VITA March, 2015

Donald D. Hoffman, Professor
Department of Cognitive Sciences
University of California
Irvine, CA 92697 USA
ddhoff@uci.edu
www.cogsci.uci.edu/∼ddhoff/

Education

B.A.	University of California, Los Angeles, 1978, Quantitative Psychology.
Ph.D.	Massachusetts Institute of Technology, 1983, Computational Psychology.

Positions

1978 –1983	Member of the Technical Staff and Project Engineer, Hughes Aircraft Company, El Segundo, California.
1983 –1983	Research Scientist, Laboratory for Artificial Intelligence, Massachusetts Institute of Technology.
1983 –1986	Assistant Professor of Cognitive Science, and of Information and Computer Science, University of California, Irvine.
1986 –1990	Associate Professor of Cognitive Science, and of Information and Computer Science, University of California, Irvine.
1990 –	Professor of Cognitive Science, and of Information and Computer Science, University of California, Irvine.
1995 – 1996	Visiting Professor, Zentrum für interdisziplinäre Forschung der Universität Bielefeld, Germany.
1996 –	Professor of Philosophy, University of California, Irvine.
2006 –	Professor of Logic and Philosophy of Science, University of California, Irvine.

Research Interests

Vision, Cognitive Science, Consciousness, Evolutionary Models of Perception

Honors

Troland Research Award of the National Academy of Sciences (1994).
Distinguished Scientific Award of the American Psychological Association for an Early Career Contribution to Psychology in Sensation and Perception (1989).
UCI Chancellors's Award for Excellence in Undergraduate Research (2002).
Rustum Roy Spirit Award, Chopra Foundation (2013).
Hughes Aircraft Company Bachelors, Masters, and Ph.D. fellowships.
B.A., summa cum laude.
Who's Who in America, Editions 50–62.
Who's Who in the West, Editions 23–34.
Who's Who in the World, Editions 11–13.
Who's Who in American Education, Edition 6.
Who's Who in Finance and Industry, Edition 28.
Who's Who in Science and Engineering, Editions 2–10.
Who's Who Among America's Teachers, Editions 8, 9.
Dictionary of International Biography, Editions 23, 24.
My Last Lecture: Teaching award given by UCI students (1988).
UCI Faculty Mentor of the Month, Undergraduate Research Opportunity Program (2009).

Contracts and Grants

$177,283	NSF, "Object Recognition Using Visual Information from Images", PI, 1984.
369,110	ONR, "An Interdisciplinary Investigation of Inferences from Images," PI, 1985.
126,000	DOD, "Inferring 3-D Shape from Image Motion and Occluding Contours," PI, 1986.
271,064	NSF, "A Formal Investigation of Perceptual Information Processing," Co-PI with B. Bennett, 1987.
458,239	ONR, "Formal and Psychophysical Investigations of Vision," PI, 1988.
1,676,678	NSF, "Research and Training Program in Mathematical Behavioral Science," Faculty Participant (R.D. Luce, PI), 1990–1995.
13,701	ONR, "Workshop on Image Representation in Biological and Machine Vision," PI, 1992.
85,015	CalTrans, "Automatic Video Analysis For Transportation," PI on subcontract, 1993.
35,000	NAS, Troland Research Award, 1994.
10,000	UCI COR, "Perception and Evolution," Co-PI with A. Nelson, 1995.
35,000	German NSF, "Perception and Evolution," Faculty Participant, 1995.
530,000	NSF, "Acquisition of Equipment for a VR Laboratory," Faculty Participant (M. D'Zmura, PI), 1997.
180,000	Alzheimer's Foundation, "Optimizing Object Perception in Alzheimer's Disease," Co-I (W.R. Shankle, PI), 1999.
250,000	Alzheimer's Foundation, "Preclinical detection & disease measurement of AD," Co-I (W.R. Shankle, PI), 2001.
387,000	NSF, "The role of parts in the visual perception of objects," PI, 2001.
100,000	P&G, "Vision Research," PI, 2008.
81,730	VF Corporation, "Vision Research," PI, 2012.
50,000	Faggin Foundation, "Consciousness Research," PI, 2014.
100,000	Faggin Foundation, "Consciousness Research," Co-PI, 2015.

Publications

1982

1. Equation counting and the interpretation of sensory data. *Perception*, **11**, 557–576. W. Richards, J. Rubin, D. Hoffman.
   – also appeared as *MIT Artificial Intelligence Laboratory Memo 614*
2. The interpretation of biological motion. *Biological Cybernetics*, **42**, 3, 197–204. D. Hoffman, B. Flinchbaugh.
   – also appeared as *MIT Artificial Intelligence Laboratory Memo 608*
3. Inferring local surface orientation from motion fields. *Journal of the Optical Society of America*, **72**, 7, 888–892. D. Hoffman.
   – also appeared as *MIT Artificial Intelligence Laboratory Memo 592*
4. Representing smooth plane curves for recognition: Implications for figure-ground reversal. *Proceedings of the National Conference of the American Association for Artificial Intelligence*, 5–8. D. Hoffman, W. Richards.
   – also appears in *Natural Computation,* W. Richards (Ed), MIT Press, 1988.
5. Interpreting time-varying images: The planarity assumption. *IEEE Workshop on Computer Vision*, 92–94. D. Hoffman.

1983

6. The interpretation of visual illusions. *Scientific American*, **249,** 6, 154–162. D. Hoffman.
   – also appears in *The Mind's Eye. Readings From Scientific American,* J. Wolfe (Ed), Freeman Press, 1986.

1984

7. Parts of recognition. *Cognition,* **18,** 65–96. D. Hoffman, W. Richards.
   – also appears as *MIT Artificial Intelligence Laboratory Memo 732,* 1983.
   – also appears in *Visual Cognition,* S. Pinker (Ed), MIT Press, 1985.
   – also appears in *From Pixels to Predicates: Recent Advances in Computational Vision,* A. Pentland (Ed), Ablex Publishing Company, 1986.
   – also appears in *Readings in Computer Vision,* M. Fischler and O. Firschein (Eds), Morgan and Kaufmann Publishers, Inc., 1987.

1985

8. The computation of structure from fixed-axis motion: Nonrigid structures. *Biological Cybernetics*, **51,** 293–300. B. Bennett, D. Hoffman.
9. Inferring the relative 3-D positions of two moving points. *Journal of the Optical Society of America A,* **2,** 350–353. D. Hoffman, B. Bennett.
10. Codon constraints on closed 2-D shapes. *Computer Vision, Graphics, and Image Processing,* **31,** 265–281. W. Richards, D. Hoffman.
    – also appears in *Human and Machine Vision II,* A. Rosenfeld (Ed), Academic Press, 1986.

1986

11. Regularities of nature: The interpretation of visual motion. In *From Pixels to Predicates: Recent Advances in Computational Vision*, A. Pentland (Ed), Ablex Publishing Company, New Jersey, 201–226. S. Reuman, D. Hoffman.
12. The computation of structure from fixed-axis motion: Rigid structures. *Biological Cybernetics,* **54,** 71–83. D. Hoffman, B. Bennett.

1987

13. Description of solid shape and its inference from occluding contours. *Journal of the Optical Society of America, A,* **4,** 1155–1167. J. Beusmans, D. Hoffman, B. Bennett.
14. Inferring three-dimensional shapes from two-dimensional silhouettes. *Journal of the Optical Society of America, A,* **4,** 1168–1175. W. Richards, J. Koenderink, D. Hoffman.
    – also appears as *MIT Artificial Intelligence Laboratory Memo 840*
    – also appears in *Natural Computation,* W. Richards (Ed), MIT Press, 1988.
15. Perception and computation. *IEEE First International Conference on Computer Vision, London,* 356–364. B. Bennett, D. Hoffman, C. Prakash.
16. Minimum points and views for the recovery of three-dimensional structure. *Journal of Experimental Psychology: Human Perception and Performance,* **13,** 335–343. M. Braunstein, D. Hoffman, L. Shapiro, G. Andersen, B. Bennett.
17. Shape decompositions for visual shape recognition: The role of transversality. In *Image Understanding,* W. Richards (Ed), Ablex Publishing Company, New Jersey, 215–256. B. Bennett, D. Hoffman.

1988

18. Perceptual representations: Meaning and truth conditions. In *Cognition and representation*, S. Schiffer and S. Steele (Eds), Westview Press, Boulder, 87–128. D. Hoffman, B. Bennett.

1989

19. *Observer Mechanics: A formal theory of perception.* Academic Press, New York. B. Bennett, D. Hoffman, C. Prakash.
20. Inferring structure from motion: A homotopy algorithm. *Proceedings of the IEEE Workshop on Visual Motion, Irvine,* 238–245. B. Bennett, D. Hoffman, J. Nicola, C. Prakash.
21. Structure from two orthographic views of rigid motion. *Journal of the Optical Society of America, A*, **6,** 1052–1069. B. Bennett, D. Hoffman, J. Nicola, C. Prakash.
    – also appears as *UCI Mathematical Behavioral Sciences Memo MBS 89-01.*
22. Parts of visual objects: An experimental test of the minima rule. *Perception,* **18,** 817–826. M. Braunstein, D. Hoffman, A. Saidpour.

1990

23. Discriminating rigid from nonrigid motion: Minimum points and views. *Perception & Psychophysics,* **47,** 3, 205–214. M. Braunstein, D. Hoffman, F. Pollick.

1991

24. Unity of perception. *Cognition,* **38,** 295–334. B. Bennett, D. Hoffman, C. Prakash.
    – also appears as *UCI Mathematical Behavioral Sciences Memo MBS 90-13.*

1992

25. Vision. *1992 McGraw-Hill Yearbook of Science and Technology,* 487–489. D. Hoffman.
26. Interpolation in structure from motion. *Perception & Psychophysics,* **51 (2),** 105–117. A. Saidpour, M. Braunstein, D. Hoffman.
27. Perception is no accident. *Optics & Photonics News,* **3 (9),** 50–51. M. Albert, D. Hoffman.

1993

28. Recognition polynomials. *Journal of the Optical Society of America, A,* 10, 4, 759–764. B. Bennett, D. Hoffman, C. Prakash.
    – also appears as *UCI Mathematical Behavioral Sciences Memo MBS 92-17.*
29. Lebesgue logic for probabilistic reasoning and some applications to perception. *Journal of Mathematical Psychology,* 37, 1, 63–103. B. Bennett, D. Hoffman, P. Murthy.
    – also appears as *UCI Mathematical Behavioral Sciences Memo MBS 90-07.*
30. No perception without representation. Commentary in *Behavioral and Brain Sciences,* 16, 2, 247–247. D. Hoffman.
31. Modeling performance in observer theory. *Journal of Mathematical Psychology,* 37, 2, 220–240. B. Bennett, D. Hoffman, R. Kakarala.
    – also appears as *UCI Mathematical Behavioral Sciences Memo MBS 90-25.*
32. Inferring 3D structure from image motion: The constraint of Poinsot motion. *Journal of Mathematical Imaging and Vision,* 3, 143–166. B. Bennett, D. Hoffman, J. Kim, S. Richman.
    – also appears as *UCI Mathematical Behavioral Sciences Memo MBS 91-01.*
33. Inferring structure from motion in two-view and multi-view displays. *Perception,* 22, 1441–1465. J. Liter, M. Braunstein, D. Hoffman.

1994

34. Interpolation Across Surface Discontinuities in Structure-from-motion. *Perception & Psychophysics,* 55, 611–622. A. Saidpour, M. Braunstein, D. Hoffman.

35. Detection of one versus two objects in structure from motion. *Journal of the Optical Society of America, A,* 11, 3162–3166. J. Liter, M. Braunstein, D. Hoffman.
36. Inferring 3D structure from three points in rigid motion. *Journal of Mathematical Imaging and Vision,* 4, 401–406. B. Bennett, D. Hoffman.
    – also appears as UCI Mathematical Behavioral Sciences Memo MBS 92-16.

1995

37. The perception of color from motion. C. Cicerone, D. Hoffman, P. Gowdy, J. Kim. *Perception & Psychophysics,* 57(6), 761–777.
38. Genericity in spatial vision. In D. Luce, K. Romney, D. Hoffman, & M. D'Zmura (Eds.), *Geometric Representations of Perceptual Phenomena: Articles in Honor of Tarow Indow's 70th Birthday.* Erlbaum, New York, pp. 95–112. M. Albert, D. Hoffman.

1996

39. Observer theory, Bayes theory, and psychophysics. In D. Knill and W. Richards (Eds) *Perception as Bayesian inference,* Cambridge University Press, pp. 163–212. B. Bennett, D. Hoffman, C. Prakash, S. Richman.
    – also appears as UCI Mathematical Behavioral Sciences Memo MBS 93-12.
40. What do we mean by the structure of the world? In D. Knill and W. Richards (Eds) *Perception as Bayesian inference,* Cambridge University Press, pp. 219–221. D. Hoffman.

1997

41. Salience of visual parts. *Cognition, 63,* 29–78. D. Hoffman, M. Singh.
    – also appears as UCI Mathematical Behavioral Sciences Memo MBS 94-27.
42. Constructing and representing visual objects. *Trends in Cognitive Sciences, 1,* 98-102. M. Singh, D. Hoffman.
43. Color from motion: Dichoptic activation and a possible role in breaking camouflage. *Perception, 26,* 1367–1380. C. Cicerone, D. Hoffman.

1998

44. *Visual intelligence: How we create what we see.* W.W. Norton & Co. D. Hoffman.
    – first chapter also appears in *The Norton Psychology Reader,* W. W. Norton, 2006.
45. Part boundaries alter the perception of transparency. *Psychological Science, 9,* 370–378. M. Singh, D. Hoffman.
46. Active vision and the basketball problem. Commentary in *Behavioral & Brain Sciences, 21,* 772–773. M. Singh, D. Hoffman.

1999

47. Parsing silhouettes: The short-cut rule. *Perception & Psychophysics, 61,* 636–660. M. Singh, G. Seyranian, D. Hoffman.
48. Completing visual contours: The relationship between relatability and minimizing inflections. *Perception & Psychophysics, 61,* 943–951. M. Singh, D. Hoffman.
49. Contour completion and relative depth: Petter's rule and support ratio. *Psychological Science, 10,* 423–428. M. Singh, D. Hoffman, M. Albert.
50. Perception, inference, and the veridicality of natural constraints. Commentary in *Behavioral and Brain Sciences, 22,* 395–396. M. Singh, D. Hoffman.

2000

51. The generic-viewpoint assumption and illusory contours. *Perception, 29,* 303–312. M. Albert, D. Hoffman.
52. Constructing surfaces and contours in displays of color from motion: The role of nearest neighbors and maximal disks. *Perception, 29,* 567–580. C. Fidopiastis, D.D. Hoffman, W.D. Prophet, M. Singh.

2001

53. The data problem for color objectivism. *Consciousness and Cognition, 10,* 74–77. D. Hoffman.
54. Mereology of visual form. *Proceedings of the Fourth International Workshop on Visual Form, Capri, Italy* 40–50. D. Hoffman.
55. Flank transparency: Transparent filters seen in dynamic two-color displays. *Perception, 30,* 1423–1426. D. Wollschläger, A. Rodriguez, D. Hoffman.
56. Part-based representations of visual shape and implications for visual cognition. In *From fragments to objects: Segmentation and grouping in vision* P. Kellman and T. Shipley (Eds), Elsevier Science, pp. 401–459. M. Singh, D. Hoffman.
57. Contours from apparent motion: A computational theory. In *From fragments to objects: Segmentation and grouping in vision* P. Kellman and T. Shipley (Eds), Elsevier Science, pp. 509–530. W. Prophet, D. Hoffman, C. Cicerone.

2002

58. Perception and evolution. In *Perception and the Physical World: Psychological and Philosophical Issues in Perception*, D. Heyer and R. Mausfeld (Eds.) Chichester, UK: Wiley, pp. 229–245. B. Bennett, D. Hoffman, C. Prakash.
59. Visual worlds: Construction or reconstruction? *Journal of Consciousness Studies, 9,* 72–87. T. Davies, D. Hoffman, A. Rodriguez.
60. Attention to faces: A change-blindness study. *Perception, 31,* 9, 1123–1146. T. Davies, D. Hoffman.
61. Reality check: Insights from cognitive science. *Topic, 1, 2,* 102–105. T. Davies, D. Hoffman.
62. Flank transparency: The effects of gaps, line spacing, and apparent motion. *Perception, 31,* 1073–1092. D. Wollschläger, A.M. Rodriguez, D.D. Hoffman.
63. Psychophysical studies of expressions of pain. Commentary in *Behavioral & Brain Sciences, 25,* 458–459. T. Davies, D. Hoffman.

2003

64. The interaction of colour and Motion. In *Colour: Mind and the Physical World,* D. Heyer and R. Mausfeld (Eds.) Oxford University Press, 361–377. D. Hoffman.
65. Colour construction. Commentary in *Colour: Mind and the Physical World,* D. Heyer and R. Mausfeld (Eds.) Oxford University Press, 273–274. D. Hoffman.
66. An internalist account of colour. Commentary in *Colour: Mind and the Physical World,* D. Heyer and R. Mausfeld (Eds.) Oxford University Press, 435–436. D. Hoffman.
67. Facial attention and spacetime fragments. *Axiomathes, 13,* 303–327. T. Davies, D. Hoffman.
68. Does perception replicate the external world? Commentary in *Behavioral & Brain Sciences, 26,* 415–416. D. Hoffman.
69. Vision: Form perception. In L. Nadel (Ed.) *Encyclopedia of Cognitive Science, Volume 4,* 486–490. London: Macmillan Publishers Limited. D. Hoffman, M. Singh.

2004

70. Kann man Gott abschreiben? In *Im Anfang war Kein Gott: Naturwissenschaftliche und theologische*

Perspektiven, Tobias Daniel Wabbel (Ed.) Düsseldorf: Patmos. Pages 166–174. D. Hoffman. (Dismissing God. In *In the beginning was no god.*)

2005

71. EEG detection of early Alzheimer's disease using psychophysical tasks. *Clinical EEG Neuroscience, 36,* 141–150. R. Sneddon, W. R. Shankle, J. Hara, A. Rodriquez, D. Hoffman, U. Saha.
72. Consciousness is fundamental. In *What we believe but cannot prove: Today's leading thinkers on science in the age of certainty,* J. Brockman (Ed.) New York: HarperCollins and London: Free Press, 93–96. D. Hoffman.
73. Visual illusions and perception. In *2005 McGraw-Hill Yearbook of Science & Technology,* D. Hoffman.

2006

74. The Scrambling Theorem: A simple proof of the logical possibility of spectrum inversion. *Consciousness and Cognition, 15,* 31–45. D. Hoffman.
75. The Scrambling Theorem unscrambled: A response to commentaries. *Consciousness and Cognition, 15,* 51–53. D. Hoffman.
76. Mimesis and its perceptual reflections. In W. Pape (ed.) *A View in the Rear-Mirror: Romantic Aesthetics, Culture, and Science Seen from Today. Festschrift for Frederick Burwick on the Occasion of His Seventieth Birthday.* Trier: WVT, Wissenschaftlicher Verlag Trier, 2006 (Studien zur Englischen Romantik. 3). 201–209. D. Hoffman.

2007

77. Book: *Automotive lighting and human vision.* Springer Verlag. B. Wördenweber, J. Wallaschek, P. Boyce, D. Hoffman.
78. A spoon is like a headache. In *What is your dangerous idea?: Today's leading thinkers on the unthinkable*, John Brockman (Ed.), Free Press, UK, 2006, HarperCollins, US, 2007, 211–213. D. Hoffman.
79. Malperceptions. In *Vectors: Journal of Culture and Technology in a Dynamic Vernacular,* Volume 3. Online Only: http://www.vectorsjournal.net/, P. Hoberman, D. Hoffman.
80. Visual perception and neural correlates of novel 'biological motion'. *Vision Research, 47,* 2786–2797. J. Pyles, J. Garcia, D. Hoffman, E. Grossman.
81. Spectrum inversion. Artwork exhibited at the Serpentine Gallery, London. Exhibited online at: http://www.edge.org/3rd_culture/serpentine07/serpentine07_index.html#hoffman D. Hoffman
82. Solving the mind-body problem. In *What are you optimistic about?: Today's leading thinkers on why things are good and getting better*, John Brockman (Ed.), HarperCollins, New York, 279–282. D. Hoffman.

2008

83. Conscious realism and the mind-body problem. *Mind & Matter, 6,* 87–121. D. Hoffman.
84. Computer, Felsen, Gehirne und Sterne: Rätselhafte Zeichen einer multimodalen Benutzerschnittstelle (Sensory experiences as cryptic symbols of a multi-modal user interface). *Activa Nervosa Superior, 52,* 95–104. Also appears in *Kunst und Kognition,* M. Bauer, F. Liptay, S. Marschall (Eds.) Munich: Wilhelm Fink, 261–279. D. Hoffman.

2009

85. Non-veridical perception. In *What have you changed your mind about?: Today's leading minds rethink everything,* John Brockman (Ed.), Harper Perennial, New York, 75–77. D. Hoffman.
86. The interface theory of perception. In *Object Categorization: Computer and Human Vision Perspectives,* S. Dickinson, M. Tarr, A. Leonardis, B. Schiele (Eds.), Cambridge University Press, 148–165. D. Hoffman.
87. Mind and body. In *The Encyclopedia of Perception,* Bruce Goldstein (Ed.), Sage Publishers, Thousand Oaks, CA, 554–555. D. Hoffman.
88. Consciousness. In *The Encyclopedia of Perception,* Bruce Goldstein (Ed.), Sage Publishers, Thousand Oaks, CA, 300–304. D. Hoffman.
89. Computer consciousness. In *The Encyclopedia of Perception,* Bruce Goldstein (Ed.), Sage Publishers, Thousand Oaks, CA, 283–285. D. Hoffman.
90. Nature and consciousness. *Mindfield Bulletin,* 1, 1, 6–7. D. Hoffman.

2010

91. The laptop quantum computer. In *This Will Change Everything: Ideas That Will Shape The Future.* Edited by J. Brockman. Harper Perennial, New York. 47–50. D. Hoffman.
92. Human vision as a reality engine. In *Psychology and the Real World: Essays Illustrating Fundamental Contributions to Society.* Edited by M. Gernsbacher, R. Pew, L. Hough, and J. Pomerantz. FABBS Foundation. New York: Worth Publishers. D. Hoffman
93. Learning colors. *[ark]: The StoJournal for Architects, 2,* 52–55. D. Hoffman.
    – also appears in Dutch as Kleuren Leren. *Kleurenvisie, 1, Juli, 2011,* 4–7 .
94. Natural selection and veridical perceptions. *Journal of Theoretical Biology,* 266, 504–515. J. Mark, B. Marion, D. Hoffman.

2011

95. The sculpting of human thought. In *Is the internet changing the way you think? The net's impact on our minds and future.* Edited by J. Brockman. Harper Perennial, New York. 90–92. D. Hoffman.
96. Preliminary evidence that the limbal ring influences facial attractiveness. *Evolutionary Psychology,* 9, 137–146. D. Peshek, N. Sammak-Nejad, D. Hoffman, P. Foley.
97. The construction of visual reality. In *Hallucinations: Research and Practice.* Edited by J.D. Blom & I. Sommer. Springer Verlag. 7–15. D. Hoffman.

2012

98. The sensory desktop. In *This will make you smarter: New scientific concepts to improve your thinking.* Edited by J. Brockman. Harper Perennial, New York. 135–138. D. Hoffman.
99. Computational evolutionary perception. *Perception, 41,* 1073–1091. (Special issue in honor of David Marr.) D. Hoffman, M. Singh.

2013

100. Public objects and private qualia: The scope and limits of psychophysics. In *The Wiley-Blackwell Handbook of Experimental Phenomenology.* Edited by L. Albertazzi, 71–89, D. Hoffman.
101. Does natural selection favor true perceptions? *Proceedings of the SPIE 8651, Human Vision and Electronic Imaging XVIII, 865104.* DOI: 10.1117/12.2011609. D. Hoffman, M. Singh, J. Mark.
102. Natural selection and shape perception: Shape as an effective code for fitness. In *Shape Perception in Human and Computer Vision: An Interdisciplinary Perspective.* Edited by S. Dickinson and Z. Pizlo, Springer, New York. 171–185. M. Singh, D. Hoffman.

103. Motion and color cognition. In *The Encyclopedia of Color Science and Technology.* Edited by N.M. Moroney. Springer Verlag. D. Hoffman.

2014

104. Worries on the mystery of worry. In *What should we be worried about: Real scenarios that keep scientists up at night.* Edited by J. Brockman. Harper Perennial, New York. 135–138. D. Hoffman.
105. Objects of consciousness, *Frontiers of Psychology, 5:577.* doi: 10.3389/fpsyg.2014.00577. D. Hoffman, C. Prakash.
106. Consciousness and the interface theory of perception. In *Brain, Mind, Cosmos: The Nature of our Existence and the Universe.* Chapter 17. Edited by D. Chopra. D. Hoffman.
107. The origin of time in conscious agents. *Cosmology,* 18, 494–520. D. Hoffman.

2015

108. Truer perceptions are fitter perceptions. In *This idea must die: Scientific theories that are blocking progress.* Edited by J. Brockman. Harper Perennial, New York. 467–468. D. Hoffman.
109. Human vision as a reality engine *[revised].* In *Psychology and the Real World: Essays Illustrating Fundamental Contributions to Society, Second Edition.* Edited by M. Gernsbacher and J. Pomerantz. Forward by Malcolm Gladwell, and Afterward by Steven Pinker. FABBS Foundation. New York: Worth Publishers. 40–47. D. Hoffman

In Press

110. Illusory color spread from apparent motion. In *The Oxford Compendium of Visual Illusions.* Edited by A. Shapiro and D. Todorovic. Oxford University Press. C. Cicerone, D. Hoffman.
111. Evolving AI. In *What do you think about machines that think?* Edited by J. Brockman. Harper Perennial, New York. . D. Hoffman.

Under Review

112. The interface theory of perception. *Psychonomic Bulletin and Review.* D. Hoffman, M. Singh, C. Prakash.

Invited Lectures

1983 Natural Computation. Massachusetts Institute of Technology.
Recovery and Recognition of Shape. University of Oregon, Eugene.
Recovery and Recognition of Shape. Stanford University.
Recovery and Recognition of Shape. University of California, Irvine.
Recovery and Recognition of Shape. Stanford Research International.
Recovery and Recognition of Shape. Fairchild Camera Corporation, Palo Alto.

1984 Shape Recognition: An AI Approach. University of California, Irvine.
Representing Shapes. NASA Ames.
Shape Recognition. Texas Instruments Corp., Dallas.
Parts of Recognition. Optical Society of America, San Diego.
Recovery and Recognition of Shape. Odetics Inc., Anaheim.
Recovery and Recognition of Shape. Ford Aerospace, Newport Beach.
Vision: State of the Art. University of Arizona.
Recovery and Recognition of Shape. California Institute of Technology.

1985 Recovery and Recognition of Shape. University of California, San Diego.
Shape Recognition. University of California, Los Angeles.
Recovery and Recognition of Shape. University of Pennsylvania, Phil.
Recognizing Visual Shapes. Office of Naval Research (ONR), Pasadena.
Perception as Inference. Event Perception Conference. Uppsala, Sweden.
Shape Recognition. Center for Neurobiology of Learning and Memory, UCI.

1986 Observer Theory. ONR Contractors Conference. Dedham, Massachusetts.
Parts of Recognition. Rochester Vision Conference. Rochester, NY.
Observer Theory. State Developmental Research Inst., Asilomar, CA.
Observer Theory. University of Illinois, Champagne.
Parts of Shape Recognition. University of Illinois, Champagne.
Observer Theory. Helmholtz Club, UC Irvine.

1987 Observer Theory. University of California, Berkeley.
Observer Theory. American Philosophical Association, San Francisco.

1988 Observer Theory. ONR Contractors Meeting, UC Irvine.
My Last Lecture. UC Irvine.
The Cognitive Revolution: Vision. UCLA.
Forms of Perception. Institute for Mathematical Behavioral Science, UC Irvine.

1989 Observer Theory. Philosophy Department, UC Irvine.
Marr—Ten years later. Society of Philosophy and Psychology, Tucson.
Empirical Tests of Formal Theories of Perception. Helmholtz Club, UC Irvine.

1990 Empirical Tests of Formal Theories of Perception. Cognitive Science, UC Irvine.
The Cognitive Revolution: Vision. UCLA.
Recognition of 3D Shape. International Conference on Computational and Biological Models of Visual Processes. Trieste, Italy.
Formal Theories of Perception. Western Psychological Association. Los Angeles.

1991 Representing 3D Shapes for Visual Recognition. Society for Photo-Optical Instrumentation and Engineering: Medical Imaging V Conference. San Jose.
Perception and Logic. MIT, Cambridge, Massachusetts.
Representing 3D Shapes For Visual Recognition. UC Riverside.
The Principle of Genericity in Visual Interpretations. California Institute of Technology.

1992 Representing 3D Shapes for Visual Recognition. Rockwell Science Center, Thousand Oaks, CA.
Representing 3D Shapes for Visual Recognition. Center for High-Speed Image/Signal Processing, UC Irvine.
Image Segmentation. ONR Workshop on Image Representation in Biological and Machine Vision, Laguna Beach.
Recognition Polynomials. University of Southern California, Los Angeles.
Recognition Polynomials. Center for High-Speed Image/Signal Processing, UC Irvine.

Invited Lectures

1993 Lebesgue Logic and the Bayesian Foundations of Observer Theory. AFOSR Workshop on Visual Perception: Computation and Psychophysics. Chatham, Massachusetts.
Generic Visions. Franz Hall, UCLA.
Detecting and Segmenting Rigid Body Motion in Cinematic Images. School of Engineering, UC Irvine.
Bayesian Estimation in Vision. Cognitive Sciences, UC Irvine.
Genericity in Spatial Vision. Conference on Geometric Representations of Perceptual Phenomena. Institute for Mathematical Behavioral Sciences, UCI.
Genericity in Spatial Vision. Pacific Construction Management Incorporated, Long Beach.
Genericity in Spatial Vision. Department of Psychology, UC Santa Barbara.

1994 Automated Interpretation of Digital Video for IVHS. Institute for Transportation Studies and School of Engineering, UC Irvine.
Eye and Virtual Reality. Department of Psychology, Arizona State University, Tempe.
Eye and Virtual Reality. Russian Academy of Science, All-Russian Institute of Scientific and Technical Information, Moscow, Russia.
Eye and Virtual Reality. International Symposium on Reflexive Processes, Moscow, Russia.
Eye and Virtual Reality. ATR Labs, Nara, Japan.
Eye and Virtual Reality. Keihana Corporation, Nara, Japan.
Eye and Virtual Reality. NTT Basic Research, Tokyo, Japan.
Eye and Virtual Reality. University of Tokyo, Tokyo, Japan.
Genericity in Spatial Vision. The Salk Institute, La Jolla, California.
Unconscious Inferences and the Mind/Body Problem. Helmholtz Centennial Conference, Kiel, Germany.

1995 Bayes and Darwin: What You See Is What You Beget. Zentrum für interdisziplinäre Forschung, Bielefeld, Germany.
Vision. College of Engineering, California State Polytechnic University, Pomona.
What You See Is What You Beget. California State University, San Bernardino.
Dynamic Color Spreading. Universität Freiburg, Germany.
Vision and Reality. Zentrum für interdisziplinäre Forschung, Bielefeld, Germany.
Visual Motion. Zentrum für interdisziplinäre Forschung, Bielefeld, Germany.

1996 The Creative Genius of Vision. Christian Albrechts Universität, Kiel, Germany.
Illusory Contours. Clarement College, Claremont, California.
Visual Recognition. Southern California Robotics Society.

1997 Does the Brain Create Consciousness, Or Vice Versa? Irvine Consciousness Conference, Laguna Beach, California.
Observer Theory and Quantum Theory. California State University, Long Beach, California.

1998 Visual Intelligence. HNC Software, San Diego, California.
Constructing Visual Objects. Brain and Cognitive Sciences, Massachusetts Institute of Technology.
Constructing Visual Objects. Cognitive Science Symposium, UC Riverside.
Visual Object Recognition. Neuroscience Symposium, The MITRE Corporation, McLean, Virginia.
Visual Object Recognition. George Washington University, District of Columbia. (Spring)
Visual Intelligence. Graduate School of Management, UC Irvine.
Visual Intelligence. George Washington University, District of Columbia. (Fall)

1999 Visual Intelligence. Department of Mathematics, UCLA.
Visual Intelligence. New England Complex Systems Institute: Managing the Complex. Boston, Massachusetts.
Visual Intelligence. Bard College. Annandale-on-Hudson, New York.
Visual Intelligence. UC Irvine Faculty Associates.
Seeing Digital: The Synergy of Human Senses and Digital Technology. The Franke Institute for the Humanities, University of Chicago.
Vision and Bayesian Inference. DARPA/ISO. Airlie, Virginia.

Invited Lectures

2000 Visual Intelligence. Department of Mathematics, UCI.
Visual Intelligence. Skidmore College. Saratoga Springs, New York.
Face Perception. Skidmore College. Saratoga Springs, New York.
Object Recognition. Skidmore College. Saratoga Springs, New York.
Visual Intelligence. American Philosophical Association. Albuquerque, New Mexico.
Visual Intelligence. Timberland Company. Stratham, New Hampshire.
Visual Intelligence. Hedrick Hall, UCLA.

2001 Visual Intelligence. Neurosciences and Psychology, Johns Hopkins University.
Independent Component Analysis and Object Detection. Boeing Aircraft, Saint Louis.
Visual Intelligence. Sigma Xi Society, UC Riverside.
Visual Intelligence. Skeptics Society. UCI.
Mereology of Visual Form. IWVF4. Capri, Italy.
Visual Intelligence. Minary Conference on Humanities and Neuroscience. Dartmouth College.

2002 Face Attention. Western Psychological Association, Irvine.
Face Attention. Cognitive Sciences Conference, CSU Long Beach.
Perceptions and realities. UCI UROP Symposium Keynote Address.
Face Attention. Mitteleuropa Foundation Conference: "The Legacy of Kanizsa," Bolzano, Italy.
Visual Intelligence. The Exploration Place. Wichita, Kansas.

2003 Visual Intelligence. Regents Point, Irvine.
Attention and Face Perception. American Psychological Society Annual Convention, Atlanta.
Brain Imaging Studies of Face Perception. UC Irvine.

2004 Visual Intelligence. Sole Technology, Inc., Lake Forest, CA.
Ellipsoidal Basis Function Networks for Classification. Navy NSWC, Panama City, Florida.
Is Spectrum Inversion Possible? The Scrambling Lemma. Inst. Math. Behav. Sci., UC Irvine.
Visual Intelligence. Kiel University, Germany.
Is Spectrum Inversion Possible? The Scrambling Lemma. Kiel University, Germany.
Visual Intelligence. Paderborn University–Hella LLAB Summerschool, Germany.

2005 Visual Intelligence. Social Sciences Dinner Club, UCI.
Visual Intelligence. Annenberg House, USC.
Ellipsoidal Basis Function Networks for Classification. Boeing Aircraft, St. Louis.
Visual Intelligence. Ophthalmology Grand Rounds, UCI Medical Center, Orange, CA.
Neural Nets for Detection and Classification. Lockheed Martin, Long Island, NY.
Perception and Reality. Soka University, Aliso Viejo, CA.
Human Vision and Automotive Lighting. Paderborn University–Hella LLAB Summerschool, Germany.

2006 Perception, Evolution, and the Mind-Body Problem. Psychology Students Association, UCI.
Visual Intelligence. FUSION Conference, UCI.
Visual Intelligence. Campus Village Student Housing, UC Irvine.
Visual Intelligence. Regents Scholars Association, UCI.
Perception, Evolution, and the Mind-Body Problem. Future Salon, UCLA.
Conscious Realism. Toward a Science of Consciousness Conference 2006. Tucson.
Perception Evolution, and the Mind-Body Problem. Soka University, Aliso Viejo, CA.
Perception Evolution, and the Mind-Body Problem. Brain & Cognitive Sciences, MIT.
Perception Evolution, and the Mind-Body Problem. Inst. Math. Behav. Sci., UC Irvine.
Visual Intelligence. Bahai Conference on Evolution of Consciousness. San Francisco.
Human Vision and the Physical World. Paderborn University–Hella LLAB Summerschool, Germany.
Physics From Consciousness. Inst. Math. Behav. Sci., UC Irvine.
Niche, User Interface, and Interstellar Communication. American Anthropological Association, San Jose.
Would ETI Understand Our Pictures? SETI Institute, Mountain View, CA.

Invited Lectures

2007 Vision and the World. Perception of Perception Conference, Exposition Park, USC.
Visual Intelligence. Perception of Perception Conference, Velaslavasay Panorama, USC.
The User-Interface Theory of Perception. Humanitech Conference on Text & Image, UCI.
Conscious Realism. Philosophy & Science Quarterly Lecture Series, UCI.
Conscious Realism. "News 21," Annenberg School for Communication, USC.
Interstellar Communication. Society for Psychological Anthropology, Manhattan Beach, CA.
Perception as a User Interface. Visualization in Scientific Practice Conf., University of Toronto.
Enhanced EBF Networks for ARPDD. Office of Naval Research, Arlington, VA.
Vision and Perception. UCI Eye Institute 2nd Annual Collaboration Colloquium..
Perception and Consciousness. Psychology Students Association, UCI.
Neural Nets for Detection and Classification. Lockheed Martin, Long Island, NY.
Consciousness Is Fundamental. Five day workshop. Esalen Institute, Big Sur, CA.
Visual Intelligence. Arroyo Vista Student Housing, UC Irvine.

2008 Visual Intelligence. Campus Village Student Housing, UC Irvine.
Automated Periscope Detection Using Radar. Naval Research Labs, Washington, DC.
Visual Intelligence. Regents Scholars Association, UCI.
Visual Intelligence. VF Corporation. The Presidio, San Francisco.
Visual Perception of Objects and Events. HumaniTech Events Web Conference, UCI.
EBF Networks for ARPDD. Naval Research Labs, Washington, DC.
Quantum Cognitive Science. Inst. Math. Behav. Sci., UC Irvine.
Visual Intelligence. VF Outdoor, Inc. San Leandro, CA.
Particle Filters for Geophysical Aided Navigation. Lockheed Martin, Long Island, NY.
Consciousness Is Fundamental. Five day workshop. Esalen Institute, Big Sur, CA.
The User Interface Theory of Perception. Waldzell Meeting, Melk Abbey, Austria.
Consciousness Is Fundamental. Waldzell Meeting, Melk Abbey, Austria.
Visual Intelligence. VF Corporation Marketing Summit, Greensboro, North Carolina.
The Interface Theory of Perception. Università ca'Foscari Venezia, Venice, Italy.

2009 Automated Periscope Discrimination Using Radar. Naval Research Labs, Washington, DC.
How Do We See? How Can We Visualize? Center for Transformative Scholarship, USC.
The Interface Theory of Perception. Psychology Department, UC Santa Barbara.
The Interface Theory of Perception. Mellon Workshop on Science and the Arts, UC Riverside.
Visual Intelligence & Marketing. Procter & Gamble, *Mind Matters* Meeting. Cincinnati, Ohio.
Consciousness. Parapsychological Association. University of Washington, Seattle.
Vision Science. VF Corporation, Greensboro, North Carolina.
Mind, Emotion, Connection. Workshop (with Rupert Sheldrake). Esalen, Big Sur, CA.
Interface Theory of Perception. Inside Edge Foundation for Education, University Club, UCI.
The Interface Theory of Perception. Psychology Department, UC San Diego.

2010 Research in Psychology. Psychology Student Association, UC Irvine.
Visual Intelligence: How We Create What We See. Irvine Presbyterian Church.
Visual Intelligence. VF Jeanswear, Kansas City, Kansas.
Visual Attention. VF Jeanswear, Kansas City, Kansas.
Natural Selection and Veridical Perception. Inst. Math. Behav. Sci., UC Irvine.
Artificial Neural Networks for ARPDD. Naval Research Labs, Washington, DC.
Interface Theory of Perception. International Remote Viewing Conference. Las Vegas, NV.
Mind, Emotion, Connection. Workshop (with Rupert Sheldrake). Esalen, Big Sur, CA.
Evolution of Shape Perception. Shape Workshop, Europ. Conf. Comput. Vis. Crete, Greece.
Evolutionary Psychology of Attractiveness. VF Corp. Workshop. Beverly-Wilshire, LA.

Invited Lectures

2011 Artificial Neural Networks for ARPDD. Naval Research Labs, Washington, DC.
How the mind creates the visual world. UCI CEO Roundtable Retreat. Carmel Valley, CA.
Face Perception. Procter & Gamble, Colerain Township, Ohio.
Color Vision. Procter & Gamble, Mason, Ohio.
Visual Science. Procter & Gamble, Cincinnati, Ohio.
Evolutionary Psychology. Procter & Gamble, Cincinnati, Ohio.
Visual Attention. Procter & Gamble, Cincinnati, Ohio.

2012 Visual Intelligence. American Association of University Women, Dana Point, CA.
Vision in Light of Evolution. Inst. Math. Behav. Sci., UC Irvine.
Visual Intelligence. Regents Point, Irvine CA.

2013 Does Evolution Favor True Perceptions? Keynote Talk, SPIE HVEI Conference, San Francisco.
Quantum Game Theory. "Quantum Thinking" Conference. Inst. Math. Behav. Sci., UC Irvine.
Perception, Evolution, Quantum Measurement. "Quantum Thinking" Conference. IMBS, UCI.
The Interface Theory of Perception. "Perception and Action in Immersive Worlds," Symposium of the Association for the Scientific Study of Consciousness, 17, San Diego.
Vision Science and Attractiveness. Wrangler Corporation. Greensboro, NC.
Vision Science and Attractiveness. VF Corporation. Greensboro, NC.
Consciousness and the Interface Theory of Perception. Sages & Scientists Symposium, Chopra Foundation, Costa del Sol, Carlsbad, CA.
Consciousness and the Interface Theory of Perception. SAND Conference, San Jose.
Evolutionary Psychology. 7 For All Mankind, Los Angeles.
Vision Science. 7 For All Mankind, Los Angeles.

2014 Conscious Agents: A Formal Theory of Consciousness, Cognitive Sciences, UC Irvine.
Conscious Agents: A Formal Theory of Consciousness, Plenary talk, Towards a Science of Consciousness Conference, Tucson.
Vision and Evolution. Lee Jeans. Kansas City.
Vision and Evolution. 7 For All Mankind, Los Angeles.
Entangling Conscious Agents. SAND Conference, San Jose.
Dissecting Free Will. SAND Conference, San Jose.
Conscious Agents: A Formal Theory of Consciousness, Mathematics Dept., CSU San Bernardino.

2015 Perception, evolution and consciousness. TED 2015, Vancouver.

Professional Service

1983 Referee: Journal of the Optical Society of America (JOSA).
Referee: ACM SIGGRAPH and SIGART Interdisciplinary Workshop on Motion.
1984 Referee: Perception; National Science Foundation (NSF); JOSA; MIT Press.
Session chair: Optical Society of America National Conference.
1985 Referee: Cognitive Sciences Society National Conference; NSF.
Referee: IEEE Pattern Analysis and Machine Intelligence (PAMI).
Panelist: MIT Corporation Visiting Committee.
1986 Referee: NSF; JOSA; Philosophy of Science; Cognition.
1987 Referee: NSF; JOSA; Air Force Office of Scientific Research (AFOSR).
1988 Referee: NSF; JOSA; PAMI.
Referee: International Journal of Computer Vision (IJCV).
Panelist: NSF Science and Technology Centers.
Site Visitor: NSF Science and Technology Centers.
Host: ONR contractors conference (with B. Bennett and M. Braunstein).
1989 Session chair and host: IEEE Workshop on Visual Motion, (host with M. Braunstein).
Referee: Journal of Mathematical Psychology; Psychological Review.
Referee: The Behavioral and Brain Sciences (BBS).
Referee: NSF; AFOSR.
1990 Associate: BBS.
Referee: JOSA; NSF; AFOSR; Academic Press; Perception & Psychophysics.
Referee: University of California Microelectronics Innovation and Computer Research Opportunities.
1991 Referee: AFOSR; NSF; JOSA; Journal of Visual Communication and Image Representation.
Referee: California Space Institute.
Editorial Board: Cognition; Associate: BBS.
1992 Editorial Board: Cognition; Associate: BBS.
Host: ONR Workshop on Image Representation in Biological and Machine Vision.
Referee: Psychological Review; PAMI; Science and Engineering Research Council.
Referee: Machine Vision and Applications; Perception; JOSA.
1993 Editorial Board: Cognition; Associate: BBS.
Referee: Journal of Experimental Psychology: Human Perception and Performance (JEP:HPP).
Referee: Perception & Psychophysics (P & P); Academic Press; IEEE Transactions in Medical Imaging.
1994 Editorial Board: Cognition; Associate: BBS.
Referee: Journal of Mathematical Psychology; JEP:HPP; Spatial Vision; Perception.
Referee: Psychological Review.
1995 Editorial Board: Cognition; Associate: BBS.
Editorial Board: Psychological Review.
Referee: Perception.
1996 Editorial Board: Cognition; Associate: BBS.
Editorial Board: Psychological Review.
Referee: Psychonomic Bulletin & Review; Journal of Mathematical Psychology.
Referee: NSF; Perception.
1997 Editorial Board: Cognition; Associate: BBS.
Editorial Board: Psychological Review.
Referee: P & P.
1998 Editorial Board: Cognition; Associate: BBS.
Referee: P & P; NSF; UC Digital Media Innovation Program.
Referee: Journal of Cognitive Neuropsychology.
1999 Editorial Board: Cognition; Associate: BBS.
Referee: Psychological Review; Perception; P & P.
Referee: Psychonomic Bulletin & Review; Cognitive Neuropsychology; NSF.
Reviewer: W.W. Norton & Co.

Professional Service

2000	Editorial Board: Cognition; Associate: BBS.
	Referee: Psychonomic Bulletin & Review; Nature; Journal of Mathematical Psychology.
	Reviewer: W.W. Norton & Co.
	Referee: Trends in Cognitive Science; P & P; University of Leuven; NSF.
	Program Committee: 7th Joint Symposium on Neural Computation, USC.
	Advisory Panel: National Imaging and Mapping Agency (NIMA).
2001	Editorial Board: Cognition; Associate: BBS.
	Program Committee: 8th Joint Symposium on Neural Computation, USC.
	Reviewer: W.W. Norton & Co.
	Referee: NSF; Perception; Journal of Consciousness Studies.
	Created Illusions Exhibit for Smithsonian, Washington DC (with student Jason Thornton).
2002	Editorial Board: Cognition; Associate: BBS.
	Referee: Perception; Psychological Review; NSF; P & P.
2003	Associate: BBS; Reviewer: Blackwell Publishers.
	Referee: Journal of Cognitive Neuroscience; Perception; P & P.
	Referee: Cognition; Psychological Science; JEP:HPP.
2004	Associate: BBS.
	Referee: Psychological Review; Cognition.
2005	Associate: BBS; Reviewer: W.W. Norton & Co..
	Referee: P & P; JEP: General; Consciousness & Cognition.
	Referee: Cognition; Visual Cognition; Psychological Review.
	Referee: Journal of Experimental Child Psychology.
2006	Associate: BBS; Referee: Consciousness & Cognition.
	Referee: Psychological Review; Theory & Psychology; PNAS.
	Reviewer: Palgrave Macmillan; Journal of Consciousness Studies.
2007	Associate: BBS; Referee: Consciousness & Cognition.
	Referee: Theory & Psychology; Psychological Bulletin & Review; Vision Research.
	Referee: Psychological Review; Philosophical Psychology.
	Program Committee: Mathematics and Vision Conference, IMBS, UC Irvine.
2008	Associate: BBS; Referee: Philosophical Psychology.
2009	Associate: BBS; Reviewer: Sage Encyclopedia of Perception.
	Reviewer: Sociovisual Perspective: Vision and the Forms of the Human Past.
	Referee: Consciousness & Cognition; Philosophy of Science.
2010	Associate: BBS; Reviewer: Seeing and Perceiving.
2011	Associate: BBS; Reviewer: Seeing and Perceiving.
2012	Associate: BBS; Reviewer: Psychological Science; Perception.
2013	Associate: BBS; Reviewer: Psychological Science; Cognition.
2014	Associate: BBS; Reviewer: Cognition and Emotion; Reviewer: MIT Press.

University Service

1983 – 1984	Campus Computer Evaluation Committee.
	Graduate Committee, School of Social Sciences.
	Computing Committee, School of Social Sciences.
	Graduate Admissions, Cognitive Science.
	Faculty Search Committee, Cognitive Science.
1984 – 1985	Graduate Admissions, Cognitive Science.
1985 – 1986	School of Social Sciences Merit and Promotions.
	Graduate Admissions, Cognitive Science.
1986 – 1987	Chair, Faculty Search Committee, Cognitive Science.
	Graduate Admissions, Cognitive Science.
1987 – 1988	Senate Committee on Research.
	Graduate Admissions, Cognitive Science.
	Faculty Search Committee, Cognitive Science.
	Ad hoc tenure review committee.
1988 – 1989	Senate Committee on Research.
	Graduate Admissions, Cognitive Science.
	Faculty Search Committee, Cognitive Science.
	Chair, Committee for Review of ITS.
	Search Committee for Vice-Chancellor of Research and Graduate Studies.
1989 – 1990	Senate Committee on Research.
	Graduate Admissions, Cognitive Science.
	Chair, Committee for Review of CNLM.
1990 – 1991	Sabbatical: Fall and Winter.
	Computer Acquisition Commmittee of the IRU in Mathematical Behavioral Sciences.
	Computer Administration Commmittee of the IRU in Mathematical Behavioral Sciences.
1991 – 1992	Chair, Graduate Committee of Cognitive Science.
	Computer Administration Commmittee of the IRU in Mathematical Behavioral Sciences.
	Senate Ad Hoc Committee for Review of Teaching Loads.
	$100K Committee.
1992 – 1993	Chair, Graduate Committee of Cognitive Science.
	Computer Administration Commmittee of the IRU in Mathematical Behavioral Sciences.
	Chair, Graduate Fellowship Committee for Social Sciences.
	Acting Chair, Department of Cognitive Science (spring quarter).
1993 – 1994	Chair, Graduate Committee of Cognitive Science.
	Chair, Graduate Fellowship Committee for Social Sciences.
	Executive Committee of the School of Social Sciences.
	Ad Hoc Committee for CAP.
1994 – 1995	Chair, Graduate Committee of Cognitive Science.
	Chair, Faculty Search Committee, Cognitive Science.
	Chair, Ad Hoc Personnel Committee for School of Social Sciences.
	Executive Committee of the School of Social Sciences.
1995 – 1996	Sabbatical and leave.
1996 – 1997	Undergraduate Research Opportunity Program, Faculty Advisory Committee.
	Ad Hoc University Committee.
1997 – 1998	Undergraduate Research Opportunity Program, Faculty Advisory Committee.
	Member of Formal Hearing Panel for Tenure Grievance.
	Neuroscience Webpage Committee.
1998 – 1999	Undergraduate Research Opportunity Program, Faculty Advisory Committee.
	Committee on Priviledge and Tenure.
	Member of Ad Hoc Panel for Tenure Appointment.
	Neuroscience Webpage Committee.
	Preliminary Investigation Committee for CPT

University Service

1999 – 2000	Undergraduate Research Opportunity Program, Faculty Advisory Committee. (Fall)
	Committee on Priviledge and Tenure. (Fall)
2000 – 2001	Committee on Priviledge and Tenure.
	Preliminary Investigation Committee for CPT (twice)
	Cognitive Science Web Page Revision Committee.
	Undergraduate Research Opportunity Program, Faculty Advisory Committee.
	Ad Hoc Tenure Review Committee.
2001 – 2002	Undergraduate Research Opportunity Program, Faculty Advisory Committee.
	Cognitive Science Faculty Recruitment Committee.
	Faculty Panelist for School of Social Sciences Honors Experience recruitment.
2002 – 2003	Undergraduate Research Opportunity Program, Faculty Advisory Committee.
	Referee: Southern California Junior Science and Humanities Symposium.
	Member of UCI Task Force on Undergraduate Education.
	Chair of UCI Working Group on Undergraduate Research.
	Chair of Ad Hoc Committee for CAP.
2003 – 2004	Undergraduate Research Opportunity Program, Faculty Advisory Committee.
	Member of UCI Task Force on Undergraduate Education.
	Chair of UCI Working Group on Undergraduate Research.
	Cognitive Science Faculty Recruitment Committee.
	Session Moderator, 2004 UROP Research Symposium.
	Jack Yellott Scholarship Award Committee.
2004 – 2005	Undergraduate Research Opportunity Program, Faculty Advisory Committee.
	Member of UCI Social Sciences Faculty Mentoring Program.
	Session Moderator, 2005 UROP Research Symposium.
2005 – 2006	Undergraduate Research Opportunity Program, Faculty Advisory Committee.
	Member of UCI Social Sciences Faculty Mentoring Program.
2006 – 2007	Undergraduate Research Opportunity Program, Faculty Advisory Committee.
	Member of UCI Social Sciences Faculty Mentoring Program.
2007 – 2008	Undergraduate Research Opportunity Program, Faculty Advisory Committee.
	Member of UCI Social Sciences Faculty Mentoring Program.
	School of Social Sciences Executive Committee.
	UCI Council on Planning and Budget.
2008 – 2009	School of Social Sciences Executive Committee.
	UCI Council on Planning and Budget.
	UCI Academic Planning Group.
	Special Senate Committee on Diversity.
	Special Committee for the Review of Lower- and Upper-Division Writing at UC Irvine.
	Department of Cognitive Sciences Jack Yellott Award Committee.
2009 – 2010	Sabbatical.
2010 – 2011	Undergraduate Curriculum Director, Cognitive Sciences.
	Jack Yellott Scholarship Award Committee.
	Falmagne Dissertation Award Committee.
2011 – 2012	Falmagne Dissertation Award Committee.
2012 – 2013	Dean Recruitment Committee for Paul Merage School of Business.
	Falmagne Dissertation Award Committee.
2014 – 2015	Social Sciences Representative to Academic Senate.
	External Review Committee: UCSD Cognitive Science Undergraduate Program.

Photography

2012 3rd Place, First International Juried Competition and Exhibit "The Magic of Point Lobos," Carmel Art Institute, Carmel, CA, 28 September – 18 October. Photo appears in *Point Lobos Magazine,* Volume 36, 4, 13.

Honorable Mention, 9th Annual National Natural Landmarks Photo Contest. Photo appears in the National Natural Landmarks 2013 Calendar.

2013 International Juried Competition and Exhibit "Along Junipero Serra's Path: California Missions and Presidios," Carmel Art Institute, Carmel, CA, 28 March – 19 April.

Exhibit in Juried Competition "Nature of Water". Wildling Museum. Solvang, CA.