low- and high-pass filtered letters and faces. *Investigative Ophthalmology & Visual Science (Supplement)*, 39.
25. Greenlee, M.W., Bennett, P.J., Kraemer, F.M., & Hennig, J. (May, 1998). FMRI responses to infrequent visual configurations. *Investigative Ophthalmology & Visual Science (Supplement)*, 39.
24. McIntosh, A.R., Sekuler, A.B., **Penpeci, C.**, Rajah, M.N., Bennett, P.J., Grady, C.L., & Sekuler, R. (May, 1998). Neural systems of visual memory in young and old observers. *Investigative Ophthalmology & Visual Science (Supplement)*, 39.
23. **Murray, R.F.**, Sekuler, A.B., & Bennett (May, 1998). Attending to component directions in random dot cinematograms. *Investigative Ophthalmology & Visual Science (Supplement)*, 39.
22. **Protzner, A.B.**, Pratt, J., Sekuler, A.B., & Bennett, P.J. (May, 1998). Exogenous and endogenous attentional orienting in young and old observers. *Investigative Ophthalmology & Visual Science (Supplement)*, 39.
21. **Gold, J.**, Sekuler, A.B., & Bennett, P.J. (May, 1997). The effect of bandpass filtering on the efficiency of complex pattern identification. *Investigative Ophthalmology & Visual Science (Supplement)*, 38.
20. **Hillis, J.**, Bennett, P.J., & Sekuler, A.B. (May, 1997). Temporal properties of spatial profile analysis. *Investigative Ophthalmology & Visual Science (Supplement)*, 38.
19. **Protzner, A.**, Sekuler, A.B., Bennett, P.J., & Mamelak, M. (May, 1997). Effects of stimulus duration and contrast on the useful field of view. *Investigative Ophthalmology & Visual Science (Supplement)*, 38.
18. **Ozin, L.** & Bennett, P.J. (April, 1996) The effects of aging on spatial frequency tuning. *Investigative Ophthalmology & Visual Science (Supplement)*, 37.
17. Sekuler, A.B. & Bennett, P.J. (May, 1994). Two dimensional profile analysis in spatial vision. *Investigative Ophthalmology & Visual Science (Supplement)*, 35.
16. Bennett, P.J. & Sekuler, A.B. (1993) Effects of aging on contrast detection in noise. *Investigative Ophthalmology & Visual Science (Supplement)*, 34.
15. Bennett, P.J. (1992) The effects of lateral masking on the discrimination of lines and edges in the periphery. *Investigative Ophthalmology & Visual Science (Supplement)*, 33.
14. **Cortese, F.** & Bennett, P.J. (1992) Stimulus specific mechanisms in visual short term memory. *Investigative Ophthalmology & Visual Science (Supplement)*, 33.
13. Kahana, M. & Bennett, P.J. (1992) Perceived similarity and categorization of compound gratings. *Investigative Ophthalmology & Visual Science (Supplement)*, 33.
12. Sekuler, A.B., **Persaud, A.**, & Bennett, P.J. (1992) Do phase differences drive apparent motion? *Investigative Ophthalmology & Visual Science (Supplement)*, 33.
11. Bennett, P.J. & Sekuler, A.B. (1991). Profile analysis in human vision? Annual meeting of the Association for Research in Vision and Ophthalmology, Sarasota, Florida. *Investigative Ophthalmology & Visual Science (Supplement)*, 32, 1024.
10. Bennett, P.J. (1990). Relative phase discrimination in suprathreshold and multiple-component gratings. Annual meeting of the Association for Research in Vision and Ophthalmology, Sarasota, Florida. *Investigative Ophthalmology & Visual Science (Supplement)*, 31, 4.

9. Anderson, S.A. & Bennett, P.J. (1988). Mach bands are visible in the peripheral visual field. Annual meeting of the Association for Research in Vision and Ophthalmology, Sarasota, Florida. *Investigative Ophthalmology & Visual Science (Supplement)*, 29.
8. Bennett, P.J. & Banks, M.S. (1988). Phase deficits with aperiodic patterns. Annual meeting of the Association for Research in Vision and Ophthalmology, Sarasota, Florida. *Investigative Ophthalmology & Visual Science (Supplement)*, 29.
7. Allen, D., Bennett, P.J. & Banks, M.S. (1987). Effects of luminance on FPL and VEP acuity in human infants. Annual meeting of the Association for Research in Vision and Ophthalmology, Sarasota, Florida. *Investigative Ophthalmology & Visual Science (Supplement)*, 28, 5.
6. Banks, M.S., Bennett, P.J. & Scheffrin, B. (1987). Foveal cones and spatial vision in human neonates. Annual meeting of the Association for Research in Vision and Ophthalmology, Sarasota, Florida. *Investigative Ophthalmology & Visual Science (Supplement)*, 28, 4.
5. Bennett, P.J. & Banks, M.S. (1987). Phase deficits in the peripheral visual field. Annual meeting of the Association for Research in Vision and Ophthalmology, Sarasota, Florida. *Investigative Ophthalmology & Visual Science (Supplement)*, 28, 138.
4. Banks, M.S., Bennett, P.J. & Gubrud, G.A. (1986). Phase discrimination in normal and amblyopic fovea. Annual meeting of the Optical Society of America, Seattle, Washington. *Optical Society of America Technical Digest*, 74.
3. Bennett, P.J. & Banks, M.S. (1986) Phase discrimination in peripheral retina. Annual meeting of the Association for Research in Vision and Ophthalmology, Sarasota, Florida. *Investigative Ophthalmology & Visual Science (Supplement)*, 27, 342.
2. Banks, M.S., Geisler, W.S. & Bennett, P.J. (1985). The physical limits of grating detection and discrimination. Annual meeting of the Association for Research in Vision and Ophthalmology, Sarasota, Florida. *Investigative Ophthalmology & Visual Science (Supplement)*, 26, 83.
1. Cohen, L.B. & Bennett, P.J. (1984). Infant perception of proximity relations. International Conference on Infant Studies, New York, New York. *Infant Behavior and Development*, 7, 74.

9 Invited Presentations

The following is a list of invited presentations I have given since 2000.

29. *The effects of aging on inhibitory cortical circuits and their influence on visual perception.* Rotman Research Rounds, Baycrest Hospital, Toronto, Ontario, February 4, 2019.
28. *Science Snapshot Lecture: Human face perception.* A 15 minute public lecture given prior to a performance at the LIVELab, McMaster University, February 1 & 2, 2019.
27. *The effects of aging on vision in naturalistic contexts.* Invited lecture presented at the Workshop on Lighting for an Aging Society, Integrative Lighting: SSLNet Conference, Toronto, Ontario, June 1, 2018.
26. *Characteristics of Perceptual Learning.* Invited lecture presented at the 46th Annual Lake Ontario Visionary Establishment (L.O.V.E.) conference, Niagara Falls, Ontario, February 2-3, 2017.
25. *Identifying Human Faces.* Centre for Vision Research, York University, Toronto, ON, Canada. October 5, 2013.

24. *The effects of aging on GABAergic mechanisms and their influence on visual perception*. Talk presented at the symposium on the Neuromodulation of Visual Perception, Vision Science Society Annual Meeting, Naples, FL, USA; May 11, 2012. *Journal of Vision*, 12(9): 1404, doi:10.1167/12.9.1404
23. *Aging, Vision, and the Real World*. Kern Lecture Series, Department of Communication, Rochester Institute of Technology, Rochester, NY, USA. April 18, 2012
22. *Aging and Vision*. Schepens Eye Research Institute, Boston, MA, USA. June 22, 2011.
21. *The Perceptual and Cognitive Consequences of Aging (and why engineers should care about such things)*. Keynote address given at the Software Certification Consortium (SCC) workshop at the annual IBM CASCON conference, Toronto, Canada. November 4, 2010.
20. *Training Brains: Perceptual Learning and Cortical Plasticity in Adults*. Keynote address given at the 27th annual meeting of the Japanese Cognitive Science Society, Kobe University, Japan. September 19, 2010.
19. *The effects of normal healthy aging on vision and visual attention*. CIHR Summer Workshop on Vision Health Research, York University, Toronto, Ontario, Canada. June 27, 2009.
18. *The amazing changing aging brain*. Health Research in the City Conference, Hamilton, Ontario, Canada. February 6, 2008.
17. *The efficiency of human face perception*. Department of Psychology, Tohoku University, Sendai, Japan. October 26, 2007.
16. *Identifying human faces*. Department of Psychology, Brandeis University, Waltham, MA, USA. July 26, 2007.
15. *How do we identify faces?* National Institute of Advanced Industrial Science & Technology, Tsukuba, Japan; and Department of Psychology, Kyoto University, Kyoto, Japan. March 25 & 27, 2007.
14. *Identifying human faces*. Distinguished Lecture Series, Department of Psychology, Queen's University, Kingston, ON. March 2, 2007.
13. *Visual plasticity: Effects of learning and aging*. Hotchkiss Brain Institute, University of Calgary, Calgary AB. February 22, 2006
12. *Characterizing perceptual learning with external noise*. Seminar on Computational Cognitive Neuroscience, University of Toronto at Scarborough (December 2, 2004).
11. *Aging improves motion perception*. School of Optometry, University of Waterloo (September 29, 2004).
10. *Vision and Aging*. CIHR Vision Health Research Workshop. Centre for Vision Research, York University (July 12, 2004).
9. *The Effects of Aging on Motion Perception*. Volen Center for Complex Systems, Brandeis University, Waltham, Mass. (September 2, 2004).
8. *Integrating information across spatial scales*. Centre for Vision Research, York University (September, 26, 2003).
7. *What changes with perceptual learning?* Invited lecture given at the 32nd meeting of the Lake Ontario Visionary Establishment (L.O.V.E.), Niagara Falls, Ontario (February, 2003).
6. *Snapshots of visual completion*. Helmholtz lecture series, Helmholtz Institute, Utrecht University, The Netherlands (December, 13, 2002).

5. *Snapshots of visual completion*. Department of Psychology, Glasgow University (December, 10, 2002).
4. *Using response classification to examine the face inversion effect* (Authors: P.J. Bennett, A.B. Sekuler, & A.R. McIntosh; presented by P.J. Bennett). An invited paper presented at a symposium on classification images at the European Conference on Visual Perception (2002, Glasgow, UK).
3. *The effects of aging on visual memory: Evidence for functional reorganisation of cortical networks*. (Authors: P.J. Bennett, A.B. Sekuler, & A.R. McIntosh; presented by P.J. Bennett). Presented at the Brain Imaging Symposium at the European Conference on Visual Perception (2001, Izmir, Turkey).
2. *How does perceptual learning affect perception?* Department of Psychology, McMaster University, Hamilton, Ontario. (August, 30, 2000).
1. *Signal vs. noise: What changes with perceptual learning?* (Authors: A.B. Sekuler, & P.J. Bennett; presented by A.B. Sekuler). An invited paper presented at the NICE-2000 workshop on neural plasticity and learning (March, 2000; Grindelwald, Switzerland)

10 Student Supervision

10.1 Undergraduates (Thesis & Independent Study)

- Emily Greenberg (Expected Completion: April 2019). The perception of face gender.
- Melanie Lin (Expected Completion: April 2019). The effects of aging on face identification.
- Independent Study (2QQ3, Winter, 2019): Monica Jiang, Simrandeep Kalsi, Yuki Lai, Laura Lee, Sudhana Suvarna
- Independent Study (3QQ3, Winter, 2019): Nhi Tran
- Faiza Shafaqat (2014). Visual rivalry: Neural mechanisms of binocular vision and aging.
- David Truong (2014). Behavioural differences in reversal rates for continuous vs. discontinuous presentation of a Necker cube lattice.
- Michael Joseph (2013). Non-optimal stimuli comparisons and the noisy visual system.
- Navangi Patel (2013). Internal noise for visual detection and discrimination tasks.
- Paul Sirek (2012). The effect of stimulus type on audio-visual temporal order judgments and aging.
- Alexander Yakubovich (2011). A novel basis of anisotropic deformations for sparse, multi-scale representation of natural shape.
- Nidhi Trivedi (2011). Age-related changes in perception of faces and biological motion using EEG.
- David Bukala (2011). Effects of age on contrast perception in the presence of a surround.
- Divya Gumber (2010). Indices of holistic face processing.
- Dashrath Gautam (2009). The effects of orientation masking on face identification.
- Tania Gora (2007). Symmetry-specific components of the visual evoked potential.
- A. A. Qureshy (2007). The effects of aging on the bandwidths of directionally-selective channels.
- Richard Louka (2005). Symmetry-specific components of the visual evoked potential.
- Alyssa Bouchamp (2005). Mechanisms underlying the visual perception of symmetry.
- George Najemnik (2001). Completion of fully-occluded moving objects.
- Christopher Taylor (2000). The categorical perception of relative spatial phase.

- Paul Jaye (1995). Light source information: Effect on shape from shading.
- Jan Nybida (1994). Optimal allocation of attention in the visual field: Evidence from a divided attention task.
- Filomeno Cortese (1994). Stimulus-specific mechanisms in visual short term memory.

10.2 Master's Students

- Smurthi Venkateshan (July, 2018 - present). Thesis topic: The Effect of Aging on Depth Perception.
- Nidhi Trivedi (September, 2012) Individual differences in the local or global processing styles within individuals with Autism: an alternative explanation to the Weak Central Coherence and the Enhanced Perceptual Processing theories.
- Emilie Harvey (August, 2012) Audio-visual temporal order judgments in aging.
- Ryan Kealey (August, 2009) Effects of viewing condition and age on the functionality of eye movements.
- Lisa Betts (2001). The effects of aging on visual sensitivity and internal noise.
- Carl Gaspar (2001). The effects of learning on pattern recognition.
- Andrea Protzner (1999). The effects of irrelevant information and stimulus uncertainty on the aging visual memory system.
- Jason Gold (1996). The role of spatial frequency information in the identification of complex visual patterns.
- Linda Ozin (1995). Age differences in the shape of spatial frequency filters.

10.3 Doctoral Students

- Parker Banks (July, 2016 - present). Thesis topic: The Acquisition of Perceptual Expertise.
- Jiali Song (July, 2016 - present). Thesis topic: Divided Visual Attention.
- Jessica Cali (July, 2015 - present). Thesis topic: The Effects of Aging on Motion Perception.
- Sarah Creighton (July, 2012 - present). Thesis topic: Aging & Face Perception.
- Michael Slugocki (July, 2012 - May, 2019). Spatial and temporal interactions between shape representations in human vision. Current Position: Hardware Engineer, Panel Processes & Optics, Apple Computer, Cupertino, CA.
- Ali Hashemi (July, 2013 - October, 2018). The perceptual learning of the orientation structure of faces and textures. Current Position: Postdoctoral Fellow, Rotman Research Institute, Baycrest Hospital, Toronto.
- Amanda Beers (July, 2012 - August, 2016). Characterizing binocular rivalry across the lifespan. Current Position: Assistant Professor, Woosong University, South Korea.
- Jordan Lass (July, 2012 - July, 2016). Figure-ground and aging. Current Position: Postdoctoral Fellow, Rotman Research Institute; Baycrest Project Manager at KL-CARE, Baycrest Hospital, Toronto. Canada.
- Matt Pachai (July, 2010 - November, 2015). On the role of horizontal structure in human face identification. Current Position: VISTA Postdoctoral Fellow, Perceptual Neuroscience Laboratory, York University, Toronto, Canada.
- Lindsay Farber (July, 2009 - December, 2015). Spatial suppression in aging. Current Position: Senior Data Scientist & Head of Business Intelligence, MoneyKey, Toronto, Canada.

- Eugenie Roudaia (July, 2007 - January, 2013). Contour Integration and Aging. Current Position: Postdoctoral Fellow, Baycrest Hospital, Toronto, Canada.
- Lia Tsotsos (July, 2007 - September, 2012). Motion Perception & Aging. Current Position: Director, Sheridan Elder Research Centre, Sheridan College.
- Yaroslav Konar (July, 2007 - March, 2012). Evaluation of Holistic Face Perception. Current Position: Adjunct Lecturer & Statistical Consultant, Department of Linguistics, University of Ottawa.
- Christopher Taylor (July, 2002 - 2011). On the summation of visual noise. Current Position: Assistant Professor, New England College of Optometry, Boston, MA, USA.
- Stanley Govenlock (July, 2006 - 2010). Visual channels in aging. Current Position: Medical Doctor, Psychiatry, University of Alberta,.
- Jesse Husk (July, 2003 - August, 2009). Neural correlates of visual object learning. Current Position: Assistant Professor, Psychology, St. Francis Xavier University.
- Zahra Hussain (July, 2003 - July, 2009). Perceptual learning of complex patterns. Current Position: Assistant Professor, Psychology, American University of Beirut, Lebanon.
- Carl Gaspar (January, 2007). The effects of stimulus information and orientation on face processing. Current Position: Investigator, Center for Cognition & Brain Disorders (CCBD), Hangzhou, China
- Lisa Betts (September 2000 - August, 2006). Center-surround antagonism in visual motion processing changes with age.
- Richard Murray (2002). Perceptual organization and efficiency. Current Position: Professor, Department of Psychology, York University, Toronto, Canada.
- Jason Gold (2001). Signal and noise in perceptual learning. Current Position: Professor, Department of Psychological & Brain Sciences, Indiana University, USA.

10.4 Post-doctoral Fellows

- Eugenie Roudaia (September, 2017 - September 2018). Current Position: Postdoctoral Fellow, Rotman Research Institute, Baycrest Hospital, Toronto, Canada.
- Karin Pilz (September, 2007 - July, 2011). Current Position: Lecturer, Department of Psychology, University of Aberdeen.
- Alexa Roggeveen (September, 2007 - August, 2009). Current Position: Professor & Research Coordinator, Social Service Worker Gerontology Program, Sheridan College, Toronto.
- Carl Gaspar (January, 2007 - October, 2007). Current Position: Research Associate, Center for Cognition & Brain Disorders, Hangzhou Normal University, China
- Eric Richards (January, 2002 - August, 2006).
- Guillaume Rousselet (July 2003 - August, 2006). Current Position: Lecturer, Department of Psychology, University of Glasgow, Scotland.
- Masayoshi Nagai (July, 2003 - December, 2004). Current Position: Professor, College of Comprehensive Psychology, Ritsumeikan University, Kyoto, Japan.
- Carol Dengis (1997-1998).

11 Teaching

- Statistics & Research Methods (HUMBEHV 3HB3): a 13-week undergraduate lecture course on statistical methods and research design. Enrollment: ≈ 50 .

- Statistics & Experimental Design (PSYCH 710): a 13-week graduate course that covers the logic of hypothesis testing, basic probability, classical statistics (i.e., t-tests, chi-square tests, etc.), and linear statistical models (i.e., regression, anova, ancova), Enrollment: ≈ 30 .
- Introduction to Signal Processing (PSYCH 711/712): a 6-week graduate course that introduces students to basic aspects of signal processing (e.g., sampling, Fourier Transform, and the design and application of finite impulse response linear filters). Enrollment: ≈ 15 .
- Fundamentals of Signal Detection Theory (PSYCH 711/712): a 6-week graduate course that introduces the basic concepts of signal detection theory. Enrollment: ≈ 15 .
- Robust Statistics & Bootstrapping (PSYCH 711/712): a 6-week graduate course that examines how robust statistics and bootstrapping methods can increase the power of many statistical tests. Enrollment: ≈ 15 .

12 Editorial Service

- Reviewer, CIHR Foundation Scheme (October 2015 - October 2017)
- Chair, Peer Review Committee (Life Sciences-Clinical), Early Researcher Awards Program, Ontario Ministry of Research & Innovation (November, 2015)
- Member, Peer Review Committee (Life Sciences-Clinical), Early Researcher Awards Program, Ontario Ministry of Research & Innovation (January, 2012 - 2015)
- Consulting Editor, Attention, Perception & Psychophysics (2003 - 2012)
- Chair, CIHR Peer Review Committee (Behavioural Sciences - C) (July 2010 - May 2012)
- Member, CIHR Team Grant Peer Review Committee: Vision, Hearing & Communication Disorders (April 2010)
- Member, CIHR Peer Review Committee (Behavioural Sciences - C) (2005 - 2008)
- Ad hoc reviewer for the following journals: American Journal of Optometry; Attention, Perception & Psychophysics; Behavior Research Methods, Instruments, & Computers; Canadian Journal of Experimental Psychology; Child Development; Cognitive Development; Cognitive Science; Cortex; Current Biology; Experimental Brain Research; Frontiers in Perception Science; Investigative Ophthalmology and Visual Science; Journal of Experimental Child Psychology; Journal of Experimental Psychology: Human Perception & Performance; Journal of Cognitive Neuroscience; Journal of Gerontology; Journal of Vision; Nature; Neuron; Neuroscience Letters; New Ideas in Psychology; Optometry & Vision Science; Perception; PLOS-One; PNAS; Psychological Science; Vision Research; Visual Cognition
- Ad hoc reviewer for the following granting agencies: Air Force Office of Scientific Research (U.S.); Biotechnology & Biological Sciences Research Council (UK); Canada Research Chairs, Canada Council for the Arts (Killam Program); Canadian Institutes of Health Research (Canada); Medical Research Council (Canada); Ministry of Mental Health (Ontario, Canada); Natural Science and Engineering Research Council (Canada); MITACS; Netherlands Organisation for Scientific Research (NWO); Velux Stiftung (Switzerland)
- External referee for tenure & promotion committees: University of California (Santa Barbara), University of Southern California, University of Waterloo, Wright State University

13 Honours

- 2001-08 & 2008-15: Tier I Canada Research Chair in Vision Science (renewed in 2016)

- 2001: Ontario Innovation Trust: Distinguished Researcher Award
- 1997: Research Fellowship, German Academic Exchange Service (Deutscher Akademischer Austauschdienst)

14 Administration

14.1 Department

- Member, PNB Budget & Committees (Fall & Winter terms, 2018-19)
- Member, PNB Developmental Search Committee (Fall & Winter terms, 2018-19)
- Member, Faculty of Science Tenure & Promotion Committee, McMaster (Fall, 2017)
- Department Chair, PNB, McMaster (July 1, 2011 - June 30, 2016)
- Associate Chair (Graduate), PNB, McMaster (2008-11)
- Two Tenure & Promotion Committees, Chair & Member (2009)
- Executive Committee (2006-08)

14.2 Faculty

- Internal Member, IQAP review of undergraduate programs in Mathematics & Statistics, McMaster University (February, 2018)
- Faculty of Science Finance Committee, McMaster University (2014 - June 30, 2016)
- Working Group for the Life Sciences Program, Faculty of Science (January-April, 2014)
- Lab Safety Committee, McMaster University (2013-2014)
- Search Committee, Biology Department Chair, McMaster University (2012)
- Search Committee, Director of School of Geography & Earth Sciences, McMaster (2012)

14.3 University

- Senate Board for Student Appeals, McMaster University (2008 - present)
- Selection Committee, Dean of the Faculty of Social Sciences, McMaster University (2015)
- Presidential Biosafety Advisory Committee, McMaster University (2010-14)
- Science & Engineering Research Board (SERB), McMaster University (2012-13)
- Search Committee, Associate Vice President (Research), McMaster University (2013)
- Graduate Council, McMaster University (2010-13)
- Search Committee, Director of Program in Neuroscience (MINDS), McMaster (2012-13)
- Chair, Science & Engineering Research Board, McMaster University (2012)
- IQAP Undergraduate Program Review of Kinesiology, McMaster University (2012)
- Search Committee for Gilbrea Chair in Aging & Mental Health, McMaster, Faculty of Social Sciences (September 2010 - March 2011)
- McMaster University bargaining committee, TA negotiations (2009)

14.4 **Other**

- External Member, IQAP review of undergraduate & graduate programs in Psychology, University of Waterloo (March, 2018)
- Member, Program Committee (Advisory Board), NSERC-CREATE training program in Auditory Cognitive Neuroscience (2009-15)
- External Advisor, Program Advisory Committee, NSERC-CREATE Training Program in Auditory Cognitive Neuroscience (2009 - 2015)
- Chair, CIHR Behavioural Sciences-C Grant Selection Committee (July 1, 2010 - May 2012)