

Curriculum Vita
Jeffrey D. Schall
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Education

1986 Ph.D., Anatomy, University of Utah, Salt Lake City, Utah.
1982 B.S.Chem., Chemistry, University of Denver, Denver, Colorado.

Scholastic and Professional Distinction

2004 Fellow of the Association of Psychological Science
2002 Elected into International Neuropsychology Symposium
2001 Ellen Gregg Ingalls Award for Excellence in Classroom Teaching
1998 Troland Research Award, National Academy of Sciences
1997-2000 Investigator Award, McKnight Endowment Fund for Neuroscience
1990-1992 Alfred P. Sloan Research Fellow
1987 Association of Anatomy Chairmen Outstanding Dissertation Award Finalist,
American Association of Anatomists.
1986 James W. Prahl Memorial Award for the Outstanding Graduate Student,
University of Utah School of Medicine.
1986 Phi Kappa Phi, University of Utah.
1984 Graduate Research Fellow, University of Utah.
1982 Phi Beta Kappa, University of Denver.
1980 University Scholar, University of Denver.

Professional Experience

2003 - E. Bronson Ingram Professor of Neuroscience, Vanderbilt University
2000- Director, Center for Integrative & Cognitive Neuroscience
1999- Professor, Department of Psychology, Vanderbilt University
1998- Director, Vanderbilt Vision Research Center
1998- Director, Vision Training Program
1995-1999 Associate Professor, Department of Psychology, Vanderbilt University
1990- Kennedy Center Investigator
1989-1995 Assistant Professor, Department of Psychology, Vanderbilt University
1986-1989 Postdoctoral Fellow, Department of Brain & Cognitive Sciences, Massachusetts
Institute of Technology, Cambridge, Massachusetts, P.H. Schiller, Ph.D.
1982-1986 Research Associate, Department of Anatomy, University of Utah, Salt Lake City,
Utah, A.G. Leventhal, Ph.D.

- 1981-1982 Research Assistant, Brain Research Laboratory, National Jewish Hospital and Asthma Center, Denver, Colorado, D.W. Shucard, Ph.D.
- 1980-1982 Research Assistant, Physiological Psychology Laboratory, Department of Psychology, University of Denver, Denver, Colorado, J.A. Trowill, Ph.D., and M.L. Laudenslager, Ph.D.

Funding

- 1986-1989 National Research Service Award, National Eye Institute, EY05959, The Role of the Supplementary Motor Area in Eye Movements, \$63,996 total costs for 3 years.
- 1990-1992 Alfred P. Sloan Research Fellowship, \$25,000 total costs
- 1991-1993 P.I., McDonnell-Pew Program in Cognitive Neuroscience, 90-39, Neural Correlates of Directed Visual Attention in Visuomotor Cortex of Macaque Monkeys, \$60,000 total costs
- 1991-1996 P.I., National Eye Institute, R01-EY08890, Saccade Target Selection: Frontal Cortex, \$554,169 total costs
- 1993 P.I., University Research Council, Support for Behavioral Physiology Experiments, \$6,013
- 1993-1996 Sponsor, Kirk Thompson, NRSA F32-EY06495, National Eye Institute, Thalamocortical Transformations: Visuomotor Thalamus, \$75,900 total costs
- 1993-1996 Sponsor, Kirk Thompson, McDonnell-Pew Program in Cognitive Neuroscience, Neural Correlates of Visual Awareness, \$90,000 total costs
- 1994-1995 Preceptor, Doug P. Hanes, T32-EY07135 National Eye Institute, Training Grant in Vision Research.
- 1995-1998 Sponsor, Doug Hanes, NRSA F31-MH11178, National Institute of Mental Health, Regulation of Saccade Initiation: Frontal Cortex \$39,024
- 1995-1996 Neuroscience module director, Howard Hughes Medical Institute Undergraduate Biological Sciences Education Program (71195-513803), \$76,100 direct costs (supplemented by \$32,000 from College of Arts & Sciences)
- 1996-2000 P.I., National Eye Institute, R01-EY08890 renewal, Saccade Target Selection: Frontal Cortex, \$722,735 total costs
- 1996-2001 P.I., National Institute of Mental Health, R01-MH55806, Neural Control of Voluntary Movement, \$838,792 total costs
- 1997-2000 Investigator Award, McKnight Endowment Fund for Neuroscience, Neural Selection and Control of Visually Guided Action \$150,000 total costs
- 1998-2003 P.I., National Eye Institute, T32-EY07135, Training Grant in Vision Research, \$828,258 total direct costs
- 1998-2003 P.I., National Eye Institute, P30-EY08126, Core Grant in Vision Research, \$1,892,148 total costs
- 2000-2005 P.I., National Eye Institute, R01-EY08890, Saccade Target Selection: Frontal Cortex, \$1,868,460 total costs

- 2001-2006 P.I., National Institute of Mental Health, R01-MH55806, Neural Control of Voluntary Movement, \$1,756,946 total costs
- 2002-2005 Sponsor, Stephanie Shorter-Jacobi, NRSA F32-EY14502, National Eye Institute, Neural Control of Orienting by Macaque Frontal Eye Field
- 2002-2005 coP.I. (with Gordon Logan and Tom Palmeri), National Science Foundation BCS0218507, Stochastic Models of Executive Control in Monkeys and Humans, Joint NSF/NIH Initiative to Support Collaborative Research in Computational Neuroscience, \$756,181 total costs
- 2003-2006 Sponsor, Geoff Woodman, NRSA F32 EY015043, National Eye Institute, Neural Correlates of Visual Object-Substitution Masking
- 2004-2007 coSponsor (with Tom Palmeri), Leanne Boucher, NRSA F32EY016679, National Eye Institute, Modeling Interactive Motor Processes
- 2004-2009 P.I., National Eye Institute, T32-EY07135, Training Grant in Vision Research, \$2,832,395 total costs
- 2004-2009 P.I., National Eye Institute, P30-EY08126, Core Grant in Vision Research, \$3,020,000 total costs
- 2005-2010 P.I., National Eye Institute, R01-EY08890, Saccade Target Selection: Frontal Cortex, \$1,868,460 total costs
- 2006-2008 Sponsor, Melanie Leslie, NRSA F32EY017765, National Eye Institute, Ensemble Neural Monitoring and Saccadic Control
- 2006-2011 P.I., National Institute of Mental Health, R01-MH55806, Neural Control of Voluntary Movement, approved for funding \$1,726,688 total costs
- 2007-2010 coPI with Gordon Logan, Air Force Office of Scientific Research, FA9550-07-1-0192, Modeling the Role of Priming in Executive Control: Cognitive and Neural Constraints, \$707,000 total costs
- 2007-2010 MacArthur Law and Neuroscience Project

Teaching Experience

Neuroscience & Law (with Owen Jones of VU School of Law), College Scholars Program – Neuroethics, Methods in Behavioral Neuroscience, Movement, Introduction to Neuroscience, Seminar in Physiological Psychology: Psychology of Human Motor Control, Brain & Behavior, Freshman Seminar, Seminar in Physiological Psychology: Current Issues in Neuroscience, Seminar in Physiological Psychology: Eye Movements and Attention, Brain & Behavior, College Scholars Program – Seminar in Neuroscience

Postdoctoral fellows and associates supervised

- 1992-2000 Kirk G. Thompson, NEI Research Fellow, Research Assistant Professor currently Perception and Action Section Head, Laboratory for Sensorimotor Research, NEI, NIH, Bethesda, Maryland
- 1997-2000 Chenchal Rao Subraveti, Research Associate currently computer programmer, Vanderbilt University Medical Center

- 1998-2000 Tracy Taylor, NSERC Fellow
currently Associate Professor of Psychology, Dalhousie University
- 1998-2003 Veit Stuphorn, Research Fellow, DFG Forschungsstipendium
currently Assistant Professor, Department of Psychological and Brain Sciences,
Johns Hopkins University
- 1998-2001 Aditya Murthy, Research Associate
currently Assistant Professor, National Brain Research Centre, Gurgaon Haryana,
India
- 2000-2001 Joshua Brown, Research Associate
currently Assistant Professor, Department of Psychological and Brain
Sciences, Indiana University
- 2002 -2003 Chi-Hung Juan, Research Associate
currently Assistant Professor, Institute of Cognitive Neuroscience, National
Central University, Taiwan
- 2001 - 2006 Stephanie Shorter-Jacobi, Research Associate
Research Associate, Institute for Extraordinary Living, Kripalu Center
- 2002 - 2007 Geoff Woodman, NEI Research Fellow
currently Assistant Professor, Department of Psychology, Vanderbilt University
- 2005 - 2008 Melanie Leslie, NEI Research Fellow
currently Research Coordinator, Department of Psychology & Human
Development, Vanderbilt University
- 2003 - Leanne Boucher, NEI Research Fellow
2004 - Pierre Pouget, Research Associate
2007 - Richard Heitz, Research Associate
2007 - Supriya Ray, Research Associate

Graduate students supervised

- 1991-1997 Doug Hanes, Department of Psychology Graduate Program.
Intramural fellow with Robert Wurtz in the Laboratory for Sensorimotor
Research, NIH
Trial consultant, Logic Limited Partnership
- 1994-1999 Narcisse Bichot, Department of Psychology Graduate Program
Currently Research Scientist, Massachusetts Institute of Technology
- 1999-2003 Takashi Sato, Department of Psychology Graduate Program
Currently postdoctoral fellow with Karel Svoboda, Janelia Farm Research Center

- 2001-2003 Shigehiko Ito, Department of Psychology Graduate Program
Currently an Associate at White & Case LLP
- 2002- Erik Emeric, Neuroscience Graduate Program
- 2003-2006 Corrie Camalier, Neuroscience Graduate Program
Currently being trained by Troy Hackett and Jon Kaas
- 2006- Matthew Nelson, California Institute of Technology Graduate Program
- 2006- Katherine Thakkar (with Sohee Park), Psychological Sciences Graduate Program
- 2006- Jeremiah Cohen, Neuroscience Graduate Program
- 2007- Rebecca St. Clair (with Geoff Woodman), Psychological Sciences Graduate Program
- 2007- Braden Purcell (with Tom Palmeri), Psychological Sciences Graduate Program

Professional Service - Manuscript Review

- 2002- Editorial Board, *Journal of Neurophysiology*
- 2001-2006 Associate Editor, *Journal of Neuroscience*

Reviewer for *Cerebral Cortex*, *Cognitive Psychology*, *European Journal of Neuroscience*, *Experimental Brain Research*, *Journal of Experimental Psychology: General*, *Journal of Experimental Psychology: Human Perception and Performance*, *Nature*, *Nature Neuroscience*, *Neuroimage*, *Neuron*, *Proceedings of the National Academy of Sciences*, *Public Library of Science*, *Science*, *Trends in Cognitive Science*

Professional Service - Grant Review

- 2007 - Chair, NIH Central Visual Processing Study Section
- 2005 - NIH Central Visual Processing Study Section
- 2003, 2004 National Eye Institute, Special Emphasis Panel to review R01 grants
- 2002 National Eye Institute, Special Emphasis Panel to review Core Grants.
- 2000, 2001 National Institute of Mental Health, Neuroscience and Behavioral Science Review Branch, Silvio Conte Center Grants
- 1999, 2001 National Eye Institute, Special Emphasis Panel to review Institutional Training Grants.
- 1999, 2001 National Science Foundation, Sensory Systems
- 1998 National Eye Institute, Mentored Clinical Scientist Development Award
- 1998 National Science Foundation, Division of Integrative Biology and Neuroscience
- 1997 National Science Foundation, Behavioral Neuroscience
- 1996 The Wellcome Trust
- 1996 The Israel Science Foundation
- 1996 Department of Veterans Affairs Merit Review application for the VA Medical Research Service
- 1993 NIH Neurological Disorders Program Project Review B Committee
- 1993 Ad hoc, NIH Behavioral and Neurosciences Study Section 1

Professional Service - Other

- 2003 Advisory Panel for 5 year Strategic Plan for Strabismus, Amblyopia and Visual Processing, National Eye Institute
- 2003 Advisory Board, Silvio O. Conte Center for Neuroscience Research: Cognitive and Neural Mechanisms of Conflict and Control, Princeton University
- 2001 I-RITE, Stanford University
- 2001- Program committee, Vision Science Society
- 1992 Judge for 43rd International Science and Engineering Fair, Nashville, TN
- 1988 Participated in the Science-by-Mail program for school children, Boston Science Museum.
- 1984, '85, '86 Judge for Intermountain Junior Science and Humanities Symposium, University of Utah in cooperation with U.S. Army Research Office and the Academy of Applied Science.

Department, College & University Service

- 2006- Board of Advisors for the Vanderbilt University Center for Ethics
- 2004- Internal Advisory Committee, Vanderbilt University Institute of Imaging Science
- 2003- Committee on Moral Reasoning, Vanderbilt University
- 2003- Kennedy Center Core Advisory Committee
- 2002 *Ad hoc* committee on Undergraduate Research, Vanderbilt University
- 2002- Advisory Committee for Interdisciplinary Major in Communication of Science, Engineering and Technology, Vanderbilt University
- 2001- Faculty Advisory Committee for Large Animals, Vanderbilt University
- 2001 Search committee for the Chair, Department of Ophthalmology & Visual Science, Vanderbilt University
- 2001- 2008 Discovery Grant Review Committee, Vanderbilt University
- 2000- Director, *Center for Integrative & Cognitive Neuroscience*
- 2000-2001 Search committee, Division of Animal Care clinical veterinarian
- 1999-2003 Director, Sensory Sciences and Neural Plasticity program, Kennedy Center
- 1999- Neuroscience Council, Advisory Committee for Vanderbilt Brain Institute
- 1999- Neuroscience Graduate Program Faculty Advisory Committee
- 1999-2001 Organizing Committee for Vanderbilt University Conference on Genomics, May 2001
- 1999-2000 Kennedy Center Research Associate Review Committee
- 1999 College of Arts & Science, Admissions Committee
- 1998-1999 Chair, Committee to recommend a Center for Integrative and Cognitive Neuroscience, Vanderbilt University
- 1998-1999 Search Committee for Associate Provost for Research, Vanderbilt University
- 1998 Transinstitutional Research Committee, Vanderbilt University
- 1998- 2003 Kennedy Center Coordinating Committee
- 1998 Participant in workshop “Worlds Apart - Chronicling Discovery”, organized by Rick Chappell and Jim Hartz, sponsored by the First Amendment Center and the Office for Media Relations, Vanderbilt University

- 1996-1997 Committee to Develop Undergraduate Neuroscience Major, College of Arts & Sciences, Vanderbilt University
- 1996-1997 Vanderbilt University Research Strategy and Policy Committee
- 1994-2000 Vanderbilt University Animal Care Committee
- 1993-2000 Director of Department of Psychology Animal Facility, Vanderbilt University.
- 1993 Department of Psychology ad hoc Committee on Faculty Recruitment
- 1990- Graduate Studies Committee, Department of Psychology, Vanderbilt University.
- 1989, '90, '91 Clinical Faculty Search Committee, Department of Psychology, Vanderbilt University.

Professional Affiliations

- 2003- Association of Psychological Science
- 2002- American Physiological Society
- 2001- International Neuropsychology Symposium
- 1995- Neural Control of Movement
- 1993- Cognitive Neuroscience Society
- 1986- American Association for the Advancement of Science
- 1984- Association for Research in Vision and Ophthalmology
- 1983- Society for Neuroscience

Peer-reviewed Publications

- 1) Leventhal, A.G. & **J.D. Schall** (1983) Structural basis of orientation sensitivity in cat retinal ganglion cells. *Journal of Comparative Neurology* 220:465-475.
- 2) Leventhal, A.G., **J.D. Schall** & W. Wallace (1984) Relationship between preferred orientation and receptive field position of neurons in extrastriate cortex (area 19) in the cat. *Journal of Comparative Neurology* 222:445-451.
- 3) Vitek, D.J., **J.D. Schall** & A.G. Leventhal (1985) Morphology, central projections and dendritic field orientation of retinal ganglion cells in the ferret. *Journal of Comparative Neurology* 241:1-11.
- 4) **Schall, J.D.**, V.H. Perry & A.G. Leventhal (1986) Retinal ganglion cell dendritic fields in old-world monkeys are oriented radially. *Brain Research* 368:18-23.
- 5) **Schall, J.D.**, D.J. Vitek & A.G. Leventhal (1986) Retinal constraints on orientation specificity in cat visual cortex. *Journal of Neuroscience* 6:823-836.
- 6) **Schall, J.D.** & A.G. Leventhal (1987) Relationships between ganglion cell dendritic structure and retinal topography in the cat. *Journal of Comparative Neurology* 257:149-159.
- 7) **Schall, J.D.**, V.H. Perry & A.G. Leventhal (1987) Ganglion cell dendritic structure and retinal topography in the rat. *Journal of Comparative Neurology* 257:160-165.
- 8) Leventhal, A.G., **J.D. Schall** & S.J. Ault (1988) Extrinsic determinants of retinal ganglion cell morphology in the cat. *Journal of Neuroscience* 8:2028-2038.
- 9) Leventhal, A.G., **J.D. Schall**, S.J. Ault, J.M. Provis & D.J. Vitek (1988) Class specific cell death shapes the distribution and pattern of central projection of cat retinal ganglion cells. *Journal of Neuroscience* 8:2011-2027.

- 10) **Schall, J.D.**, S.J. Ault, D.J. Vitek & A.G. Leventhal (1988) Experimental induction of an ipsilateral visual field representation in the visual pathway of normally pigmented cats. *Journal of Neuroscience* 8:2039-2048.
- 11) Logothetis, N.K. and **J.D. Schall** (1989) Neuronal correlates of subjective visual perception. *Science* 245:761-763
- 12) Logothetis, N.K. and **J.D. Schall** (1990) Binocular motion rivalry in macaque monkeys: Eye dominance and tracking eye movements. *Vision Research* 30:1409-1419.
- 13) Garraghty, P.E., **J.D. Schall** and J.H. Kaas (1990) Normal somatotopy in SI of tyrosinase-negative albino cats. *Brain Research* 536:315-317.
- 14) **Schall, J.D.** (1991) Neuronal activity related to visually guided saccadic eye movements in the supplementary motor area of rhesus monkeys. *Journal of Neurophysiology* 66:530-558.
- 15) **Schall, J.D.** (1991) Neuronal activity related to visually guided saccades in the frontal eye fields of rhesus monkeys: Comparison with supplementary eye fields. *Journal of Neurophysiology* 66:559-579.
- 16) Parthasarathy, H.B., **J.D. Schall** and A.M. Graybiel (1992) Distributed but convergent ordering of striatal projections: The frontal eye field and the supplementary eye field in the monkey. *Journal of Neuroscience* 12:4468-4488.
- 17) **Schall, J.D.**, A. Morel and J. Kaas (1993) Topography of supplementary eye field afferents to frontal eye field in macaque: Implications for mapping between saccade coordinate systems. *Visual Neuroscience* 10:385-393.
- 18) **Schall, J.D.**, M.R. Nawrot, R. Blake, K.P. Yu (1993) Visually guided attention is neutralized when informative cues are visible but unperceived. *Vision Research* 33:2057-2064.
- 19) **Schall, J.D.** and D.P. Hanes (1993) Neural basis of saccade target selection in frontal eye field during visual search. *Nature* 366:467-469.
- 20) Hanes, D.P., Thompson, K.G. and **J.D. Schall** (1995) Relationship of presaccadic activity in frontal eye field and supplementary eye field to saccade initiation in macaque: Poisson spike train analysis. *Experimental Brain Research* 103:85-96.
- 21) **Schall, J.D.**, A. Morel, D. King and J. Bullier (1995) Topography of visual cortical afferents to frontal eye field in macaque: Convergence and segregation of processing streams. *Journal of Neuroscience* 15:4464-4487.
- 22) Hanes, D.P. and **J.D. Schall** (1995) Countermanding saccades in macaque. *Visual Neuroscience* 12:929-937.
- 23) **Schall, J.D.**, D.P. Hanes, K.G. Thompson and D.J. King (1995) Saccade target selection in frontal eye field of macaque. I. Visual and premovement activation. *Journal of Neuroscience* 15:6905-6918.
- 24) Bichot, N.P., **J.D. Schall** and K.G. Thompson (1996) Visual feature selectivity in frontal eye fields induced by experience in mature macaques. *Nature* 381:697-699.
- 25) Hanes, D.P. and **J.D. Schall** (1996) Neural control of voluntary movement initiation. *Science* 274:427-430.
- 26) Thompson, K.G., D.P. Hanes, N.P. Bichot and **J.D. Schall** (1996) Perceptual and motor processing stages identified in the activity of macaque frontal eye field neurons during visual search. *Journal of Neurophysiology* 76:4040-4055.

- 27) Thompson, K.G., N.P. Bichot and **J.D. Schall** (1997) Dissociation of target selection from saccade planning in macaque frontal eye field. *Journal of Neurophysiology* 77:1046-1050.
- 28) Hanes, D.P., W.F. Patterson, **J.D. Schall** (1998) The role of frontal eye field in countermanding saccades: Visual, movement and fixation activity. *Journal of Neurophysiology* 79:817-834.
- 29) Schmolesky, M.T. Y.-C. Wang, D.P. Hanes, K.G. Thompson, S. Leutgeb, **J.D. Schall** and A.G. Leventhal (1998) Signal timing across the macaque visual system. *Journal of Neurophysiology* 79:3272-3278.
- 30) Bichot, N.P. and **J.D. Schall** (1999) Saccade target selection in macaque during feature and conjunction visual search. *Visual Neuroscience* 16:81-89.
- 31) Thompson, K.G. and **J.D. Schall** (1999) The detection of visual signals by macaque frontal eye field during masking. *Nature Neuroscience* 2:283-288.
- 32) Bichot, N.P. and **J.D. Schall** (1999) Effects of similarity and history on neural mechanisms of visual selection. *Nature Neuroscience* 2:549-554.
- 33) Thompson, K.G. and **J.D. Schall** (2000) Antecedents and correlates of visual detection and awareness in macaque prefrontal cortex. *Vision Research* 40:1523-1538.
- 34) Stuphorn V, Taylor TL, **Schall JD** (2000) Performance monitoring by supplementary eye field. *Nature* 408:857-860.
- 35) Bichot NP, Thompson KG, Rao SC, **Schall JD** (2001) Reliability of frontal eye field neurons signaling saccade targets during visual search. *Journal of Neuroscience* 21:713-725.
- 36) Bichot NP, Rao SC, **Schall JD** (2001) Continuous processing in macaque frontal cortex during visual search. *Neuropsychologia* 39:972-982.
- 37) Sato T, **Schall JD** (2001) Pre-excitatory pause in frontal eye field responses. *Experimental Brain Research* 139:53-58.
- 38) Sato T, Murthy A, Thompson KG, **Schall JD** (2001) Effect of search efficiency but not response interference on visual selection in frontal eye field. *Neuron* 30:583-591.
- 39) Murthy A, Thompson KG, **Schall JD** (2001) Dynamic dissociation of visual selection from saccade programming in frontal eye field. *Journal of Neurophysiology* 86:2634-2637.
- 40) Bichot NP, **Schall JD** (2002) Priming in macaque frontal cortex during popout visual search: feature-based facilitation and location-based inhibition of return. *Journal of Neuroscience* 22:4675-4685.
- 41) Sato T, Watanabe K, Thompson KG, **Schall JD** (2003) Effect of target-distractor similarity on FEF visual selection in the absence of the target. *Experimental Brain Research* 151:356-363.
- 42) Sato T, **Schall JD** (2003) Effects of stimulus-response compatibility on neural selection in frontal eye field. *Neuron* 38:637-648.
- 43) Ito S, Stuphorn V, Brown JW, **Schall JD** (2003) Performance monitoring by the anterior cingulate cortex during saccade countermanding. *Science* 302:120-122.
- 44) **Schall JD** (2004) On the role of frontal eye field in guiding attention and saccades. *Vision Research* 44:1453-1467.
- 45) **Schall JD**, Sato TR, Thompson KG, Vaughn AA, Juan C-H. (2004) Effects of search efficiency on surround suppression during visual selection in frontal eye field. *Journal of Neurophysiology* 91:2765-2769.

- 46) Ray S, **Schall JD**, Murthy A (2004) Programming of double-step saccade sequences: Modulation by cognitive control. *Vision Research* 44:2707-2718.
- 47) Juan C-H, Shorter-Jacobi SM, **Schall JD** (2004) Dissociation of spatial attention and saccade preparation. *Proceedings of the National Academy of Sciences* 101:15541-15544.
- 48) Pouget P, Emeric EE, Stuphorn V, Reis K, **Schall JD** (2005) Chronometry of visual responses in frontal eye field, supplementary eye field and anterior cingulate cortex. *Journal of Neurophysiology* 94:2086-2092.
- 49) Royal DW, Sary G, **Schall JD**, Casagrande VA. (2005) Correlates of motor planning and postsaccadic fixation in the macaque monkey lateral geniculate nucleus. *Experimental Brain Research* Sep 168:62-75.
- 50) Ruiz O, Royal DW, Sary G, Chen X, **Schall JD**, Casagrande VA. (2006) Low-threshold Ca^{2+} -associated bursts are rare events in the LGN of the awake behaving monkey. *Journal of Neurophysiology* 95:3401-3413
- 51) Stuphorn V, **Schall JD**. (2006) Executive control of countermanding saccades by the supplementary eye field. *Nature Neuroscience* 9:925-931.
- 52) Emeric EE, Brown JW, Carpenter RHS, Hanes DP, Harris R, Logan GD, Mashru RN, Paré M, Pouget P, Stuphorn V, Taylor TL, **Schall JD** (2007) Influence of history on saccade countermanding performance by humans and macaque monkeys. *Vision Research* 47:35-49
- 53) Murthy A, Ray S, Shorter-Jacobi SM, **Schall JD**, Thompson KG (2007) Frontal eye field contributions to rapid corrective saccades. *Journal of Neurophysiology* 97:1457-1469.
- 54) Boucher L, Logan GD, Palmeri TJ, **Schall JD** (2007) Inhibitory control in mind and brain: An interactive race model of countermanding saccades. *Psychological Review* 114:376-397.
- 55) Camalier, CR, A.Gotler, A.Murthy, K.G.Thompson, **J.D.Schall**, T.J.Palmeri, G.D.Logan. (2007) Dynamics of saccade target selection: Race model analysis of double step and search step saccade production in human and macaque. *Vision Research* 47:2187-2211.
- 56) Boucher L, Stuphorn V, Logan GD, **Schall JD**, Palmeri TJ (2007) Stopping eye and hand movements: Are the processes independent? *Perception & Psychophysics* 69:785-801
- 57) Woodman GF, Luck SJ, **Schall JD** (2007) The role of working memory representations in the control of attention. *Cerebral Cortex*. 17 Suppl 1:i118-24. (Invited for special issue on prefrontal cortex, working memory and flexible behavior, based on the May symposium in honor of Pat Goldman-Rakic).
- 58) Woodman GF, Kang M-S, Rossi, AF, **Schall JD** (2007) Nonhuman primate event-related potentials indexing covert shifts of attention. *Proceedings of the National Academy of Sciences* 104:15111-15116.
- 59) Cohen JY, Pouget P, Woodman GF, Subraveti CR, **Schall JD**, Rossi AF (2007) Difficulty of visual search modulates neuronal interactions and response variability in the frontal eye field. *Journal of Neurophysiology* 98:2580-2587.
- 60) Emeric EE, Brown JW, Leslie M, Pouget P, Stuphorn V, **Schall JD** (2008) Error-related local field potentials in the medial frontal cortex of primates. *Journal of Neurophysiology* 99:759-772.

- 61) Woodman GF, Kang M-S, Thompson KG, **Schall JD** (2008) Visual search efficiency modulates the beginning of response preparation: Neurophysiological evidence for discrete flow. *Psychological Research* 19:128-136..
- 62) Nelson MJ, Pouget P, Nilsen EA, Patten CD, **Schall JD** (2008) Signal distortion through metal microelectrode recording circuits and filters. *Journal of Neuroscience Methods* 169:141-157.
- 63) Pouget P, Stuphorn V, Chenchal SR, **Schall JD** (2007) Error monitoring by spike synchrony in supplementary eye field. *Journal of Neuroscience* (revised)
- 64) Brown JW, Hanes DP, Ruch KD, **Schall JD**, Stuphorn V (2006) Relation of frontal eye field activity to saccade initiation during a countermanding task. *Experimental Brain Research* (revised)
- 65) Stuphorn V, **Schall JD** (2006) Relationship of supplementary eye field to saccade initiation during a countermanding task: executive not immediate control. *Journal of Neurophysiology* (submitted)
- 66) Pouget P, Stepniewska I, Leslie MW, Emeric EE, Nelson MJ, **Schall JD**. (2007) Connectivity and cytoarchitecture of frontal eye field related to saccade target selection. *Cerebral Cortex* (submitted).

Reviews, Commentaries, & Chapters

- 1) **Schall, J.D.** (1986) review of *Pattern Recognition Mechanisms*, 1985, C. Chagas, R. Gattass & C. Gross (eds.) for *Journal of Electrophysiological Techniques* 14:77-78.
- 2) Leventhal, A.G. and **J.D. Schall** (1989) Extrinsic determinants of retinal ganglion cell development in cats and monkeys, in *Development of Vertebrate Retina*, B. Finlay & D.R. Sengelaub (eds.), Plenum Press, New York, pp 173-195.
- 3) Logothetis, N.K. and **J.D. Schall** (1989) Neuronal activity related to motion perception in the middle temporal visual area (MT) of the macaque, in *Proceedings of the Retina Research Foundation, vol 2. Neural Mechanisms of Visual Perception*. M.K. Lam and C.D. Gilbert (eds.), Portfolio, The Woodlands, Texas, pp 199-222.
- 4) **Schall, J.D.** (1991) Neuronal basis of saccadic eye movements, in *Vision and Visual Dysfunction. Volume 4: The Neural Basis of Visual Function*, A.G. Leventhal (ed.), Macmillan Press, London. pp 388-442.
- 5) **Schall, J.D.** and D.P. Hanes (1993) Saccade latency in context: Regulation of gaze behavior by supplementary eye field. Commentary on "Express saccades and visual attention" by B. Fischer & H. Weber *Behavioral and Brain Sciences* 16:588-589.
- 6) **Schall, J.D.** (1995) Neural basis of saccade target selection. *Reviews in the Neurosciences* 6:63-85.
- 7) **Schall, J.D.** (1995) Racing to explain procrastination. *Nature* 377:14-15.
- 8) Bullier, J., **J.D. Schall** and A. Morel (1996) Functional streams in occipital-frontal connections in the monkey. *Behavioral Brain Research* 76:89-97.
- 9) **Schall, J.D.** and D.P. Hanes (1997) Neurons and Reaction Times, reply to letters from M.G.H. Coles, from J.C. Lynch and from F. Richer & A. Achim regarding "Neural control of voluntary movement initiation". *Science* 275:144-145.

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- 11) **Schall, J.D.** and N.P. Bichot (1998) Neural correlates of visual and motor decision processes. *Current Opinion in Neurobiology* 8:211-217.
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- 88) Sherwood JM, P.Pouget, K.Thompson, S.Chenchal Rao, **J.D.Schall**. Evidence for ensemble coding in the macaque frontal eye field revealed through particle - clustering analysis. Program No. 590.7. 2005 Abstract Viewer/Itinerary Planner. Washington, DC: Society for Neuroscience
- 89) Woodman GF, M.Kang, A.F.Rossi, **J.D.Schall**. Comparative psychophysiology: macaque event - related potentials reveal anticipatory and stimulus - evoked components similar to those observed in humans. Program No. 821.1. 2005 Abstract Viewer/Itinerary Planner. Washington, DC: Society for Neuroscience
- 90) Woodman GF, Kang M, Sato TR, Thompson KG, **Schall JD**. (2006) Neurophysiological evidence for the discrete flow of information between stages of processing. Psychonomic Society, 47th Annual Meeting, Houston, Texas
- 91) G.F. Woodman, M. Kang, T.R. Sato, K.G. Thompson, **J.D. Schall** Visual search efficiency modulates the onset of response preparation in the frontal-eye field: neurophysiological evidence for discrete information flow between processing stages. Program No. 15.1. 2006 Neuroscience Meeting Planner. Atlanta, GA: Society for Neuroscience, 2006. Online.
- 92) L. Boucher, G.D. Logan, T.J. Palmeri, **J.D. Schall** Modeling trial history of saccade countermanding. Program No. 48.8. 2006 Neuroscience Meeting Planner. Atlanta, GA: Society for Neuroscience, 2006. Online.
- 93) M. Kang, **J.D. Schall**, G.F. Woodman. Electroencephalographic and local-field potential gamma band activity is not reliably observed during spatial working memory maintenance in macaque monkeys. Program No. 160.13. 2006 Neuroscience Meeting Planner. Atlanta, GA: Society for Neuroscience, 2006. Online.
- 94) D.W. Royal, P. Pouget, O. Ruiz, **J. Schall**, V. Casagrande. Receptive field mapping with local field potentials (LFPs) and single-unit activity (SUA) in macaque lateral geniculate nucleus (LGNd). Program No. 241.6. 2006 Neuroscience Meeting Planner. Atlanta, GA: Society for Neuroscience, 2006. Online.
- 95) P. Pouget, E.E. Emeric, M.T. Leslie, **J.D. Schall**. Dynamic relationship between spikes and field potentials in supplementary eye field of macaque monkeys during saccade countermanding. Program No. 439.18. 2006 Neuroscience Meeting Planner. Atlanta, GA: Society for Neuroscience, 2006. Online.
- 96) M.W. Leslie, E. Emeric, P. Pouget, **J.D. Schall** Supplementary eye field and adaptive control of saccade countermanding in macaque monkey. Program No. 439.19. 2006 Neuroscience Meeting Planner. Atlanta, GA: Society for Neuroscience, 2006. Online.

- 97) J.Y. Cohen, P. Pouget, G.F. Woodman, C. Rao, **J.D. Schall**, A.F. Rossi. Multivariate analysis of frontal eye field activity during visual search. Program No. 548.14. 2006 Neuroscience Meeting Planner. Atlanta, GA: Society for Neuroscience, 2006. Online.
- 98) E.E. Emeric, P. Pouget, M. Leslie, M. Kang, G.F. Woodman, **J.D. Schall**. Anterior cingulate local field potential delta and theta frequency bands are modulated by countermanding errors. Program No. 571.11. 2006 Neuroscience Meeting Planner. Atlanta, GA: Society for Neuroscience, 2006. Online.
- 99) M.J. Nelson, P. Pouget, **J.D. Schall**. Effect of electrode impedance on measurement of local field potentials in the supplementary eye field. Program No. 835.14. 2006 Neuroscience Meeting Planner. Atlanta, GA: Society for Neuroscience, 2006. Online.
- 100) L. Boucher, G.D. Logan, T.J. Palmeri, **J.D. Schall**. Interactive race model of the stopping mechanism for combined eye and hand movements. Program No. 618.2. 2007 Neuroscience Meeting Planner. San Diego, CA: Society for Neuroscience, 2007. Online.
- 101) P. Pouget, I. Stepniewska, M.W. Leslie, E.E. Emeric, M.J. Nelson, **J.D. Schall**, A neuroanatomical test of premotor theory of attention Program No. 19.1. 2007 Neuroscience Meeting Planner. San Diego, CA: Society for Neuroscience, 2007. Online.
- 102) M.W. Leslie, E. Emeric, P. Pouget, **J.D. Schall**. Local field potentials in supplementary eye field of macaque monkeys during a saccade stop signal task: Presaccadic potentials Program No. 398.10. 2007 Neuroscience Meeting Planner. San Diego, CA: Society for Neuroscience, 2007. Online.
- 103) E.E. Emeric, M. Leslie, P. Pouget, **J.D. Schall**. Local field potentials in supplementary eye field of macaque monkeys during a saccade stop signal task: Performance monitoring. Program No. 398.9. 2007 Neuroscience Meeting Planner. San Diego, CA: Society for Neuroscience, 2007. Online.
- 104) M.J. Nelson, L. Boucher, A. Murthy, K.G. Thompson, G.D. Logan, T.J. Palmeri, **J.D. Schall**. Executive control of search-step saccade performance investigated through trial history. Program No. 527.9. 2007 Neuroscience Meeting Planner. San Diego, CA: Society for Neuroscience, 2007. Online.
- 105) L.R. Pearson, **J.D. Schall**, G.D. Logan, T.J. Palmeri. Comparative accumulator modeling of the role of stopping in saccade behavioral switching Program No. 558.9. 2007 Neuroscience Meeting Planner. San Diego, CA: Society for Neuroscience, 2007. Online.
- 106) J.Y. Cohen, P. Pouget, G.F. Woodman, C.R. Subraveti, **J.D. Schall**, A.F. Rossi. Visual search difficulty modulates the variability of spike timing in the frontal eye field. Program No. 717.3. 2007 Neuroscience Meeting Planner. San Diego, CA: Society for Neuroscience, 2007. Online.
- 107) Heitz, R. P., Woodman, G. F., Pouget, P., Cohen, J. Y., & Schall, J. D. (2008) Effects of luminance contrast on visual responses in frontal eye field. Poster presented at the annual meeting of the *Vision Sciences Society*, Naples, FL.
- 108) Purcell, B. A., Heitz, R. P., Cohen, J. Y., Logan, G. D., Schall, J. D., & Palmeri, T. J. (2008) Modeling interactions between visually-responsive and movement-related neurons in FEF during saccade visual search. Poster presented at the annual meeting of the *Vision Sciences Society*, Naples, FL.

- 109) Cohen, J. Y., Heitz, R. P., Schall, J. D., & Woodman, G. F. (2008) Attention in visual cortex occurs earlier than target selection in the frontal eye field. Poster presented at the annual meeting of the *Vision Sciences Society*, Naples, FL.

Invited Presentations and Meetings

- 2008 “Neural Guidance and Control of Action”, Neurons Brains and Models: Crossing Levels of Analysis in Cognitive Brain Research Interdisciplinary Seminar, University of Michigan
- 2008 Adrian Seminars in Neuroscience, Department of Physiology, Development and Neuroscience, Cambridge University
- 2007 “On the role of the frontal lobe in timing eye movements”, Neural Basis of Timing and Anticipation symposium, Yale University
- 2007 “On the contributions of the frontal eye field, supplementary eye field and anterior cingulate cortex to the guidance and control of saccades” in symposium Cortical Mechanisms for Eye Movements, Centre for Vision Research Conference 2007: Cortical Mechanisms of Vision
- 2007 Department of Neuroscience Seminar Series, University of Minnesota
- 2006 Centre for Vision Research, York University, Toronto Canada
- 2006 Center for Neuroscience at the University of Pittsburgh (CNUP) annual retreat
- 2006 “Prefrontal cortex, Working Memory, Flexible Behavior”, in memoriam of Patricia S Goldman-Rakic. Yale University
- 2006 Invited presentation at 3rd annual Computational and Systems Neuroscience meeting (Cosyne06), Salt Lake City Utah
- 2005 "Neural selection and control of visually guided saccades", Max Planck Institute for Biological Cybernetics, Tuebingen, Germany
- 2005 “Executive control of gaze by the frontal lobe” for Symposium on Executive Functions and the Frontal Lobe, University of Tuebingen
- 2005 "Neural selection and control of visually guided saccades", University of Indiana
- 2005 "Neural basis of deciding, choosing and acting", Neurobiology of Decision-Making, Banbury Center, Cold Spring Harbor Laboratory
- 2005 "Neural selection and control of visually guided saccades", School of Psychology colloquium series, Georgia Tech
- 2005 Dan Guitton Recognition Symposium, Canadian Physiological Society winter meeting, Mont Sainte Anne Quebec
- 2005 "Neural selection and control of visually guided saccades", Johns Hopkins University Department of Biomedical Engineering
- 2004 “Neural selection and control of visually guided movements”, RIKEN Brain Science Institute, Tokyo, Japan
- 2004 “Neural basis of saccade selection and control”, 4th Antonio Borsellino College on Neurophysics, Trieste, Italy
- 2004 Percept, Decision, Action: Bridging the Gaps – Novartis Foundation Symposium 271, Trieste, Italy
- 2004 “Neural basis of saccade selection and control”, Department of Physiology, Northwestern University Medical School

- 2004 "An Interactive Race Model of Countermanding", 37th Annual Meeting of the Society for Mathematical Psychology, University of Michigan
- 2004 "Neural selection and control of visually guided saccades", invited speaker for the 24th Symposium of the Center for Visual Science, Adaptive Representation and Control in Vision, University of Rochester, Rochester, New York.
- 2004 "Neural mechanisms of visual search" VisioNYC (Vision in old New York), The New York Academy of Sciences, Columbia University, New York, New York.
- 2004 "Neural selection and control of visually guided saccades", invited speaker for the Eighth International Conference on Cognitive and Neural Systems, Center for Adaptive Systems and the Department of Cognitive and Neural Systems, Boston University.
- 2004 "Neural control of visually guided saccades", University of Montreal, Montreal, Canada.
- 2004 "Neural selection of visually guided saccades", Montreal Neurological Institute, McGill University, Montreal, Canada.
- 2004 "Neural selection and control of visually guided saccades", Neuroscience Seminar Series, Division of Neuroscience, Baylor College of Medicine, Houston, Texas
- 2004 van Swammerdam Lecture, Vrije Universiteit, Royal Netherlands Academy of Arts and Sciences, Amsterdam, The Netherlands
- 2003 "Neural correlates of primate decision making", Symposium, 33rd Annual Meeting of the Society for Neuroscience. New Orleans, Louisiana.
- 2003 Keynote speaker, European Conference on Eye Movements, Dundee, Scotland
- 2003 San Miniato Workshop on Visual Attention, San Miniato, Italy
- 2003 "Neural selection and control of visually guided saccades", Stanford University
- 2003 "Neural selection and control of visually guided saccades", University of California, Berkeley
- 2003 "Neural selection and control of visually guided saccades", University of Wisconsin
- 2003 "Neural selection and control of visually guided saccades", University of Pennsylvania
- 2003 "Neural selection and control of visually guided saccades", University of Western Ontario, London, Ontario, Canada
- 2003 "Neural selection and control of visually guided saccades", University of Quebec, Montreal, Quebec, Canada
- 2002 "Neural Basis of Deciding, Choosing and Doing", 5th Annual Scholarship Conference of the Society for Evolutionary Analysis in Law. Vanderbilt University Law School, Nashville, Tennessee
- 2002 Attention and Performance XX, Ettore Majorana Foundation and Centre for Scientific Culture, Erice, Sicily
- 2002 "Antecedents and correlates of visual awareness in the frontal cortex" in Plenary Session on Visual Perception and Consciousness, 5th Annual "Toward a Science of Consciousness" conference, Tucson, Arizona
- 2002 "Neural selection and control of visually guided action", Dartmouth College
- 2002 "Neural selection and control of visually guided action", Brown University
- 2002 "Neural selection and control of visually guided action", University of Illinois
- 2001 "The physiology of cognitive processes", Royal Society, London, England.

2001 "Look and See: How the Brain Attends, Makes Choices and Directs the Eyes", Symposium, 31st Annual Meeting of the Society for Neuroscience. San Diego, California.

2001 "Neural selection and control of visually guided movements", McGovern Institute, Massachusetts Institute of Technology, Cambridge, Massachusetts.

2001 Dynamics of Neural Networks: From Biophysics to Behavior, Institute for Theoretical Physics, Santa Barbara, California

2001 Symposium and workshop on the anterior cingulate, The Swartz Center for Computational Neuroscience, The Salk Institute for Biological Studies, The Gatsby Foundation, Rancho Santa Fe, California.

2001 "The Time it Takes to Think and Do: Accounting for Response Time", Symposium, Neural Control of Movement, Seville, Spain

2001 "Neural selection and control of visually guided action", Center for Neural Science, New York University

2000 Neuroscience Expert Panel, DARPA Focus 2000, Chantilly, Virginia.

2000 "Neural Mechanisms of Visual Perception and Cognition" 26th Annual SIERKEN Symposium, National Institute of Physiological Sciences, Okazaki, Japan.

2000 "Towards Animal Models of Attention and Consciousness", The Banbury Center, Cold Spring Harbor Laboratory

2000 McKnight Conference on Neuroscience, The Aspen Institute, Aspen, Colorado

2000 "Neural coding of visual selection in frontal cortex", invited for Neural Coding - the Annual Symposium sponsored by the Center for Visual Science, University of Rochester, Rochester, New York.

2000 "Neural selection and control of visually guided action", Center for the Neural Basis of Cognition, Carnegie Mellon University, Pittsburgh, Pennsylvania.

2000 "Neural basis of deciding, choosing and doing", NIH Neuroscience Lecture Series, Sponsored by NINDS, NIMH, NIDCD, NIDA, and NICHD, Lipsett Amphitheater, Building 10, NIH, Bethesda, Maryland.

2000 "Neural selection and control of visually guided action", Progress in Neuroscience Seminar Series, Weill Medical College, Cornell University, New York, New York.

1999 "Neural selection and control of gaze", Computation and Neural System seminar series, California Institute of Technology, Pasadena, California.

1999 11th Annual Frontiers of Science Symposium, National Academy of Sciences, Beckman Center, Irvine, California.

1999 "Neural selection of targets for gaze", Invited presentation for Symposium: Perceptual and Cognitive Processing for Saccadic Eye Movements at the annual Optical Society of America. Santa Clara, California.

1999 "Neural selection and control of visually guided action", Vision Research Center Visiting Scholar Program, University of Alabama at Birmingham, Birmingham, Alabama.

1999 "Neural selection and control of visually guided action", Department of Physiology & Biophysics, University of Washington, Seattle, Washington.

1999 "Antecedents and correlates of visual awareness in macaque prefrontal cortex", Invited presentation at Pre-ARVO conference sponsored by *Vision Research* on Pre-attentive and

attentive mechanisms in vision: Perceptual organization and dysfunction. Fort Lauderdale, Florida.

1999 “Neural selection and control of visually guided action”, Volen National Center for Complex Systems, Brandeis University, Waltham, Massachusetts.

1999 “Neural selection and control of visually guided action”, Neurobiology Department Seminar Series, Duke University, Durham, North Carolina

1999 “Neural selection and control of visually guided action”, Neuroscience and Cognitive Science Seminar Series, University of Maryland, College Park, Maryland.

1998 “Cortical control of gaze”, Grand Rounds, Department of Neurology, Vanderbilt University.

1998 “Neural selection and control of visually guided action”, Helmholtz Club, Irvine, California.

1998 Computational Neuroscience: Vision Course, Cold Spring Harbor Laboratory

1998 Panel member of symposium “What the brain's neurons can tell the mind's models of mind” chaired by Ray Klein, scheduled for the Fifth Annual Meeting of the Cognitive Neuroscience Society. San Francisco, California.

1998 “Neural selection and control of visually guided action”, 10th Biennial McKnight Conference on Neuroscience, Aspen, Colorado

1998 “Neural selection and control of visually guided eye movements”, Rockefeller University, New York, New York.

1998 “Neural selection and control of visually guided eye movements”, Department of Psychology, University of Oregon, Eugene, Oregon.

1998 “Neural selection and control of visually guided eye movements”, Boynton Colloquium Series, Center for Visual Sciences, University of Rochester, Rochester, New York.

1997 “Neural decisions for the guidance of gaze”, Seminars in Neuroscience, The Center for Molecular Neuroscience, Vanderbilt University School of Medicine.

1997 Panel member in symposium “Visual Search and Selection”, International Neuropsychological Symposium, Camogli, Italy.

1997 “Searching and stopping for the guidance of gaze”, Kenneth Craik Club, Physiology Department, Cambridge University, Cambridge, UK.

1997 Invited presentation for *From Attention to Action, Contemporary Issues in Movement Planning, Preparation and Initiation*, biennial international symposium hosted by the Center for Neural Science, New York University, New York, NY

1997 “Searching and stopping for the guidance of gaze”, Neuroscience Seminar Series, Queen’s University, Kingston, Ontario

1997 “Searching and stopping for the guidance of gaze”, David Bodian Lecture, Zanvyl Krieger Mind/Brain Institute, Johns Hopkins University, Baltimore, Maryland

1997 “Searching and stopping for the guidance of gaze”, Department of Neurobiology, Harvard Medical School. Boston, Massachusetts.

1997 “Searching and stopping for the guidance of gaze”, invited seminar in the Department of Neurobiology and Physiology, Northwestern University, Evanston, Illinois

1996 "Neural basis of saccade target selection", Cognitive Neuroscience Seminar at the National Institutes of Health, Bethesda, Maryland

- 1996 Panel organizer for symposium, "Saccade target selection", 6th annual meeting of Neural Control of Movement, Marco Island, Florida.
- 1995 Panel member for workshop, "Role of the primate frontal and medial eye fields in oculomotor control" 5th annual meeting of Neural Control of Movement, Key West, Florida.
- 1995 Vision: From Photon to Perception, National Academy of Sciences Colloquium, Beckman Center, Irvine, California
- 1995 "Neural basis of saccade target selection", Seminars in Cognitive Neuroscience Series, Montreal Neurological Institute, Montreal, Canada
- 1994 "Mechanisms of visual selection and attention that guide eye movements", McDonnell-Pew Program in Cognitive Neuroscience 1994 Annual Meeting, Miami, Florida
- 1991 "Central Control of Eye Movements", Grand Rounds, Department of Neurology, Vanderbilt University School of Medicine, Nashville, Tennessee
- 1990 "The neural basis of visually guided eye movement", Visual Science Symposium, annual meeting of American Academy of Optometry, Nashville, Tennessee
- 1989 "The role of frontal cortex in visually guided movements", Department of Psychology, Vanderbilt University, Nashville, Tennessee
- 1989 "The role of frontal cortex in visually guided movements", Department of Neurobiology, State University of New York at Stony Brook, Stony Brook, New York
- 1988 "A survey of the neuronal responses in supplementary motor area in monkeys performing visually guided movements", 21st Winter Conference on Brain Research, Steamboat Springs, Colorado
- 1986 "Retinal ganglion cell morphology and cortical orientation specificity", Department of Brain and Cognitive Sciences, Massachusetts Institute of Technology, Cambridge, Massachusetts
- 1983 "Structural basis of retinal ganglion cell orientation sensitivity", Department of Neurobiology, State University of New York, Albany, New York.