QASIM **Z**AIDI

Graduate Center for Vision Research,
State University of New York, College of Optometry,
33 West 42nd St, New York, NY 10036.

Office: 212-938-5542; Lab: 212-938-5756; Fax: 212-938-5537

E-mail: qz@sunyopt.edu

http://poseidon.sunyopt.edu/Zaidi/index.php

EDUCATION

1984 Ph.D. University of Chicago, Chicago, IL. (Color & Vision)

1973 B.S. Orta Dogu Teknik Universitesi, Ankara, Turkiye. (Probability & Measure Theory)

PROFESSIONAL POSITIONS

2007-	SUNY Distinguished Professor, Graduate Center for Vision Research, State University of New York, College of Optometry, New York, NY.
1998-07	Professor, Vision Science, State University of New York, College of Optometry, New York, NY.
1995-98	Senior Research Scientist, State University of New York, College of Optometry, New York, NY.
1994-95	Vision Research Investigator, Lighthouse Research Institute, New York, NY.
1991-94	Associate Professor, Dept. of Psychology, Columbia University, New York, NY.
1985-91	Assistant Professor, Dept. of Psychology, Columbia University, New York, NY.
1984-85	Postdoctoral Fellow, AT&T Bell Laboratories, Murray Hill, NJ.
1980-84	Research Assistant, Dept. of Behavioral Sciences and Dept. of Ophthalmology, University of Chicago, Chicago, IL.
1979-80	Instructor, Dept. of Psychology, Roosevelt University, Chicago, IL.
1975-77	Statistician, Social Psychiatry Study Center, University of Chicago, Chicago, IL.

RESEARCH AWARDS

2001-17	NIH R01 EY013312 "Neural basis of shape from texture".
2013-18	NIH R01 EY023322 " Neural mechanisms of color" (Bevil Conway PI).
2014-15	SUNY BNE "Mapping neural transformations for context based perceptual adjustments" (Zaidi, Xiao & T'so).
1988-2013	NIH R01-EY007556 "Mechanisms of color detection, induction and adaptation".
2001	Macquarie University Visiting Fellow "Functional aspects of cortical adaptation". Macquarie University, Sydney, Australia.

1999	DAAD A/99/42594 "Color adaptation to complex scenes". Max Planck Institute,
	Tubingen, Germany.
1997-98	SIVR 97-98-093 "Three-dimensional shape and motion distortions".
1996-97	SIVR 96-97-075 "Visual processing of object motion".
1985-87	Columbia University Biomedical Research Grant "Color vision".

HONORS

W. S. Stiles Lecture. London, England, (2010).

Chancellor's Award for Excellence in Scholarship and Creative Activities, State University of New York (2002).

Chancellor's Research Recognition Award, State University of New York (2002).

Fellow of the Optical Society of America (2000).

PUBLICATIONS

Bachy R, Alonso JM & Zaidi Q. Cortical gamut expansion revealed by lightness perception in human faces. BiorXiv

Huang Z & Zaidi Q (2020) Spatial induction in color scission. I-Perception (In Press)

Maruya, A., & Zaidi, Q. (2020). Mental geometry of perceiving 3D size in pictures. Journal of Vision, 20(10), 4.

Maruya, A., & Zaidi, Q. (2020). Mental geometry of three-dimensional size perception. Journal of Vision, 20(8), 14-14.

Zaidi, Q., & Conway, B. (2019). Steps towards neural decoding of colors. Current Opinion in Behavioral Sciences, 30, 169-177.

Wool, L. E., Packer, O. S., Zaidi, Q., & Dacey, D. M. (2019). Connectomic identification and three-dimensional color tuning of S-OFF midget ganglion cells in the primate retina. Journal of Neuroscience, 39(40), 7893-7909.

Ennis, R. J., & Zaidi, Q. (2019). Geometrical structure of perceptual color space: mental representations and adaptation invariance. Journal of vision, 19(12), 1-1.

Pons, C., Jin, J., Mazade, R., Dul, M., Zaidi, Q., & Alonso, J. M. (2019). Amblyopia affects the ON visual pathway more than the OFF. Journal of Neuroscience, 3215-18.

Sawada, T., & Zaidi, Q. (2018). Rotational-symmetry in a 3D scene and its 2D image. Journal of Mathematical Psychology, 87, 108-125.

Jansen, M, Li, X, Lashgari, R, Kremkow, J, Bereshpolova, Y, Swadlow, H, Zaidi, Q, and Alonso, J M. (2018). Cortical Balance Between ON and OFF Visual Responses Is Modulated by the Spatial Properties of the Visual Stimulus. Cerebral Cortex, 29(1), 336-355.

Koch E, Baig F, Zaidi Q. Picture perception reveals mental geometry of 3D scene inferences. Proceedings of the National Academy of Sciences. 2018 Jul 5:201804873.

- Wool, L. E., Crook, J. D., Troy, J. B., Packer, O. S., Zaidi, Q., & Dacey, D. M. (2018). Nonselective wiring accounts for red-green opponency in midget ganglion cells of the primate retina. Journal of Neuroscience, 1688-17.
- Luo-Li, G., Mazade, R., Zaidi, Q., Alonso, J. M., & Freeman, A. W. (2018). Motion changes response balance between ON and OFF visual pathways. Communications Biology, 1(1), 60.
- Pons, C., Mazade, R., Jin, J., Dul, M. W., Zaidi, Q., & Alonso, J. M. (2017). Neuronal mechanisms underlying differences in spatial resolution between darks and lights in human vision. Journal of vision, 17(14), 5-5.
- Mylo, M., Giesel, M., Zaidi, Q., Hullin, M. B., & Klein, R. Appearance Bending: A Perceptual Editing Paradigm for Data-Driven Material Models. In Vision, Modeling and Visualization (2017, September) pp. 9-16.
- Koch E, Jin J, Alonso J-M, Zaidi Q. Functional implications of orientation maps in visual cortex. Nature Communications 7 (2016).
- Bachy, R, and Zaidi, Q. Properties of lateral interaction in color and brightness induction. JOSA A 33(3) A143-149, 2016.
- Jansen, M, Giesel, M., H, Zaidi, Q, Segregating animals in naturalistic surroundings: Interaction of color distributions and mechanisms. JOSA A 33(3) A273-282, 2016.
- Zhao, L., Sendek, C., Davoodnia, V., Lashgari, R., Dul, M. W., Zaidi, Q., & Alonso, J. M. (2015). Effect of Age and Glaucoma on the Detection of Darks and Lights. Investigative ophthalmology & visual science, 56(11), 7000-7006.
- Wool L, Komban S, Kremkow J, Jansen M, Li X, Alonso J-M, Zaidi Q, Salience of unique hues and implications for color theory. Journal of Vision. February 6, 2015 15(2): 10; doi:10.1167/15.2.10.
- Dul M, Ennis R, Radner S, Lee B, Zaidi Q. Retinal adaptation abnormalities in Primary Open-Angle Glaucoma. Investigative Ophthalmology and Visual Science, February 2015, 56: 1329-1334.
- Zaidi Q, Marshall J, Thoen H, Conway B, Evolution of Neural Computations: Mantis Shrimp and Human Color Decoding. i-Perception (2014) volume 5, 492–496.
- Bachy, R, and Zaidi, Q. Troxler fading, eye movements, and retinal ganglion cell properties. i-Perception. 2014, *i-Perception* **5**(7) 611–612; doi:10.1068/i0679sas.
- Ennis, R, Lee, B and Zaidi, Q, Eye-movements and the neural basis of context effects on visual sensitivity. The Journal of Neuroscience, (2014), 34(24): 8119-8129
- Kremkow, J, Jin, J, Komban, S, Wang, Y, Lashgari, R, Li, X, Jansen, M, Zaidi, Q, Alonso, J M. Neuronal nonlinearity explains greater visual spatial resolution for darks than lights. Proceedings of the National Academy of Sciences 111.8 (2014): 3170-3175.
- S J Komban, J Kremkow, Q Zaidi, Alonso, J M. Neuronal and perceptual differences in the temporal processing of darks and lights. Neuron, Volume 82, Issue 1, 2 April 2014, Pages 224–234 (2014).
- Bachy, R, and Zaidi, Q. Factors governing the speed of color adaptation in foveal versus peripheral vision. J. Opt. Soc. Am. A, Vol. 31, Issue 4, pp. A220-A225 (2014).

Jansen, M, Li, X, Lashgari, R, Kremkow, J, Bereshpolova, Y, Swadlow, H, Zaidi, Q, and Alonso, J M. Chromatic and achromatic spatial resolution of local field potentials in awake cortex. Cerebral Cortex, doi: 10.1093/cercor/bhu270 (2014).

Geisel, M. and Zaidi, Q. Rapid Sensing of Material Affordances. First Workshop on Affordances: Affordances in Vision for Cognitive Robotics, July 13, 2014, Berkeley, USA

Zaidi, Q, Li, A, Wong, C, Cohen, E, and Meng, X. Hardwired and plastic mechanisms in 3-D shape perception, in *Shape Perception in Human and Computer Vision: An interdisciplinary Perspective*, edited by Dickinson and Pizlo, Springer 2013.

Zaidi, Q, Victor, J, McDermott, J, Geffen, M, Bensmaia, S, and Cleland, T, Perceptual Spaces: Mathematical structures to neural mechanisms. The Journal of Neuroscience, 33(45): 17597–17602, 2013.

Geisel, M. and Zaidi, Q. Frequency based heuristics for material perception. Journal of Vision, December 6, 2013 vol. 13 no. 14 article 7.

Jain, A. and Zaidi, Q. Efficiency of extracting stereo-driven object motions. Journal of Vision, (2013) 13(1):18, 1–14.

Cohen, E. H. and Zaidi, Q. Symmetry in context: Salience of mirror symmetry in natural patterns. Journal of Vision, 13 (6), 2013

Zaidi, Q, Jain, A and Meng, X. Perception of Non-rigid 3-D Shapes, in *The Oxford Handbook of Computational Perceptual Organization*, edited by Gepshtein and Maloney (In Pres).

Zaidi, Q, Jain, A, and Cohen, E. Perception of Non-rigid 3-D Motions, in *The Oxford Handbook of Computational Perceptual Organization*, edited by Gepshtein and Maloney (In Press).

Zaidi, Q, Ennis, R., Cao, D. and Lee, B. Neural locus of color afterimages. Current Biology, 22(3), 220 - 224, 2012.

Zaidi, Q., Visual inferences of material changes: color as clue and distraction. Wiley Interdisciplinary Reviews: Cognitive Science, 2: n/a. doi: 10.1002/wcs.148, 2011.

Meng, X. and Zaidi, Q. Visual effects of haptic feedback are large but local. PLoS ONE 6(5): e19877. doi:10.1371/journal.pone.0019877, 2011.

Komban, S.J., Alonso, J.M. and Zaidi, Q. Darks are processed faster than lights. The Journal of Neuroscience, 8 June 2011, 31(23):8654-8658.

Jain, A and Zaidi, Q. Discerning non-rigid 3-D shapes from motion cues. Proceedings National Academy of Sciences. January 25, 2011 vol. 108 no. 4 1663-1668.

Cohen, E. Jain, A and Zaidi, Q. The utility of shape attributes in deciphering movements of non-rigid objects Journal of Vision, 10(11):29, 1–15, 2010.

Yoonessi, A. and Zaidi, Q. The role of color in recognizing material changes Ophthalmic and Physiological Optics 30 (5), 626-631, 2010.

Li, A. and Zaidi, Q. Release from Cross-Orientation Suppression Facilitates 3D Shape Perception. PLoS ONE 4(12): e8333. doi:10.1371/journal.pone.0008333, 2009.

Lee, R.J., Mollon, J., Zaidi, Q. and Smithson, H.E. Latency characteristics of the short-wavelength-sensitive cones and their associated pathways. Journal of Vision, 9(12), 1-17, 2009.

Zaidi, Q. and Bostic, M. Color strategies for object identification, Vision Res. 48(26):2673-81, 2008.

Li, A., Tzen, B., Yagdarova, A. and Zaidi, Q. Neural basis of 3-D shape aftereffects. Vision Research 48(2):244-252, 2008.

Cohen, E. and Zaidi, Q. Fundamental failures of shape constancy resulting from cortical anisotropy. Journal of Neuroscience, 27(46):12540-12545, 2007.

Cohen, E.H, Zaidi, Q. The oblique effect and three-dimensional shape. Visual Cognition 15:80-83, 2007.

Zaidi, Q. and Li, A. Three-dimensional shape from chromatic orientation flows. Visual Neuroscience, 3-4(23), 323-330, 2006.

Sun, H., Smithson, H., Lee, B., and Zaidi, Q. Do magnocellular and parvocellular ganglion cells avoid short-wavelength cone input? Visual Neuroscience, 3-4(23), 441-446, 2006.

Robilotto, R. and Zaidi, Q. Lightness identification of patterned three-dimensional real objects. Journal of Vision, *6*(1), 18-36, 2006.

Sun, H., Smithson, H., Lee, B., and Zaidi, Q. Specificity of cone inputs to macaque retinal ganglion cells. J. Neurophysiology, 95: 837-849, 2006. (Commentary by R. Shapley, J Neurophysiol; 95: 587-588).

Zaidi, Q. The role of adaptation in color constancy. In "Fitting the Mind to the World: Adaptation and Aftereffects in High-Level Vision" Volume 2, Advances in Visual Cognition Series, Ed. Clifford, C. & Rhodes, G., Oxford University Press 103-131, 2005.

Zaidi, Q. A sculpture technique for rendering complex impossible objects. Perception, 34, 121-132, 2005.

Li, A. and Zaidi, Q. Three-dimensional shape from non-homogeneous textures: carved and stretched surfaces. Journal of Vision, *4*(10), 860-878, 2004.

Smithson, H. and Zaidi, Q. Color constancy in context: roles of local adaptation and reference levels. Journal of Vision, Special issue on Perception of Color and Material Properties in Complex Scenes 4(9), 693-710, 2004.

Khang, B. and Zaidi, Q. Illuminant color perception of spectrally filtered spotlights. Journal of Vision, Special issue on Perception of Color and Material Properties in Complex Scenes 4(9), 680-692, 2004.

Robilotto, R. and Zaidi, Q. Limits of lightness identification for real objects under natural viewing conditions. Journal of Vision, Special issue on Perception of Color and Material Properties in Complex Scenes 4(9), 779-797, 2004.

Robilotto, R. and Zaidi, Q. Perceived transparency of neutral density filters across dissimilar backgrounds. Journal of Vision, *4*(3), 183-195, 2004.

Li, A. & Zaidi, Q. (2004) Perception of 3D shape from homogeneous and non-homogeneous surface textures, Proceedings of Electronic Imaging Science and Technology: Human Vision and Electronic Imaging IX, SPIE vol. 5292, 307-321.

Li, A. and Zaidi, Q. Observer strategies in the perception of 3-D shape from isotropic textures: developable surfaces. Vision Research, 43, 2741-2758, 2003.

Shapiro, A., Beere, J. and Zaidi, Q. Time course of adaptation stages in the S cone color system. Vision Research, 43, 1135-1147, 2003.

Clifford, C.W.G., Spehar, B., Solomon, S.G., Martin, P. R. and Zaidi, Q. Interactions between color and luminance in the perception of orientation. Journal of Vision, 3, 106-115, 2003.

Zaidi, Q. and Griffiths, A.F. Generic assumptions shared by visual perception and imagery. Brain and Behavioral Sciences 25, 215-216, 2002.

Tsujimura, S. and Zaidi, Q. Similarities between visual processing of relative and absolute motion. Vision Research 42, 3005-3017, 2002.

Robilotto, R., Khang, B. and Zaidi, Q. Sensory and physical determinants of perceived achromatic transparency. Journal of Vision, 2(5), 388-403, 2002.

Khang, B. and Zaidi, Q. Accuracy of color scission for spectral transparencies. Journal of Vision, 2, 251-266, 2002.

Zaidi, Q. and Li, A. Limitations on shape information provided by texture cues. Vision Research, 42, 815-835, 2002.

Khang, B. and Zaidi, Q. Cues and strategies for color constancy: perceptual scission, image junctions, transformational color matching. Vision Research, 42, 211-226, 2002.

Lee, B., Joost, U. and Zaidi, Q. Commentary on "Lichtenberg, G.C.(1793) Letter to Johann Wolfgang von Goethe on "Farbige Schatten." Color Research and Application, 27, 300-303, 2002.

Li, A. and Zaidi, Q. Veridicality of three-dimensional shape perception predicted from amplitude spectra of natural textures. J. Opt. Soc. Am., A18, 2430-2447, 2001.

Li, A. and Zaidi, Q. Information limitations on the perception of shape from texture. Vision Research, 41, 2927-2942, 2001.

Zaidi, Q. Is there a perceptual color space? Review of "Geometric representations of perceptual phenomena", R.D. Luce, M. D'Zmura, D. Hoffman, G.J. Iverson and A.K. Romney (eds.). Color Research and Application, 26, 325-328, 2001.

Zaidi, Q. Color constancy in a rough world. Color Research and Application, 26, S192-S200, 2001.

Shapiro, A., Beere, J. and Zaidi, Q. Stages of temporal adaptation in the RG color system. Color Research and Application, 26, S43-S47, 2001.

Zaidi, Q. and DeBonet, J.S. Motion energy versus position tracking: spatial, temporal, and chromatic parameters. Vision Research, 40, 3613-3635, 2000.

Li, A. and Zaidi, Q. The perception of 3D shape from texture is based on patterns of oriented energy. Vision Research, 40, 217-242, 2000.

Griffiths, A.F. and Zaidi, Q. Perceptual assumptions and projective distortions in a three-dimensional shape illusion. Perception, 29, 171-200, 2000.

Zaidi, Q. Color and brightness induction: From Mach bands to 3-D configurations. In Color Vision: From Genes to Perception, Gegenfurtner, K. and Sharpe, L. (eds.), Cambridge University Press, New York, 1999.

Zaidi, Q. Identification of illuminant and object colors: heuristics based algorithms. J. Opt. Soc. Am., A15, 1767-1776, 1998.

Griffiths, A.F. and Zaidi, Q. Rigid objects that appear to bend. Perception, 27, 799-802, 1998.

Zaidi, Q., Spehar, B. and DeBonet, J.S. Adaptation to textured chromatic fields. J. Opt. Soc. Am., A15, 23-32, 1998.

Zaidi, Q. Decorrelation of L and M cone signals. J. Opt. Soc. Am., A14, 3430-3431, 1997.

Spehar, B. and Zaidi, Q. Surround effects on the shape of the temporal contrast sensitivity function. J. Opt. Soc. Am., A14, 2517-2525, 1997.

Zaidi, Q., Spehar, B. and Shy, M. Induced effects of backgrounds and foregrounds in three-dimensional configurations: the role of T junctions. Perception, 26, 395-408, 1997.

Spehar, B. and Zaidi, Q. New configurational effects on perceived contrast and brightness: Second-order White's effects. Perception, 26, 409-418, 1997.

Zaidi, Q., Spehar, B. and DeBonet, J.S. Color constancy in variegated scenes: the role of low-level mechanisms in discounting illumination changes. J. Opt. Soc. Am., A14, 2608-2621, 1997.

DeBonet, J.S. and Zaidi, Q. Comparison between spatial interactions in perceived contrast and perceived brightness. Vision Research, 37, 1141-1155, 1997.

Zaidi, Q., DeBonet, J.S. and Spehar, B. Perceived grey-levels in complex configurations. Recent Progress in Color Science, Eschbach, R. and Braun, K. (eds.), Imaging Science & Technology, 97-100, (1997).

Greenstein, V., Zaidi, Q., Hood, D., DeBonet, J.S., Spehar, B., Cideciyan, A. and Jacobson, S. Enhanced S Cone Syndrome: receptoral and post-receptoral analyses. Vision Research, 36, 3711-3722, 1996. Reprinted in OSA Trends in Optics and Photonics Series Vol. 11, Noninvasive Assessment of the Visual System, Yager, D. (ed.), (Optical Society of America, Washington, DC 1997).

Spehar, B., DeBonet, J.S. and Zaidi, Q. Brightness induction from uniform and complex surrounds: a general model. Vision Research, 36, 1893-1906, 1996.

Greenstein, V., Halevy, D, Zaidi, Q. and Ritch, R. Chromatic and achromatic system deficits in open-angle glaucoma. Vision Research, 36, 621-629, 1996. Reprinted in OSA Trends in Optics and Photonics Series Vol. 11, Noninvasive Assessment of the Visual System, Yager, D. (ed.), (Optical Society of America, Washington, DC 1997).

Sachtler, W. and Zaidi, Q. Visual processing of motion boundaries. Vision Research, 35, 807-826, 1995.

Zaidi, Q. Commentary on "Schrodinger, E. (1925) Uber der Verhaltnis der Vierfarben zur Dreifarbentheorie" Color Research and Application, 19, 37-40, 1994.

Gegenfurtner, K., Kiper, D., Beusmans, J., Carandini, M., Zaidi, Q. and Movshon, J. A. Chromatic properties of neurons in macaque MT. Visual Neuroscience, 11, 455-466, 1994.

Zaidi, Q. and Shapiro, A. Adaptive orthogonalization of opponent-color signals. Biological Cybernetics, 69, 415-428, 1993.

Greenstein, V., Shapiro, A., Hood, D and Zaidi, Q. Chromatic and luminance sensitivity in diabetes and glaucoma. J. Opt. Soc. Am., A10, 1785-1791, 1993.

Sachtler, W. and Zaidi, Q. The effect of spatial configuration on motion aftereffects. J. Opt. Soc. Am., A10, 1433-1449, 1993.

Zaidi, Q. and Zipser, N. Induced contrast from radial patterns. Vision Research, 33, 1281-1286, 1993.

Zaidi, Q. and Halevy, D. Visual mechanisms that signal the direction of color changes. Vision Research, 33, 1037-1051, 1993.

Zaidi, Q. Commentary on "Maxwell, J. C. (1860) On the theory of compound colours and the relations of the colours of the spectrum" Color Research and Application, 18, 270-272, 1993.

Shapiro, A. and Zaidi, Q. The effect of prolonged temporal modulation on the differential response of color mechanisms. Vision Research, 32, 2065-2076, 1992.

Zaidi, Q., Yoshimi, B., Flanigan, N. and Canova, A. Lateral interactions within color mechanisms in simultaneous induced contrast. Vision Research, 32, 1695-1707, 1992.

Greenstein, V., Shapiro, A., Zaidi, Q. and Hood, D. Psychophysical evidence for post-receptoral sensitivity loss in diabetics. Invest. Ophthal. and Vis. Sc., 33, 2781-2790, 1992.

Sachtler, W. and Zaidi, Q. Chromatic and luminance signals in visual memory. J. Opt. Soc. Am., A9, 877-894, 1992.

Zaidi, Q., Shapiro, A. and Hood, D. The effect of adaptation on the differential sensitivity of the S-cone color system. Vision Research, 32, 1297-1318, 1992.

Zaidi, Q. Parallel and serial connections between human color mechanisms. In Applications of Parallel Processing in Vision, J. Brannan (Ed.), Elsevier, Amsterdam, 227-259, 1992.

Zaidi, Q. and Sachtler, W. Motion adaptation from surrounding stimuli. Perception, 20, 703-714, 1991.

Zaidi, Q., Yoshimi, B. and Flanigan, J. The influence of shape and perimeter-length on induced color contrast. J. Opt. Soc. Am., A8, 1810-1817, 1991.

Zaidi, Q. and Halevy, D. Chromatic mechanisms beyond linear opponency. In From Pigments to Perception: Advances in Understanding Visual Processes, A. Valberg and B. Lee (Eds.), Plenum Press, London, 337-348, 1991.

Zaidi, Q. Apparent brightness in complex displays: A reply to Moulden and Kingdom. Vision Research, 30, 1253-1255, 1990.

Zaidi, Q. Local and distal factors in visual grating induction. Vision Research, 29, 691-697, 1989.

Zaidi, Q., Pokorny, J. and Smith, V. Sources of individual differences in anomaloscope equations for tritan defects. Clinical Vision Sciences, 4, 89-94, 1989.

Zaidi, Q. and Pokorny, J. Appearance of pulsed infrared light: second harmonic generation in the eye. Applied Optics, 27, 1064-1068, 1988.

Zaidi, Q. Adaptation and color matching. Vision Research, 26, 1925-1938, 1986.

Krauskopf, J., Zaidi, Q. and Mandler, M.B. Mechanisms of simultaneous color induction. J. Opt. Soc. Am., A3, 1752-1757, 1986.

Krauskopf, J. and Zaidi, Q. Induced desensitization. Vision Research, 26, 759-762, 1986.

Smith, V., Pokorny, J. and Zaidi, Q. How do sets of color matching functions differ? In Colour Vision: Physiology and Psychophysics, J. Mollon and L.T. Sharpe (Eds.), Academic Press Ltd., London, 1983.

Pokorny, J., Smith, V., Burns S., Elsner, A. and Zaidi, Q. Modeling Blue-Yellow Opponency, Proceedings of the Fourth International Congress, AIC. M. Richter (Ed.), Berlin, 1981.

PUBLISHED CONFERENCE ABSTRACTS

Zhehao H & Zaidi Q. Motion generated scission of surface color from transparent layer. Vision Sciences Society, Annual Meeting (2019).

Maruya A & Zaidi Q. Perceived distortions of 3D shapes are based on misestimates of viewpoint applied to correct mental geometry. Vision Sciences Society, Annual Meeting (2019).

Zhehao H & Zaidi Q. Color transparency from motions of backgrounds and overlays. ModVis Annual Meeting (2019).

Maruya A & Zaidi Q. Mental geometry for estimating relative 3D size. ModVis Annual Meeting (2019).

Pons C, R. Mazade, J. Jin, M. Dul, Q. Zaidi, M. Alonso (2018). Visual dominance for darks increases in amblyopia. Society for Neuroscience.

Zaidi, Qasim, Romain Bachy Color scission versus spatial integration for real objects and illuminations, European Conference on Visual Perception, Trieste, IT, Aug 2018.

Qasim Zaidi, Erin Koch, Famya Baig, "Perspective Geometry Explains Perceived 3D Object Poses in Real Scenes and Pictures." Visual Science of Art, Trieste, IT, Aug 2018.

Pons C, R. Mazade, J. Jin, M. Dul, Q. Zaidi, M. Alonso (2018). Visual dominance for darks increases in amblyopia. Vision Science Society.

Bachy R, Alonso JM & Zaidi Q. "Brightness Perception involves Local Adaptation opposed by Lateral Interaction." ModVis Annual Meeting (2018).

Koch, Erin M., Famya Baig, and Qasim Zaidi. "Perspective Geometry Explains Perceived 3D Object Poses in Real Scenes and Pictures." ModVis Annual Meeting (2018).

Koch E, Jin J, Alonso, J.-M., Zaidi, Q. Linear relation between spatial resolution and orientation in primary visual cortex. Society for Neuroscience, Annual Meeting 2017.

Koch E, Jin J, Alonso, J.-M., Zaidi, Q. Facilitation of pattern and contour selectivity by excitatory intra-cortical circuits. COSYNE Annual Meeting 2017.

R. Bachy, J.M. Alonso and Q. Zaidi, Powerful visual illusion of light/dark perception in human faces, Society for Neuroscience, Annual Meeting 2016.

C. Pons, R. Mazade, J. Jin, M. Dul, Q. Zaidi, M. Alonso (2016). Visual dominance for darks increases with low light and optical blur. Society for Neuroscience.

C. Pons, R. Mazade, J. Jin, M. Dul, Q. Zaidi, M. Alonso (2016). Visual dominance for darks increases with low light and optical blur. European Conference on Visual Perception.

Huang Z, Zaidi, Q. Sequential attraction in color perception. Vision Sciences Society, Annual Meeting 2016.

Koch E, Jin J, Alonso, J.-M., Zaidi, Q. Functional implications of orientation maps in visual cortex. Vision Sciences Society, Annual Meeting 2016.

Koch E, Jin J, Alonso, J.-M., Zaidi, Q. Modeling Response Properties Across the Orientation Map in Visual Cortex. ModVis Annual Meeting 2016.

Wool L, Dacey D, Zaidi, Q. Selective wiring is not needed for color opponency in midget ganglion cells. . Association for Research in Vision and Ophthalmology, Annual Meeting 2016.

Jansen, M, Li, X, Lashgari ,R, Kremkow, J, Bereshpolova, Y, Swadlow, H, Zaidi, Q, Alonso, J.-M. Changes in the balance of ON and OFF cortical responses with the spatial-frequency content of the visual scene. Society for Neuroscience, Annual Meeting 2015.

Koch E, Jin J, Jansen, M, Pons C, Alonso, J.-M., Zaidi, Q. Cortical topography and cross-orientation interactions in visual cortex. Society for Neuroscience, Annual Meeting 2015.

Khachatryan A, Fung P, Le'Pre C, Bachy R, Zaidi Q, Xiao Y. Neural locus of simultaneous color contrast. Society for Neuroscience, Annual Meeting 2015.

Bachy R, Zaidi, Q. Effects of lateral interactions and adaptation on color and brightness induction. European Conference on Visual Perception, Liverpool, UK, Aug 2015.

Giesel M, Bartov V, Zaidi, Q. Modeling drawings of shape. European Conference on Visual Perception, Liverpool, UK, Aug 2015.

Zaidi Q, Bachy R. Effects of lateral interactions and adaptation on color and brightness induction. International Colour Vision Society, Annual Meeting, July 2015.

Froyen V, Zaidi Q, Formal aspects of non-rigid-shape-from-motion perception. Computational and Mathematical Models in Vision, Annual Meeting 2015.

Koch E, Jin J, Wang Y, Kremkow J, Alonso J-M, Zaidi Q. Cross-orientation suppression and the topography of orientation preferences. Vision Sciences Society, Annual Meeting 2015.

Sawada T, Zaidi Q. Role of 3D rotational symmetry in visual perception. Vision Sciences Society, Annual Meeting 2015.

Bartov J, Giesel M, Zaidi Q. Exploring the veridicality of shape-from-shading for real 3D objects. Vision Sciences Society, Annual Meeting 2015.

Bachy B, Zaidi Q. Asymmetries and spatial gradients in color and brightness induction. Vision Sciences Society, Annual Meeting 2015.

Choi H, Khachatryan A, Smith C, Kaplan E, Zaidi Q, Xiao Y. Neural circuitry of brightness induction: modeling and physiology. Vision Sciences Society, Annual Meeting 2015.

Jansen, M, Li, X, Lashgari ,R, Kremkow, J, Bereshpolova, Y, Swadlow, H, Zaidi, Q, Alonso, J.-M. Signatures of Magnocellular and Parvocellular inputs to cortical LFP. Society for Neuroscience, Annual Meeting 2014.

Giesel M, Zaidi Q. Rapid sensing of material affordances. First Workshop on Affordances: Affordances in Vision for Cognitive Robotics (in conjunction with RSS 2014).

Zaidi, Q, Ennis, R., Cao, D. and Lee, B. Eye-movements and the neural basis of context effects on temporal sensitivity. Vision Sciences Society, Annual Meeting 2014.

Jain, A and Zaidi, Q. Insights into the perception of 3-D deforming shapes and shape deformations from comparisons of foveal to peripheral performance. Vision Sciences Society, Annual Meeting 2014.

Zaidi, Q and Conway, B. Color decoding by primate IT neurons: Identification and discrimination. Computational and Mathematical Models in Vision, Annual Meeting 2014.

Komban S. J, Jin, J, Wang, Y, Lashgari, R, Kremkow J, Zaidi, Q, Alonso J.-M. Cross-orientation interactions between ON and OFF pathways. Society for Neuroscience, Annual Meeting 2013.

Wool, L, Komban, S, Jansen, M, Li, X, Kremkow, J, Bereshpolova, Y, Swadlow, H, Alonso, J.-M and Zaidi, Q. Electrophysiological correlates of color salience. Society for Neuroscience, Annual Meeting 2013.

Jansen, M, Li, X, Lashgari ,R, Kremkow, J, Bereshpolova, Y, Swadlow, H, Zaidi, Q, Alonso, J.-M. Spatial tuning for color and luminance in awake area V1. Society for Neuroscience, Annual Meeting 2013.

Bachy, R. and Zaidi, Q. Factors governing the speed of adaptation in central versus peripheral vision. International Colour Vision Society, Annual Meeting, July 2013.

Wool, L, Komban, S, Alonso, J-M. and Zaidi, Q. Salience of unique and other colors. International Colour Vision Society, Annual Meeting, July 2013.

Komban SK, Jin J, Wang Y, Lashgari R, Kremkow J, Alonso JM, Zaidi Q. Perceptual consequences of temporal differences in ON and OFF channels. Vision Sciences Society, Annual Meeting 2013.

Jain A, Doerschner K, Zaidi Q. Identification of Nonrigid 3D Shapes from Motion Cues in Fovea and Periphery. Vision Sciences Society, Annual Meeting 2013.

Giesel M, Zaidi Q. Constituents of material property perception. Vision Sciences Society, Annual Meeting 2013.

Ennis R, Zaidi Q. Perceptual color space is affine. Vision Sciences Society, Annual Meeting 2012. Zaidi, Q and Cohen, E. Parallel model for the salience of mirror symmetry in natural patterns. Computational and Mathematical Models in Vision, Annual Meeting 2013.

Radner S, Ennis R, Lee B, Dul M, Zaidi Q. Adaptation abnormalities in Primary Open-Angle Glaucoma. Association for Research in Vision and Ophthalmology, Annual Meeting 2013.

Zhao L, Dul M, Alonso J, Komban S, Zaidi Q. Darks are detected faster and more accurately than lights in normal subjects and patients with moderate glaucoma. Association for Research in Vision and Ophthalmology, Annual Meeting 2013.

Wool, L, Komban, S and Zaidi, Q. Salience of unique and other colors. . Society for Neuroscience, Annual Meeting 2012.

Ennis, R and Zaidi, Q. Geometrical investigations of perceptual color space. Society for Neuroscience, Annual Meeting 2012.

Jansen, M, Li, X, Lashgari ,R, Kremkow, J, Bereshpolova, Y, Swadlow, H, Zaidi, Q, Alonso, J.-M. Chromatic spatial frequency tuning of local field potentials in awake area V1. Society for Neuroscience, Annual Meeting 2012.

Komban S. J, Jin, J, Wang, Y, Lashgari, R, Kremkow J, Zaidi, Q, Alonso J.-M. Temporal dynamics of responses to dark and light stimuli in visual cortex. Society for Neuroscience, Annual Meeting 2012.

Kremkow J, Komban S. J, Jin, J, Wang, Y, Lashgari, R, Zaidi, Q, Alonso J.-M. Different spatial frequency tuning for dark and light stimuli in visual cortex. Society for Neuroscience, Annual Meeting 2012.

Zaidi, Q and Giesel M. Inferences of material properties based on frequency-band analyses. European Conference on Visual Perception, Alghero, Sardinia, Sept 2012.

Zaidi, Q and Cohen, E. Modeling perceptual variations by neural decoding. Computational and Mathematical Models in Vision, Annual Meeting 2012.

Jain, A and Zaidi, Q. A Bayesian Model for Disparity Driven Object Motion. Computational and Mathematical Models in Vision, Annual Meeting 2012.

Jain, A and Zaidi, Q. Efficiency of object motion extraction using disparity signals. Vision Sciences Society, Annual Meeting 2012.

Giesel M and Zaidi Q. Adaptation reveals frequency band based inferences of material properties. Vision Sciences Society, Annual Meeting 2012.

Papathomas T, Ash J, Hughes J, Keane B, Zaidi Q. Familiarity dominates shape-from-motion signals in the concave-to-convex 3D illusion. Vision Sciences Society, Annual Meeting 2012.

Zaidi, Q., Ennis, R., Cao, D., Lee, B. Early neural locus for color after-images. European Conference on Visual Perception, Toulouse, France, Sept 2011.

Jain, A and Zaidi, Q. Perception of 3-D waves. European Conference on Visual Perception, Toulouse, France, Sept 2011.

Zaidi, Q., Ennis, R., Cao, D., Lee, B. Early neural locus for color after-images. International Color Vision Society, Annual Meeting, Kongsberg, Norway, July 2011.

Zaidi, Q. and Jain, A. Classifying Dynamic 3-D Shape Deformations from Motion Cues. Vision Sciences Society, Annual Meeting 2011.

Giesel M and Zaidi Q. Visual perception of material affordances. Vision Sciences Society, Annual Meeting 2011.

Ennis R , Lee, B. and Zaidi Q. Physiological signature of time-varying color after-images. Vision Sciences Society, Annual Meeting 2011.

Jansen M and Zaidi Q. Detecting animals in natural surroundings: The role of color distributions. Vision Sciences Society, Annual Meeting 2011.

Papathomas T, Ash J, Hughes J, Keane B, Zaidi Q. Face priors overcome shape-from-motion signals in the rotating hollow face illusion. Vision Sciences Society, Annual Meeting 2011.

Zaidi, Q and Jain, A. Perception of non-rigid 3-D shapes from motion cues. European Conference on Visual Perception, Lausanne, Switzerland, 2010.

Jain, A and Zaidi, Q. Veridical perception of non-rigid 3-D shapes from motion cues. Vision Sciences Society, Annual Meeting 2010.

Meng, X. and Zaidi, Q. Haptic learning disambiguates but does not override texture cues to 3-D shape. Vision Sciences Society, Annual Meeting 2010.

Yoonessi, A. and Zaidi, Q. Roles of color and 3-D information in recognizing material changes. Vision Sciences Society, Annual Meeting 2010.

Komban, S.J., Alonso, J.M. and Zaidi, Q. ON/OFF channel asymmetry or consequences of a Luminance nonlinearity. Vision Sciences Society, Annual Meeting 2010.

Ennis, R., and Zaidi, Q. Cortical aftereffects of time-varying stimuli. Vision Sciences Society, Annual Meeting 2010.

Zaidi, Q., and Yoonessi, A. Cortical color processing: costs and benefits of expanding neural dimensionality. Society for Neuroscience, Annual Meeting 2009.

Ennis, R., Lee, B. and Zaidi, Q. The effects of eye movements on contrast detection. Society for Neuroscience, Annual Meeting 2009.

Komban, S.J., Alonso, J.M. and Zaidi, Q. ON and OFF visual channels: Differences in spatial resolution and contrast sensitivity. Society for Neuroscience, Annual Meeting 2009.

Zaidi, Q., Cohen, S. and Jain, A. Shape-driven motion perception: human performance is optimally efficient. European Conference on Visual Perception, 2009.

Zaidi, Q. Costs and benefits of higher-order color mechanisms. International Color Vision Society, Annual Meeting, Braga, Portugal, July 2009.

Lee, R.J., Mollon, J.D., Zaidi, Q. & Smithson, H.E. Adaptation of higher order colour mechanisms. International Color Vision Society, Annual Meeting, Braga, Portugal, July 2009.

Lee, R. J., Mollon, J. D., Zaidi, Q., & Smithson, H. E. Temporal characteristics of the short-wavelength-sensitive cones and their associated pathways. International Color Vision Society, Annual Meeting, Braga, Portugal, July 2009.

Cohen, E. and Zaidi, Q. Motion perception driven by inferred shape properties. Vision Sciences Society, Annual Meeting 2008.

Wong, C. and Zaidi, Q. Matched Filters for 3-D Shape from Kernel-Based Image Analysis. Vision Sciences Society, Annual Meeting 2008.

Zaidi, Q., Purpura, K.P., Mechler, F., Schmid, A., Ohiorhenuam, I., Hu, Q. and Victor, J.D. Roles of V1 & V2 in decoding 3-D shape from texture. Vision Sciences Society, Annual Meeting 2008.

Meng, X. and Zaidi, Q. Interactions between eye-movements and prior assumptions for 3-D shape from motion. Vision Sciences Society, Annual Meeting 2008.

Li, A., and Zaidi, Q. Unmasking of orientation flows in 3-D shape perception. Vision Sciences Society, Annual Meeting 2008.

Purpura, K.P., Mechler, F., Schmid, A., Ohiorhenuam, I., Hu, Q., Victor, J.D. and Zaidi, Q. Monocular correlates of 3D shape reduce suppression in V1 and V2 of Macaques. Society for Neuroscience, Annual Meeting 2007.

Zaidi, Q. and Cohen, E. From cortical anisotropy to failures of 3-D shape constancy. European Conference on Visual Perception, 2007.

Lee, R., Mollon. J., Zaidi, Q., Smithson, H. Adaptation of central colour channels. European Conference on Visual Perception, 2007.

de Almeida, VMN, Fiadeiro, PT, Teixeira, M, Nascimento, SMC and Zaidi, Q. Color constancy of real 3-D objects and the roles of spatial and temporal mechanisms. International Color Vision Society, Annual Meeting, Belem, Brazil, July 2007.

Lee, R., Mollon. J., Zaidi, Q., Smithson, H. The special status of the cardinal axes. International Color Vision Society, Annual Meeting, Belem, Brazil, July 2007.

Zaidi, Q. and Bostic, M. Color based identification of real 3-D objects. International Color Vision Society, Annual Meeting, Belem, Brazil, July 2007.

Li, A., and Zaidi, Q. 3-D curvature aftereffects invariant to texture pattern. Vision Sciences Society, Annual Meeting 2007.

Meng, X. and Zaidi, Q. Feature correspondence versus motion energy in 3-D shape perception. Vision Sciences Society, Annual Meeting 2007.

Cohen, E. and Zaidi, Q. Salience of mirror symmetry in natural patterns. Vision Sciences Society, Annual Meeting 2007.

Zaidi, Q., Robilotto, R. and Khang, B-G. Psychophysics based models for properties of translucent objects. CIE Expert Symposium on Visual Appearance, Paris, 2006.

Zaidi, Q. and Meng, X. Activation of competing perceptual assumptions for 3-D shape. European Conference on Visual Perception, 2006, p182.

Meng, X. and Zaidi, Q. Perceived velocity gradients and the rigidity of 3-D shapes. Vision Sciences Society, Annual Meeting 2006.

Bostic, M., Robilotto, R. and Zaidi, Q. Reflectance identification of real colored objects across illuminants. Vision Sciences Society, Annual Meeting 2006.

Li, A., Tzen, B., Yagdarova, A. and Zaidi, Q. 3-D curvature aftereffects from illusory orientation flows. Vision Sciences Society, Annual Meeting 2006.

Sun, H., Smithson, H., Lee, B.B. and Zaidi, Q. Do the MC and PC pathways deliberately avoid Scone input? International Color Vision Society 2005, Annual Meeting, Lyon, France.

Zaidi, Q. and Robilotto, R. Reflectance identification of patterned 3-D real objects. AIC - Congress of the International Colour Association 2005, Granada, Spain.

Robilotto, R. and Zaidi, Q. Perceptual strategies for the identification of patterned 3-D real objects across illuminants. Association for Research in Vision and Ophthalmology, Annual Meeting 2004.

Smithson, H., Bourke, A., Zaidi, Q., Mollon, J., & Stockman, A., Three ways to find a tritan line OSA Fall Vision Meeting, Rochester, 2004.

Zaidi, Q. and Robilotto, R. Material identification for patterned 3-D objects. Vision Sciences Society, Annual Meeting 2004, p61.

Li, A. and Zaidi, Q. 3-D shape from chromatic orientation flows. Vision Sciences Society, Annual Meeting 2004, p147.

Sun, H., Smithson, H., Lee, B.B. and Zaidi, Q. A new technique for measuring cone inputs to visual neurons. Association for Research in Vision and Ophthalmology, Annual Meeting 2004.

Li, A. & Zaidi, Q. (2004) Perception of 3-D shape from homogeneous and non-homogeneous surface textures. Human Vision and Electronic Imaging Conference (SPIE), San Jose, CA, 2004.

Smithson, H. and Zaidi, Q. Effects of temporal and spatial context on color appearance. OSA Fall Vision Meeting, Tucson, 2003.

Sun, H., Smithson, H., Lee, B.B. and Zaidi, Q. A new technique for measuring cone inputs to visual neurons. OSA Fall Vision Meeting, Tucson, 2003.

Zaidi, Q. and Li, A. Perception and misperception of carved and developable textured surfaces. European Conference on Visual Perception, 2003 (Perception, 32 (Sup), 12, 2003).

Li, A. and Zaidi, Q. Perception of 3-D carved surfaces from monocular texture cues. Vision Sciences Society, Annual Meeting 2003, p229.

Griffiths, A. F. and Zaidi, Q. Misperception of symmetries in partionable shapes. Vision Sciences Society, Annual Meeting 2003, p231.

Zaidi, Q. and Li, A. Separable contributions of non-conflicting texture and motion cues to the perception of 3-D shape. OSA Fall Vision Meeting, San Francisco, 2002.

Zaidi, Q. and Li, A. Conditions where motion parallax supplements shape-from-texture. European Conference on Visual Perception, 2002 (Perception, 31 (Sup), 62, 2002).

Li, A. and Zaidi, Q. Isotropic textures signal distance not 3-D shape. Vision Sciences Society, Annual Meeting 2002, p44.

Tsujimura, S. and Zaidi, Q. Is induced motion due to position illusions? Vision Sciences Society, Annual Meeting 2002, p133.

Griffiths, A. F. and Zaidi, Q. Perceptual asymmetry in solid shape perception. Vision Sciences Society, Annual Meeting 2002, p110.

Khang, B. and Zaidi, Q. Illuminant color perception of spectrally filtered spotlights. Vision Sciences Society, Annual Meeting 2002, p56.

Smithson, H. and Zaidi, Q. Partitions of object colour space under illuminant and background changes. Vision Sciences Society, Annual Meeting 2002, p54.

Robilotto, R. and Zaidi, Q. Perceived transparency across dissimilar backgrounds. Vision Sciences Society, Annual Meeting 2002, p129.

Clifford, C.W.G., Spehar, B., Solomon, S.G., Martin, P. R. and Zaidi, Q. Colour-luminance interactions in human orientation perception. Vision Sciences Society, Annual Meeting 2002, p78.

Baldwin, L.A., Shapiro, A.G., and Zaidi, Q. Time course of L-M system adaptation to simple and complex fields. Vision Sciences Society, Annual Meeting 2002, p54.

Zaidi, Q. and Khang, B. Color constancy for transparencies and materials. European Conference on Visual Perception, 2001 (Perception, 30 (Sup), 8, 2001).

Li, A. and Zaidi, Q. A new observer model for shape from texture. European Conference on Visual Perception, 2001 (Perception, 30 (Sup), 8, 2001).

Li, A. and Zaidi, Q. Phase spectra are irrelevant in 3D shape from natural textures. Vision Sciences Society, Annual Meeting 2001, p44.

Tsujimura, S. and Zaidi, Q. Higher sensitivity for relative motion is due to position tracking. Vision Sciences Society, Annual Meeting 2001, p28.

Griffiths, A. F. and Zaidi, Q. Looking through Ames' window. Vision Sciences Society, Annual Meeting 2001, p45.

Khang, B. and Zaidi, Q. Shifts in inferred colors of transparent layers. Vision Sciences Society, Annual Meeting 2001, p119.

Robilotto, R., Khang, B. and Zaidi, Q. Perceived transparency: trade-offs between reflectance and transmittance. Vision Sciences Society, Annual Meeting 2001, p119.

Spehar, B. and Zaidi, Q. Chromatic and brightness crispening. European Conference on Visual Perception, 2000. (Perception, 29 (Sup), 15, 2000).

Zaidi, Q. and Li, A. Neural model of shape from texture: developable surfaces. Association for Research in Vision and Ophthalmology, Annual Meeting 2000. (Inv. Ophth. & Vis. Sc., 41, S219, 2000).

Li, A. and Zaidi, Q. Roles of frequency and orientation modulation in shape from texture. Association for Research in Vision and Ophthalmology, Annual Meeting 2000. (Inv. Ophth. & Vis. Sc., 41, S317, 2000).

Griffiths, A. F. and Zaidi, Q. Perceived shapes and poses of iso-perspectival solids. Association for Research in Vision and Ophthalmology, Annual Meeting 2000. (Inv. Ophth. & Vis. Sc., 41, S722, 2000).

Khang, B. and Zaidi, Q. Tests of color scission by identification of transparent overlays. Association for Research in Vision and Ophthalmology, Annual Meeting 2000. (Inv. Ophth. & Vis. Sc., 41, S239, 2000).

Robilotto, R. and Zaidi, Q. Performance based lightness constancy: crumpled 3D objects. Association for Research in Vision and Ophthalmology, Annual Meeting 2000. (Inv. Ophth. & Vis. Sc., 41, S227, 2000).

Shapiro, A., Beere, J. and Zaidi, Q. Time course of higher-order adaptation in the S-(L+M) color system. Association for Research in Vision and Ophthalmology, Annual Meeting 2000. (Inv. Ophth. & Vis. Sc., 41, S809, 2000).

Spehar, B and Zaidi, Q. Contrast sensitivity in uniform and complex surrounds. Symposium on long range interactions. Optical Society of America, Annual Meeting 1999 (Conference Program, 62).

Li, A. and Zaidi, Q. Which natural textures convey shape? European Conference on Visual Perception, 1999 (Perception, 28 (Sup), 14, 1999).

Shapiro, A., Beere, J. and Zaidi, Q. Temporal properties of adaptation stages in the S-(L+M) color system. International Color Vision Society, XVth Symposium, July 1999. (ICVS, XVth Symposium Abstracts, P15, 1999).

Zaidi, Q. Color representation by cortical neurons. Association for Research in Vision and Ophthalmology, Annual Meeting 1999. (Inv. Ophth. & Vis. Sc., 40, S177, 1999).

- Li, A. and Zaidi, Q. Shape from natural textures. Association for Research in Vision and Ophthalmology, Annual Meeting 1999. (Inv. Ophth. & Vis. Sc., 40, S398, 1999).
- Morikawa, K. and Zaidi, Q. Minimum velocity limits for motion energy detection. Association for Research in Vision and Ophthalmology, Annual Meeting 1999. (Inv. Ophth. & Vis. Sc., 40, S191, 1999).
- Li, Andrea and Zaidi, Q. Oriented flows used in extracting shape from texture. Optical Society of America, Annual Meeting 1998 (OPN Optics & Photopic News, 9 (Special Issue), 92, 1998).
- Zaidi, Q. A fresh look at color constancy: heuristics based algorithms. European Conference on Visual Perception, 1998 (Perception, 27 (Sup), 42, 1998).
- Li, Andrea and Zaidi, Q. Oriented energy analysis of shape from texture. European Conference on Visual Perception, 1998 (Perception, 27 (Sup), 40, 1998).
- Griffiths, A.F. and Zaidi, Q. Perceptual assumptions and projective distortions in a three-dimensional shape illusion. European Conference on Visual Perception, 1998 (Perception, 27 (Sup), 112, 1998).
- Zaidi, Q. Color constancy in a rough world. Association for Research in Vision and Ophthalmology, Annual Meeting 1998. (Inv. Ophth. & Vis. Sc., 39, S444, 1998).
- Li, Andrea and Zaidi, Q. Shape from one- and two-dimensional textures. Association for Research in Vision and Ophthalmology, Annual Meeting 1998. (Inv. Ophth. & Vis. Sc., 39, S852, 1998).
- Griffiths, A.F. and Zaidi, Q. A model for three-dimensional shape and tilt perception. Association for Research in Vision and Ophthalmology, Annual Meeting 1998. (Inv. Ophth. & Vis. Sc., 39, S854, 1998).
- Zaidi, Q. Simultaneous estimation of illuminant and object colors. Association for Research in Vision and Ophthalmology, Annual Meeting 1997. (Inv. Ophth. & Vis. Sc., 38, S476, 1997).
- Li, Andrea and Zaidi, Q. Image enhancement of colored images. Association for Research in Vision and Ophthalmology, Annual Meeting 1997. (Inv. Ophth. & Vis. Sc., 38, S254, 1997).
- Griffiths, A.F. and Zaidi, Q. Three-dimensional illusions: projections and priors. Association for Research in Vision and Ophthalmology, Annual Meeting 1997. (Inv. Ophth. & Vis. Sc., 38, S1001, 1997).
- Zaidi, Q., Spehar, B. and DeBonet, J.S. Adaptation to variegated scenes and color constancy. European Conference on Visual Perception, 1996. (Perception, 25 (Sup), 27, 1996).
- Zaidi, Q., Spehar, B. and DeBonet, J.S. Chromatic adaptation to variegated fields. Association for Research in Vision and Ophthalmology, Annual Meeting 1996. (Inv. Ophth. & Vis. Sc., 37, 4, 1996).
- DeBonet, J.S. and Zaidi, Q. Induced contrast and brightness in dynamic random noise. Association for Research in Vision and Ophthalmology, Annual Meeting 1996. (Inv. Ophth. & Vis. Sc., 37, S1072, 1996).
- Spehar, B. and Zaidi, Q. Effects of simple and complex surrounds on temporal contrast sensitivity. Association for Research in Vision and Ophthalmology, Annual Meeting 1996. (Inv. Ophth. & Vis. Sc., 37, S521, 1996).

Zaidi, Q., DeBonet, J.S. and Spehar, B. Detection of illumination changes in variegated scenes. European Conference on Visual Perception, 1995. (Perception, 24 (Sup), 12, 1995).

DeBonet, J.S. and Zaidi, Q. Temporal and spatial frequency analysis of motion-energy and feature-tracking. European Conference on Visual Perception, 1995. (Perception, 24 (Sup), 101, 1995).

Spehar, B., DeBonet, J.S. and Zaidi, Q. Spatial summation of brightness induction. European Conference on Visual Perception, 1995. (Perception, 24, (Sup), 37, 1995).

Zaidi, Q., DeBonet, J.S. and Spehar, B. Perceived grey-levels in complex configurations. Third Annual IS&T/SID Color Imaging Conference, 1995 (Proceedings of the Third Annual IS&T/SID Color Imaging Conference, 14-17, 1995).

Zaidi, Q., DeBonet, J.S. and Spehar, B. Detection of illumination changes in variegated scenes. Association for Research in Vision and Ophthalmology, Annual Meeting 1995. (Inv. Ophth. & Vis. Sc., 36, 2928, 1995).

DeBonet, J.S. and Zaidi, Q. Temporal and spatial frequency analysis of motion-energy and feature-tracking. Association for Research in Vision and Ophthalmology, Annual Meeting 1995. (Inv. Ophth. & Vis. Sc., 36, 253, 1995).

Spehar, B., DeBonet, J.S. and Zaidi, Q. Spatial summation of brightness induction. Association for Research in Vision and Ophthalmology, Annual Meeting 1995. (Inv. Ophth. & Vis. Sc., 36, 2157, 1995).

Greenstein, V., Hood, D., Zaidi, Q., Spehar, B., DeBonet, J.S., Cideciyan, A. and Jacobson, S. Enhanced S cone syndrome: evidence for relatively more S than L and M cones. Association for Research in Vision and Ophthalmology, Annual Meeting 1995. (Inv. Ophth. & Vis. Sc., 36, 2054, 1995).

Zaidi, Q., DeBonet, J.S. and Spehar, B. Perceived grey-levels in complex configurations. Inter Society Color Council, Annual Meeting 1995. (ISCC 64th Annual Meeting, 39-42, 1995).

Zaidi, Q. and DeBonet, J.S. Contribution of chromatic signals to motion-energy and feature-tracking. Optical Society of America, Annual Meeting 1994, (Optics and Photonic News, 5 (suppl), 99, 1994).

Sachtler, W.L., Han, J. and Zaidi, Q. Adaptation to motion boundaries. Optical Society of America, Annual Meeting 1994, (Optics and Photonic News, 5 (suppl), 99, 1994).

Zaidi, Q. and Sachtler, W.L. Visual processing of motion boundaries. Association for Research in Vision and Ophthalmology, Annual Meeting 1994. (Inv. Ophth. & Vis. Sc., 35, 2076, 1994).

DeBonet, J.S. and Zaidi, Q. Weighted spatial integration of induced contrast-contrast. Association for Research in Vision and Ophthalmology, Annual Meeting 1994. (Inv. Ophth. & Vis. Sc., 35, 1667, 1994).

Zaidi, Q. Contrast sensitivity for input distributions. Optical Society of America, Annual Meeting 1993. (Opt. Soc. Am. Tech. Digest Series, 16, 268, 1993).

Sachtler, W. and Zaidi, Q. Visual processing of simple and multiple motion. Optical Society of America, Annual Meeting 1993. (Opt. Soc. Am. Tech. Digest Series, 16, 273, 1993).

Zaidi, Q. Adaptation processes governed by the distribution of inputs. European Conference on Visual Perception, 1993. (Perception, 22, (Sup), 62, 1993).

Zaidi, Q. and Shapiro, A. Functional models of adaptation to color modulation. Association for Research in Vision and Ophthalmology, Annual Meeting 1993. (Inv. Ophth. & Vis. Sc., 34, 744, 1993).

Zipser, N. and Zaidi, Q. Temporal properties of brightness induction. Association for Research in Vision and Ophthalmology, Annual Meeting 1993. (Inv. Ophth. & Vis. Sc., 34, 765, 1993).

Greenstein, V., Halevy, D., Ritch, R. and Zaidi, Q. Opponent and achromatic system deficits in pigmentary vs. juvenile open-angle glaucoma. Association for Research in Vision and Ophthalmology, Annual Meeting 1993. (Inv. Ophth. & Vis. Sc., 34, 1267, 1993).

Sachtler, W. and Zaidi, Q. Measurements and models of the motion after-effect. Optical Society of America, Annual Meeting 1992. (Opt. Soc. Am. Tech. Digest Series, 23, 216, 1992).

Shapiro, A. and Zaidi, Q. Prolonged temporal modulation and the interaction between color mechanisms. Optical Society of America, Annual Meeting 1992. (Opt. Soc. Am. Tech. Digest Series, 23, 51, 1992).

Zaidi, Q and Shapiro, A. Adaptive decorrelation between opponent-color mechanisms. European Conference on Visual Perception, 1992. (Perception, 21 (Sup), 62, 1992).

Greenstein, V., Ritch, R., Shapiro, A., Zaidi, Q. and Hood, D. The effects of glaucoma on cone pathways. Association for Research in Vision and Ophthalmology, Annual Meeting 1992. (Inv. Ophth. & Vis. Sc., 33, 1383, 1992)

Zaidi, Q. and Shapiro, A. Combination of signals from opponent color mechanisms. Advances in Color Vision, Optical Society of America, Topical Meeting 1992. (Advances in Color Vision Technical Digest, Vol 4, 201-203, 1992)

Movshon, J. A., Kiper, D., Beusmans, J., Gegenfurtner, K., Zaidi, Q., Carandini, M. Chromatic properties of neurons in macaque MT. Society for Neuroscience, Annual Meeting 1991. (Soc. Neurosci. Abstr., Vol 17, Part 1, 524, 1991)

Zaidi, Q. and Halevy, D. Mechanisms that signal color changes-II. Association for Research in Vision and Ophthalmology, Annual Meeting 1991. (Inv. Ophth. & Vis. Sc., 32, 1214, 1991)

Sachtler, W. L. and Zaidi, Q. Efficiency of chromatic and luminance signals in temporal discrimination. Association for Research in Vision and Ophthalmology, Annual Meeting 1991. (Inv. Ophth. & Vis. Sc., 32, 1213, 1991)

Shapiro, A., and Zaidi, Q. The effects of prolonged temporal modulation on the response of color mechanisms. Association for Research in Vision and Ophthalmology, Annual Meeting 1991. (Inv. Ophth. & Vis. Sc., 32, 842, 1991)

Greenstein, V., Shapiro, A., Carr, R., Harooni, M., Hood, D., Ritch, R., and Zaidi, Q. Chromatic and achromatic threshold changes associated with ocular disorders. Association for Research in Vision and Ophthalmology, Annual Meeting 1991. (Inv. Ophth. & Vis. Sc., 32, 1231, 1991)

Zaidi, Q., Yoshimi, B. and Flanigan, N. Tests of spatial additivity for induced color contrast. Optical Society of America, Annual Meeting, 1990. (Opt. Soc. Am. Tech. Digest Series, 15, 206, 1990).

- Zaidi, Q. and Halevy, D. Mechanisms that signal color changes. Association for Research in Vision and Ophthalmology, Annual Meeting 1990. (Inv. Ophth. & Vis. Sc., 31, 110, 1990)
- Shapiro, A., Zaidi, Q., and Hood, D. Adaptation in the red-green (L-M) color system.
- Association for Research in Vision and Ophthalmology, Annual Meeting 1990. (Inv. Ophth. & Vis. Sc., 31, 262, 1990)
- Yoshimi, B., and Zaidi, Q. The effect of shape, perimeter and area on induced color contrast. Association for Research in Vision and Ophthalmology, Annual Meeting 1990. (Inv. Ophth. & Vis. Sc., 31, 264, 1990)
- Greenstein, V., Thomas, S., Shapiro, A., Zaidi, Q., and Hood, D. A comparison of techniques for measuring S cone sensitivity in diabetics. Association for Research in Vision and Ophthalmology, Annual Meeting 1990. (Inv. Ophth. & Vis. Sc., 31, 423, 1990)
- Sachtler, W. L. and Zaidi, Q. Motion detection and the role of motion boundaries. Association for Research in Vision and Ophthalmology, Annual Meeting 1990. (Inv. Ophth. & Vis. Sc., 31, 521, 1990)
- Zaidi, Q., Hood, D. and Shapiro, A. The time course of sensitivity change in S-cone color mechanisms. Association for Research in Vision and Ophthalmology, Annual Meeting, 1989. (Inv. Ophth. & Vis. Sc., 30, 221, 1989).
- Zaidi, Q. and Hood, D. Sensitivity changes in color mechanisms. Optical Society of America, Annual Meeting, 1988. (Opt. Soc. Am. Technical Digest Series Vol. 11, 67, 1988).
- Zaidi, Q. and Skorupski, A. Spatial weighting function for induced color contrast. Optical Society of America, Annual Meeting, 1988. (Opt. Soc. Am. Technical Digest Series Vol. 11, 104, 1988).
- Zaidi, Q. and Hood, D. Sites of instantaneous nonlinearities in the visual system. Association for Research in Vision and Ophthalmology, Annual Meeting, 1988. (Inv. Ophth. & Vis. Sc., 29, 163, 1988).
- Zaidi, Q. Nonlinear color mechanisms: a new model and a new method. Optical Society of America, Annual Meeting, 1987. (J. Opt. Soc. Am. A 4(13), 107, 1987).
- Zaidi, Q. Does shape affect color induction? Optical Society of America, Annual Meeting, 1987. (J. Opt. Soc. Am. A 4(13), 52, 1987).
- Zaidi, Q. & Krauskopf, J. Spatial interactions in color induction. Association for Research in Vision and Ophthalmology, Annual Meeting, 1987. (Inv. Ophth. & Vis. Sc., 28, 214, 1987).
- Zaidi, Q. and Krauskopf, J. Color induction in cardinal and intermediate directions. Association for Research in Vision and Ophthalmology, Annual Meeting, 1986. (Inv. Ophth. & Vis. Sc., 27, 73, 1986).
- Krauskopf, J. and Zaidi, Q. Spatial factors in color induction. Association for Research in Vision and Ophthalmology, Annual Meeting, 1986. (Inv. Ophth. & Vis. Sc., 27, 291, 1986).
- Krauskopf, J. and Zaidi, Q. New measurements of color induction. European Conference on Visual Perception, 1986. (Perception, 15, A28, 1986).
- Zaidi, Q. Color Contrast. Eleventh Annual Interdisciplinary Conference, Whistler, BC, 1986.

Krauskopf, J. and Zaidi, Q. Spatial factors in desensitization along cardinal directions of color space. Association for Research in Vision and Ophthalmology, Annual Meeting, 1985. (Inv. Ophth. & Vis. Sc., 26, 206, 1985).

Zaidi, Q. and Pokorny, J. Failures of metamerism at short-wavelengths, Optical Society of America, Annual Meeting, 1983. (J. Opt. Soc. Am., 73, 1902, 1983).

Zaidi, Q., Pokorny, J. and Smith, V. Sources of variation in blue-green equations. Optical Society of America, Annual Meeting, 1982. (J. Opt. Soc. Am., 72, 1727, 1982).

INVITED LECTURES

Cortical and Visual Geometry in Pattern and Object Perception. University of Pennsylvania, Philadelphia, PA, Oct 2019.

Mental geometry of 3D scene inferences. European Conference on Visual Perception, Leuven, BE, Aug 2019.

Mental geometry of 3D scene inferences: Using geometrical knowledge to judge pose and size. Society for Mathematical Psychology, Annual Meeting, July 2019.

Neural and Mental Geometry of Visual Perception. University of Washington, Seattle, WA, Feb 2019.

Geometry and Perception. Koenderink Fest Rutgers University, New Brunswick, NJ, May 2018. Geometry and Perception. National Research University, Moscow, Russia, June 2018.

Functions of excitatory cortical circuits. Brain Engineering and Computational Neuroscience Conference, Tehran, Iran, February 2018.

Perception and appearance bending of material qualities. OSA Fall Vision Meeting, Washington, DC, October 2017.

Shape deformations are ubiquitous in images: how do we tell that objects are deforming?.

European Conference on Visual Perception, Berlin, Germany. August 2017.

Lightness estimation from ON and OFF interactions. Cosyne, Snowbird, UT, February 2017. Genesis of pattern and contour selectivity by excitatory intracortical circuits. University of Utah, Salt Lake City, UT, February 2017.

Genesis of pattern and contour selectivity in visual cortex. OSA Fall Vision Meeting, Rochester, NY, October 2016.

Sequential integration in color identification. European Conference on Visual Perception, Barcelona, Spain. August 2016.

Functional Implications of the Pinwheel Orientation Mosaic. The Salk Institute, La Jolla, February 2016.

Identifying surface colors across illumination conditions: Neural Adaptation, Similarity Judgments and Prior Beliefs. European Conference on Visual Perception, Liverpool, UK. August 2015.

Visual effects of haptic feedback are large but brief and local. Asia-Pacific Conference on Vision, Singapore, July 2015.

Visual illusions: Phenomenology to neural circuits. Meiji University Tokyo, Japan, July 2015. Perception of shapes, deformations and motions of non-rigid 3-D objects. Perceptual Representation of Illumination, Shape & Material Workshop, Ankara, Turkey, October 2014.

Could ganglion cell adaptation abnormalities provide early markers for loss of function? Imaging and Perimetric Society, New York NY, September 2014.

Perceptual machinery of the human brain. Habib Univeristy Karachi, Pakistan, August 2014. Parallel Processing for Shape and Material Perception. International Symposium "Future of Shitsukan Research", Tokyo, Japan, July 2014.

The Enigma of Unique Hues. Asia-Pacific Conference on Vision, Takamatsu Japan, July 2014. Links between percepts and neural responses. Neuroscience seminar series, Albert Einstein Medical School, NY, June 2014.

Linking percepts to neural responses. University of Maryland, June 2014.

Perception and Neurons. School of Optometry of Montréal, Université de Montréal, November 2013.

Geometric structure of perceptual color space. Mini-symposium on Perceptual Spaces: Mathematical structures to neural mechanisms. Society for Neuroscience Annual Meeting, San Diego, November 2013.

Perception and Neurons. Department of Psychology, Rutgers University, NJ, October 2013. Fast and slow processes in color neurophysiology. Symposium on Color Neurophysiology, International Colour Vision Society, Annual Meeting, Winchester, UK, July 2013.

Salience of symmetry in natural patterns. Workshop on Symmetry. Computer Vision and Pattern Recognition, Annual Meeting, Portland OR, June 2013.

Phenomenology and Neurons. Symposium on "Does appearance matter?" Vision Sciences Society, Annual Meeting, Naples FL, May 2013.

Perception of non-rigid 3-D shapes and motions. Bilkent University, Ankara, Turkey, February 2012.

Lights, Materials, Actions. Brown University, Providence, RI, October 2011.

What do deforming shapes reveal about shape-from-motion. Joint ECVP-APGV Sympoium on Deforming Shapes – Deformable Templates, Toulouse France, August, 2011.

Color in a material world. Conference on More or Less: Varieties of Cortical Colour Vision, Vancouver, BC, August 2011.

Visual Perception of Material Affordances: Frequency band analyses. University College London, London, UK, June 2011.

Visual Perception of Material Affordances. Workshop on the Perception of Material Properties, Castle Rauischholzhausen, Germany, June 2011.

Cortical decoding of color. 2nd International Symposium on Vision and Visual Dysfunction, Belém, Brazil, September 2010.

Visual Perception of Material Changes. Symposium on "The perception of colored patterns. textures and materials", Asia-Pacific Conference on Vision, Taipei, Taiwan, July 2010.

Cortical decoding of shapes and colors: costs and benefits of expanding neural dimensionality. W. S. Stiles Lecture, London, England, March 2010.

Neural Processes for 3-D Perception, INSERM Stem Cell and Brain Research Institute, Lyon, France, March 2009.

Color strategies for object identification: an operational approach to color constancy. Computational Color Imaging Workshop, Saint-Etienne, France, March 2009.

Heuristic algorithms for 3-D shape perception. First International Workshop on Shape Perception in Human and Computer Vision, European Conference on Computer Vision, Marseille, France, October 2008.

Are observers "Opportunistic" Bayesians when using color for object identification? International Congress of Psychology, Berlin, Germany, July 2008.

Neural processes that contribute to 3-D shape perception. Bernstein Center for Computational Neuroscience Berlin, Germany, July 2008.

Physical, computational and perceptual factors in color-based object identification, Chester F. Carlson Center for Imaging Science, Rochester Institute of Technology, Rochester, NY, April 2007.

Neural filters for 3-D perception. Department of Cognitive Sciences, University of California, Irvine, CA, February 2007.

Color based object identification: Alternatives to inverse optics. Colour Group of Great Britain, London, January 2007.

Perceptual assumptions and neural filters. Department of Psychology, University College London, London, January 2007.

Varieties of perceptual assumptions. Laboratoire Psychologie de la Perception, CNRS - Université Paris 5, October 2006.

Visual intelligence. Dept of Neuropsychology, Queens College, CUNY, Queens, NY, April 2006.

Cortical computations involving color, orientation and 3-D shape. International Color Vision Society, Annual Meeting, Lyon, France, July 2005.

Expanding the domain of color constancy. The Rutgers University Series on Human and Computer Vision, New Brunswick, NJ. November 2004.

Roles for local adaptation and reference levels in color constancy. European Conference on Visual Perception, Budapest, Hungary, August 2004.

Environmental invariances and neural strategies for 3-D shape from texture. Vision Research Labs, University of Chicago, Chicago, IL, June 2004.

Perceptual strategies for material identification. College of Optometry, University of Houston, Houston, TX, April 2004.

Neural basis of shape from texture. College of Optometry, University of Houston, Houston, TX, April 2004.

Perceptual strategies for material identification. Workshop on Perception of Object Color and Material Properties in Three-Dimensional Scenes, New York University, New York, NY, October 2003.

Perceptual inferences of 3-D shapes from texture information. Computer Graphics Seminar, University of Minnesota, Minneapolis, MN, September 2002.

Cues and strategies for color constancy. OSA/UCI Color Workshop, Irvine, CA. October 2001. Towards a neural basis of shape from texture. Department of Neurobiology, Duke University, Durham, NC, June 2001.

How surface textures convey 3-D shape. Cognition and Perception Area Seminar, Department of Psychology, New York University, New York, NY, April 2001.

How surface textures convey 3-D shape. Department of Psychology, University of Melbourne, Melbourne, Australia, March 2001.

Cues and strategies for color constancy. Optometry and Vision Sciences, University of Melbourne, Melbourne, Australia, March 2001.

How surface textures convey 3-D shape. Macquarie Center for Cognitive Science, Macquarie University, Sydney, Australia, February 2001.

Cues and strategies for color constancy. Vision Discussion Group, University of Sydney, Sydney, Australia, February 2001.

Towards a neural model of shape from texture. Research School of Biological Sciences, Institute of Advanced Studies, Australian National University, Canberra, Australia, February 2001.

Functional benefits of color adaptation. Australian Neuroscience Society, Annual Meeting, Brisbane, Australia, January 2001.

Towards a neural model of shape from texture. Neural Net/Vision Seminar, Brown University, Providence, RI. October 2000.

Chromatic motion-energy mechanisms. Optical Society of America, Annual Meeting, Providence, RI. October 2000.

Cortical color representations. Optical Society of America, Annual Meeting, Providence, RI. October 2000.

Developments in color appearance: physical, neural, computational, and perceptual. Keynote Lecture, Taipei Conference on Color Science, Taipei, Taiwan, June 2000.

Performance based color constancy. Department of Psychology, University of California at Santa Barbara, Santa Barbara, CA. June 2000.

Neural basis of shape from texture. Smith-Kettlewell Institute for Vision Science. San Francisco, CA. May 2000.

Neural basis of shape from texture. University of California at Berkeley, Berkeley, CA. May 2000.

Neural basis of shape from texture. The Rutgers University Series on Human and Computer Vision, New Brunswick, NJ. March 2000.

How to do perception with neurons. Department of Psychology, Bucknell University, PA. March 2000.

Junctions versus Gestalts. Optical Society of America, Annual Meeting, Santa Clara, CA. October 1999.

Measurements of object and illuminant identification. European Conference on Visual Perception, Trieste, Italy. August 1999.

Rethinking the perception of three-dimensional shape from texture cues. Max Planck Institute for Biological Cybernetics, Tubingen, Germany. August 1999.

Performance based color constancy. International Color Vision Society, XVth Symposium, Gottingen, Germany. July 1999.

Color representation by cortical neurons. Department of Neurology, Cornell Medical School, New York, NY. July 1999.

Rethinking the perception of three-dimensional shape from texture cues. Proteins to People: The First SUNY Vision Symposium, New York, NY. March 1999.

Perception without homunculi. NEC Institute, Princeton, NJ. January 1999.

A fresh look at color constancy: heuristics based algorithms. Optical Society of America, Annual Meeting, Baltimore MD. October 1998.

Is there a perceptual color space? Inter-Society Color Council/Optical Society of America Joint Symposium, Baltimore MD. October 1998.

Color and brightness induction: From Mach bands to 3-D configurations. Department of Psychology, North Dakota State University, Fargo, ND. September 1998.

Color constancy in a rough world. Kenneth Craik Seminar, Department of Physiology, Cambridge University, Cambridge, UK. July 1998.

Shape inconstancy in perspective. Institute of Ophthalmology, University of London, London, UK. July 1998.

Color and brightness induction: From Mach bands to 3-D configurations. Joint Aston University and Keele University Seminar, Keele, UK. July 1998.

A different look at color constancy: heuristics based algorithms. Computational Neurobiology Seminar, University of Chicago, Chicago, IL. May 1998.

Perceptual assumptions and projective distortions in a three-dimensional shape illusion. Department of Psychology, Harvard University, Cambridge, MA. February 1998.

A fresh look at color constancy. Brain and Behavioral Sciences, Massachussets Institute of Technology, Cambridge, MA. February 1998.

Heuristics and priors in color and shape identification. Department of Computer Science, Columbia University, New York, NY. November 1997.

Color constancy in variegated scenes. Optical Society of America, Annual Meeting, Rochester, NY. October 1996.

Color constancy in variegated scenes. Wilmer Institute Vision Research Seminar, Johns Hopkins University School of Medicine, Baltimore, MD. October 1996.

Color perception in complex scenes: induction, adaptation and constancy. Workshop on Color Vision, Max Planck Institute for Biological Cybernetics, Tuebingen, Germany. September 1996.

Affine, vector, metric and functional color spaces. Optical Society of America, Annual Meeting, Portland, OR. September 1995.

Visual processing of chromatic and luminance transients. Optical Society of America, Annual Meeting, Portland, OR. September 1995.

Fundamental issues in motion perception. The Rutgers University Series on Human and Computer Vision, New Brunswick, NJ. February 1995.

Fundamental issues in motion perception. Department of Psychology, Hunter College, New York, NY. February 1995.

Fundamental issues in motion perception. Visual Sciences Center, University of Chicago, Chicago, IL. February 1995.

Feature-tracking, motion-energy, motion-boundaries. Sensation and Perception Seminar, New York University, NY. November 1994.

Steps towards understanding and overcoming impairments of color and motion perception. The Lighthouse Inc., New York, NY. October 1994.

Visual processing of motion boundaries. Department of Psychology, Rutgers University, Newark, NJ. April 1994.

Central adaptive mechanisms of human color vision. R. S. Dow Neurological Institute, Good Samaritan Hospital, Portland, OR. July 1993.

Central adaptive mechanisms of human color vision. Biopsychology Colloquium, University of Michigan, Ann Arbor, MI. June 1993.

Adaptation processes governed by the correlation and distribution of inputs. Schnurmacher Institute of Vision Research, SUNY College of Optometry, New York, NY. April 1993.

Measurement of higher-level color processes using video displays. National Research Council, Institute for National Measurement Standards, Ottawa, Canada. November 1992.

Spatial and chromatic interactions in color appearance. Eastman Kodak Company Research Laboratories, Rochester, NY. October 1992.

Associative processes in visual perception. Department of Psychology, University of Washington, Seattle, WA. July 1992.

The S-cone color system in normals and diabetics. R. S. Dow Neurological Institute, Good Samaritan Hospital, Portland, OR. July 1992.

Analysis of chromatic and luminance motion by neurons in Macaque MT cortex. Department of Neurobiology, Columbia University, New York, NY. March 1992.

The S-cone color system in normals and diabetics. Eye Research Institute, Boston, MA. February 1992.

Spatial properties of higher-level color processes. Department of Optical Engineering, University of Texas at Dallas, Dallas, TX. September 1991.

The organization of lateral interactions within color mechanisms. Third International Brain Research Organization, World Congress of Neuroscience, Montreal, Canada. August 1991.

Simultaneous color induction. Department of Ophthalmology, McGill University, Montreal, Canada. August 1991.

Chromatic mechanisms beyond linear opponency. NATO Advanced Research Workshop, Roros, Norway. August 1990.

Human color adaptation. Department of Neurobiology, State University of New York, Stony Brook, NY. April 1990.

Adaptation in the S-cone color system. Rank Prize Funds Conference, Gloucestershire, UK. December 1989.

Color induction with complex stimuli. Center for Neural Sciences, New York University, New York, NY. April 1988.

Color and spatial factors in visual induction. Department of Psychology, Rutgers University, New Brunswick, NJ. February 1988.

Individual differences in color perception. Optical Society of America, Annual Meeting, Seattle, WA. October 1986.

Color contrast and color constancy. IBM Watson Research Center, Yorktown Heights, NY. December 1985.

Induced desensitization. RCA Research Laboratories, Princeton, NJ. April 1985.

Spatial factors in chromatic habituation. Wilmer Institute Vision Research Seminar, Johns Hopkins University School of Medicine, Baltimore, MD. February 1985.

Failure of additivity in color matches. Center for Visual Science, University of Rochester, Rochester, NY. June 1983.

Useful facts about color vision. United States Institute for Theatre Technology, Annual Meeting, Corpus Christi, TX. March 1983.

POST-DOCTORAL FELLOWS

1994-96	B. Spehar, "Brightness perception in complex displays". UNSW
1996-99	A. Li, "Neural basis of shape from texture ". CUNY
1998-99	K. Morikawa, "Psychophysical studies of Glaucoma. U Osaka
1999-02	B. Khang, "Color constancy". <i>U Sydney</i>
2000-02	S. Tsujimura, "Psychophysical studies of Glaucoma". Kagoshima U
2000-01	A. F. Griffiths, "3-D visual illusions". Montclair State U
2001-03	H. Smithson, "Mechanisms of color perception". Oxford
2005-10	X. Meng, "Shape from motion and texture".
2005-08	E. Cohen, "3-D shape representation". Vanderbilt
2008-13	A. Jain, "3-D deforming shapes". IFF Inc
2009-10	A. Yoonessi, "Role of color in material perception". Tehran U
2010-14	M. Geisel, "Material affordances". St Andrews U
2013-14	T.Sawada,"Symmetry". NRU Moscow
2014-15	V. Froyen, "Non-rigid shapes from motion". U Leuven

Ph.D. STUDENTS

- A. G. Shapiro, "The effects of habituation on the response and interaction of color mechanisms", Columbia University, 1992. *American U*
- W. L. Sachtler, "Visual processing of complex motion", Columbia University, 1993. MIT
- A. F. Griffiths, "Perceptual assumptions and perspective distortions in a three-dimensional shape illusion", Rutgers University, 1998. *Montclair State U*
- R. Robilotto, "Perception of achromatic reflectance and transparency", SUNY Optometry, 2004. *Manhattan Vision Associates*
- R. Ennis, "Geometry and physiology of color perception", SUNY Optometry, 2013. U Geissen
- S. J. Komban, "Neuronal and perceptual differences in the processing of Darks and Light", SUNY Optometry, 2013. NYU
- M. Jansen, "Cortical color mechanisms and natural tasks", SUNY Optometry, 2015. Angelaki lab.
- L. Wool, "Color Vision: From Cells to Salience", SUNY Optometry, 2016. Carandini Lab.
- R. Bachy, "Color Perception in Context: Effects of Eye Movements, Adaptation, Lateral Interaction, Scission and Integration". SUNY Optometry, 2017. *Oculus*.
- E. Koch, SUNY Optometry, 2013-.
- Z. Huang, SUNY Optometry, 2015-.

O.D.M.S. STUDENTS (SUNY)

- R. Robilotto 1998.
- C. Wong 2007.
- K.Shen 2007.
- I. Ritter 2008.
- S. Radner 2012.
- L. Zhao 2012.
- J. Bartov 2013.
- N. Wilson 2017.

UNDERGRADUATE RESEARCH STUDENTS (COLUMBIA)

B. Yoshimi 1988-90. Google

D. Halevy 1989-91. *RWJUH*

N. Zipser 1992-93. Harvard

J. DeBonet 1993-95. Amazon

TEACHING

Pro-Seminar in Vision Science II (SUNY)

Color Perception (SUNY)

Three-dimensional shape perception (SUNY).

Computational Developments in Visual Perception (SUNY)

Color Vision (SUNY)

Spatiotemporal processes (SUNY)

Computational Approaches to Human Vision (Columbia University)

Physiological Psychology II (Columbia University)

Sensation and Perception (Columbia University)

Mathematical Psychology (University of Chicago)

Advanced Statistics (Roosevelt College)

GRANT REVIEW COMMITTEES

2012-2019 National Institutes of Health, Mechanisms of Sensory, Perceptual, and Cognitive

Processes (SPC) Study Section, (Permanent member).

2010- College of CSR Reviewers

1997-2001 National Institutes of Health, Visual Sciences B Study Section, Division of

Research Grants (Permanent member).

1996- Schnurmacher Institute for Vision Research, SUNY College of Optometry.

JOURNAL EDITORIAL BOARDS

COLOR Research and Application.

Frontiers in Perception Science.

PROFESSIONAL SOCIETY COMMITTEES

MODVIS: Computational and Mathematical Models in Vision, Organizing committee 2014-International Color Vision Society, Board of Directors, 2010-18

European Conference on Visual Perception 2001. Organizing Committee.

Optical Society of America, Tillyer Award Committee. (2001-2004). Chair (2003)

CGIP 2000, First International Conference on Color in Graphics and Image Processing. International Program Committee.

Optical Society of America, Light and Color in the Open Air. Technical Program Committee (1996-97).

Optical Society of America, Color Technical Committee. Chair (1994-96); Vice-Chair (1993-94).

ADVISORY BOARDS

EU PRISM (Perceptual Representation of Illumination, Shape and Material) Network, International Advisory Board

Education Enrichment Foundation (EduEnrich), Board of Advisors.

STATE UNIVERSITY OF NEW YORK COMMITTEES & COUNCILS

State University of New York Research Council (2012-3)

State University of New York, Distinguished Professor Advisory Board (2012-)

SUNY Eye Institute, Steering Committee (2009-).

SUNY Eye Institute, Chair, Library Committee (2009-).

GRADUATE CENTER FOR VISION RESEARCH & DEPARTMENTAL COMMITTEES

SUNY Optometry VisioNYC representative (2005-).

SIVR Colloquia organizer (2016-).

Institutional Research & Planning Committee, SUNY Optometry (2008-9)

Strategic Planning Committee, SUNY Optometry (2007-8).

Research Council, Chair, SUNY Optometry (2005-8).

"Proteins to People: The 1st SUNY Vision Symposium", Organizer (March 1999).

Committee on Research Planning, Chair, SUNY Optometry (1999-2005).

Committee on Graduate Curriculum, Chair, SUNY Optometry (1998-2008).

Retinal and CNS Clinical Research Group, Chair, SUNY Optometry (1998-99).

Institutional Review Board, SUNY Optometry (1996-2000).

Colloquium and Visiting Scientist Committees, Chair, SUNY Optometry (1997-2007).

Search Committee for Computer Systems Administrator, Chair, SUNY Optometry (1995-96).

Committee on Faculty Graduate Qualifications, SUNY Optometry (1997-2002).

Comprehensive Examination Committee, SUNY Optometry (1996-2001).

Library Committee, Columbia University (1987-94).

Committee on Scientific Equipment, Chair, Department of Psychology, Columbia University (1990-94).

Committee on Computers and Computer Networks, Department of Psychology, Columbia University (1985-91).

GRANT REVIEWS

Air Force Office of Science and Research

Fight for Sight

German-US Collaboration in Computational Neuroscience

French-US Collaboration in Computational Neuroscience

Human Frontiers Science Program Organization

National Institutes of Health CVP

National Institutes of Health VISB

National Institutes of Health IFCN-8

National Institutes of Health IFCN-L

National Science Foundation

NSF-NIH Collaborative Research in Computational Neuroscience CRCNS

Research Grants Council of Hong Kong

Science and Engineering Research Council (U.K.)

Swiss National Science Foundation

U.S. Civilian Research & Development Foundation (CRDF) for the Independent States of the Former Soviet Union

JOURNAL REVIEWS

Applied Optics

Attention, Perception and Psychophysics

Behavioral and Brain Sciences

Cerebral Cortex

Clinical Visual Science

Color Research and Application

Current Biology

IEEE Systems, Man and Cybernetics

IEEE Transaction on Haptics

IEEE Transactions on Image Processing

Image and Vision Computing

Investigative Ophthalmology and Visual Science

Journal of Glaucoma

Journal of Mathematical Psychology

Journal of Neurophysiology

Journal of Neuroscience

Journal of the Optical Society of America

Journal of Vision

Nature

Nature Neuroscience

Neural Computation

Neural Networks

Neuron

Optics Letters

Perception

Perception and Psychophysics

Psychological Science
PLoS Computational Biology
PLoS One
Proceedings of the National Academy of Science
Proceedings of the Royal Society: Biological Sciences
Psychological Science
Science
SIGGRAPH Proceedings
Spatial Vision
Visual Neuroscience
Vision Research