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PERSONAL STATEMENT

I have had a lifelong interest in disease and the brain. To foster a career spanning both these interests, I completed a dual degree M.D./Ph.D. program at Stanford University to become a physician-scientist. During my graduate training in Neurosciences at the top program in the country, I discovered and characterized three new visual areas in the human brain (e.g., *Brewer et al., Nature Neuroscience 2005*), made the first visual field map measurements with fMRI in macaque cortex (*Brewer et al., Journal of Neuroscience 2002*), and developed the proposal of visual field map clusters as a fundamental, organizing principle of human visual cortex (e.g., *Brewer et al., Nature Neuroscience 2005*; *Wandell, Brewer, Dougherty, Phil Trans Roy Soc 2005*; *Wandell, Dumoulin, Brewer, Neuron 2007*). I was also an instrumental member on several collaborative projects that characterized the variability of visual field maps in human posterior occipital cortex (*Dougherty, Koch, Brewer, et al., Journal of Vision 2003*) and investigated developmental plasticity in human rod monochromats (*Baseler, Brewer et al., Nature Neuroscience 2002*), cortical plasticity induced by retinal lesions in adult macaque (*Smirnakis, Brewer et al., Nature 2005*), and sight-recovery in adult human (*Fine, Wade, Brewer, et al., Nature Neuroscience 2003*). During my postdoctoral work at Stanford, I received training in diffusion tensor imaging (DTI) through a project investigating white matter changes in temporal lobe epilepsy and collaborated on a project using DTI to measure the inter-hemispheric connectivity of human primary visual cortex (*Dougherty, Ben-Shachar, Bammer, Brewer, Wandell, PNAS 2005*). To complement my neuroscience graduate and postdoctoral training, I simultaneously completed medical school with a concentration of clinical experiences in neurology and neurosurgery.

In my current position as an Assistant Professor at the University of California, Irvine, I am pursuing several lines of research arising from this training. My lab focuses on visual and multi-sensory neuroscience, using behavioral, genetic, and high resolution neuroimaging techniques to investigate questions ranging from the fundamental organization of human visual cortex, functional plasticity in visuomotor regions, and visual changes in dementia, to collaborative studies of human-robot social interactions and decision making and the organization of human auditory cortex.

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BIOGRAPHICAL INFORMATION

EDUCATION

9/1997 – 6/2007	Stanford University School of Medicine	M.D.
3/2000 – 9/2005	Stanford University Neurosciences Graduate Program <ul style="list-style-type: none"> ◆ Dissertation: <i>Visual field map properties and plasticity in human and macaque cortex</i> ◆ Thesis Committee: Brian A. Wandell, Ph.D. (Advisor); William T. Mobley, M.D., Ph.D. (Chair); William C. Newsome, Ph.D.; Kalanit Grill-Spector, Ph.D.; Eric I. Knudsen, Ph.D. 	Ph.D.
6/1993 – 8/1993	University of California, Irvine <ul style="list-style-type: none"> ◆ Summer Session: Intensive physics program (lectures & labs) 	
9/1991 – 6/1996	Stanford University – Biological Sciences (Neurobiology focus) <ul style="list-style-type: none"> ◆ Departmental Honors in the Biological Sciences Honors Thesis: <i>The role of the laterodorsal tegmentum in the induction and maintenance of REM sleep in freely-behaving rats.</i> Advisors: Craig C. Heller, Ph.D.; Dennis Grahn, Ph.D. 	B.S.H.
9/1991 – 6/1996	Stanford University – Comparative Literature (Literary & linguistic analysis of English, German, & Latin literatures) <ul style="list-style-type: none"> ◆ Interdisciplinary Honors in the Humanities Honors Thesis: <i>The emergence of order and meaning from selected dynamic texts of Gertrude Stein.</i> Advisors: Marjorie Perloff, Ph.D.; Herbert Lindenberger, Ph.D. 	B.A., I.Hn.
9/1990 – 6/1991	University of California, Irvine - Biology <ul style="list-style-type: none"> ◆ University Program for Honors High School Scholars: <i>Early college entrance program for advanced students during senior year of high school</i> ◆ Courses: 1) Astronomy; 2) Brain and Behavior 	

POSITIONS AND EMPLOYMENT

2007 – present	Assistant Professor, Department of Cognitive Sciences, University of California, Irvine
2005 – 2007	Postdoctoral Research Associate, Department of Psychology, Stanford University
2002	Teaching Assistant, Department of Psychology, Stanford University
2000 – 2001	Scientific Writing Tutor, Department of Biological Sciences, Stanford University
1999 – 2005	Research Assistant / Graduate Student, Neurosciences Program and Department of Psychology, Stanford University

- 1999 Research Assistant, Department of Neurology, Stanford University, and AGY Therapeutics
- 1998 – 2001 The Honors Biology Writing Tutor for Honors Biology Thesis Writers, Department of Biological Sciences, Stanford University
- 1998 Teaching Assistant, Department of Surgery, Stanford University School of Medicine
- 1998 Medical Scholar, Department of Vascular Surgery and Biomechanical Engineering, Stanford University School of Medicine
- 1997 – 2001 Course Coordinator, Department of Biological Sciences, Stanford University
- 1996 – 1997 Project Assistant, The Smith-Kettlewell Eye Research Institute, San Francisco, CA
- 1995 – 1996 Research Assistant, Department of Biological Sciences, Stanford University
- 1994 – 1996 Researcher, Department of Comparative Literature, Stanford University
- 1993 – 1994 Research Assistant, Department of Radiation Oncology, Stanford University School of Medicine
- 1993 – 1996 Course Assistant, Department of Biological Sciences, Stanford University

ACADEMIC AND PROFESSIONAL HONORS

- 2015 2014 – 2015 The Dean's Award for Outstanding Undergraduate Teaching, School of Social Sciences, University of California, Irvine
The Dean's awards recognizes one outstanding undergraduate teacher for a commitment to inclusive excellence in teaching and dedication to higher education.
- 2014 2013-2014 Social Sciences Assistant Professor Research Award, University of California, Irvine
'Audiovisual Processing: fMRI investigations into the relationships among human visual and auditory field maps.'
- 2012 – 2013 National Institutes of Health Loan Repayment Program Scholar
'Visual rehabilitation after stroke.'
- 2012 2011-2012 Social Sciences Assistant Professor Research Award, University of California, Irvine
'Visual rehabilitation after stroke through perceptual learning paradigms: harnessing cortical plasticity for therapeutic interventions.'
- 2010 – 2012 National Institutes of Health Loan Repayment Program Scholar
'The dorsal visual stream: Visual field maps and functional plasticity.'
- 2010 2009-2010 Social Sciences Assistant Professor Research Award, University of California, Irvine
'Visual working memory in the human dorsal stream.'

- 2008 – 2010 National Institutes of Health Loan Repayment Program Scholar
'Neuroimaging of human visual cortex in Posterior Cortical Atrophy and Alzheimer's disease.'
- 2006 American Medical Association (AMA) Seed Grant Fellow
'Post-ictal and inter-ictal diffusion tensor imaging in patients with temporal lobe epilepsy.'
- 2002-2006 National Institutes of Health M.D./Ph.D. Pre-doctoral NRSA Fellow
'Human ventral occipito-temporal cortex.'
- 2002 First Place Poster: Stanford Medical Student Research Symposium, Stanford University
'Reorganization of human cortical maps caused by photoreceptor abnormalities'
- 1998 Biological Sciences Excellence in Teaching Award, Stanford University
Course Coordinator, Biology 44 – Undergraduate Biological Sciences Laboratory Core Course Series, Stanford University
- 1998 Gerbode Scholar, Stanford University School of Medicine
'Quantitative assessment of human aortic blood flow in age-matched atherosclerotic and non-atherosclerotic subjects during moderate exercise in a 1.5T magnet.'
- 1996 Departmental Honors in the Biological Sciences, Stanford University
'The role of the laterodorsal tegmentum in the induction and maintenance of REM sleep in freely-behaving rats.'
- 1996 Interdisciplinary Honors in the Humanities, Department of Comparative Literature, Stanford University
'The emergence of order and meaning from selected dynamic texts of Gertrude Stein' - An application of chaos theory to the investigation of the development of order and the creation of meaning in prose and poetry selections by Gertrude Stein.
- 1996 Biological Sciences Laura Weinstein Teaching Award and Grant, Stanford University
Awarded to the top undergraduate teaching assistant (\$1,965)
- 1995 Biological Sciences Excellence in Teaching Award, Stanford University
Course Assistant, Biology 44 – Undergraduate Biological Sciences Laboratory Core Course Series, Stanford University
- 1995 Howard Hughes Medical Institute Summer Fellow, Stanford University
'The role of the laterodorsal tegmentum in the induction and maintenance of REM sleep in freely-behaving rats.'

RESEARCH ACTIVITIES

GRANT AWARDS, FELLOWSHIPS, AND CONSULTING

(04/17/2015: **\$1,258,763** since start of career; **\$1,151,472** since Asst. Professor)

Under Review 8/1/2015 – 7/31/2018	National Science Foundation (NSF), Cognitive Neuroscience. <i>'Mapping the rhythm of perception.'</i> PI: Gregory Hickok, Ph.D.; Co-PI: Kourosh Saberi, Ph.D., Dept. of Cognitive Sciences, UCI.	Co-PI \$ 998,360 <i>Pending</i>
7/2014 - 6/2015	Research and Travel Funds Award , University of California, Irvine. Society for Neuroscience Nanosymposium: <i>'Auditory field maps beyond human primary auditory cortex.'</i>	PI \$1,100
7/1/2014 – 6/30/2017	National Science Foundation (NSF), Mathematical Biology Program. <i>'Quantifying Retinotopic Mapping by Conformal Geometry.'</i> #1413417. PI: Yalin Wang, Ph.D., Dept. of Computer Science and Engineering, Arizona State University. Co-PI: Zhong-Lin Lu, Ph.D., Dept. of Psychology, The Ohio State University. *A.A. Brewer was moved from Co-PI status to Consultant status due to completely overlapping full NSF funding on grant #1329255.	*Consultant \$208,000 <i>(Fees: \$42,000 over 3 years)</i>
6/2014 - 5/2015	2013-2014 Social Sciences Assistant Professor Research Award , University of California, Irvine. <i>'Audiovisual Processing: fMRI investigations into the relationships among human visual and auditory field maps.'</i> Award recognizes research excellence accompanied by a strong research project proposal by a Social Sciences faculty member.	PI \$5,000
7/2013 - 6/2014	Research and Travel Funds Award , University of California, Irvine. Optical Society for America Fall Vision Meeting, Houston, TX. Special Symposium: Measuring visual cortex without vision. <i>'Cross-sensory activation of 'clover leaf' clusters in human visual and auditory cortex.'</i>	PI \$1,100
9/1/2013- 6/30/2017	National Science Foundation (NSF), Cognitive Neuroscience. <i>'Acoustic Foundations of Speech Perception.'</i> #1329255. Funded first submission and ranked #1 priority by NSF panel during the reduced science funding of the sequester. Co-PIs: Gregory Hickok, Ph.D.; Kourosh Saberi, Ph.D., Dept. of Cognitive Sciences, UCI.	PI \$475,958
7/2012 - 6/2013	Research and Travel Funds Award , University of California, Irvine. Society for Neuroscience Nanosymposium: Human Extrastriate Cortex: Imaging of Functional Organization. <i>'Functional plasticity in</i>	PI \$1,000

human occipito-temporal visual field map clusters: Adapting to reversed visual input.'

7/2012 – 6/2013	<p>National Institutes of Health Loan Repayment Program Scholar 'Visual rehabilitation after stroke.'</p> <p>NIH salary supplement awarded to top research proposals to encourage outstanding health professionals to pursue biomedical/behavioral/social/clinical research careers.</p>	PI \$9,162.62
8/2012- 7/2013	<p>2011 - 2012 Social Sciences Assistant Professor Research Award, University of California, Irvine. '<i>Visual rehabilitation after stroke through perceptual learning paradigms: harnessing cortical plasticity for therapeutic interventions.</i>'</p> <p>Award recognizes research excellence accompanied by a strong research project proposal by a Social Sciences faculty member.</p>	PI \$5,000
7/2012 – 6/2013	<p>The Academic Senate Council on Research, Computing and Libraries (CORCL) Single Investigator Innovation Grant, University of California, Irvine. '<i>Visuospatial Responsivity & Connectivity in the Human Cerebellum.</i>'</p>	PI \$8,550
4/2012 – 3/2013	<p>Translational Collaborative Discovery Grant Award, Institute for Clinical and Translational Science, University of California, Irvine. '<i>Visual rehabilitation after stroke: harnessing cortical plasticity for therapeutic interventions.</i>'</p> <p>Co-PI: Steven C. Cramer, M.D., Depts. of Neurology and Anatomy & Neurobiology, UCI.</p>	PI \$20,000
7/2011 - 6/2012	<p>Research and Travel Funds Award, University of California, Irvine. Vision Sciences Society Symposium: Human visual cortex: from receptive fields to maps to clusters to perception. '<i>Functional Plasticity in Human Parietal Visual Field Map Clusters: Adapting to Reversed Visual Input.</i>'</p>	PI \$1,000
5/2011	<p>Social Sciences Faculty Desktop Computing Initiative Award, University of California, Irvine.</p>	PI \$1,495
12/2010 – 11/2011	<p>Center for Hearing Research Pilot Award, University of California, Irvine. '<i>Mapping tonotopic and periodotopic gradients in human auditory cortex: a traveling wave fMRI study.</i>'</p> <p>Co-PIs: Gregory Hickok, Ph.D.; Kourosh Saberi, Ph.D., Dept. of Cognitive Sciences, UCI.</p>	Co-PI \$4,000
7/2010 – 6/2012	<p>National Institutes of Health Loan Repayment Program Scholar. 'The dorsal visual stream: Visual field maps and functional plasticity.'</p> <p>NIH salary supplement awarded to top research proposals to encourage outstanding health professionals to pursue biomedical/behavioral/social/clinical research careers.</p>	PI \$35,702.07

5/2010 – 4/2011	2009-2010 Social Sciences Assistant Professor Research Award , University of California, Irvine. <i>'Visual working memory in the human dorsal stream.'</i> Award recognizes research excellence accompanied by a strong research project proposal by a Social Sciences faculty member.	PI \$1,500
3/2010 – 12/2010	The Academic Senate Council on Research, Computing and Libraries (CORCL) Special Research Grant , University of California, Irvine. <i>'Functional Plasticity in Human Visual Cortex.'</i>	PI \$3,695
4/2009 – 3/2010	Alzheimer's Disease Research Center Pilot Grant , University of California, Irvine. <i>'Neuroimaging of visual cortex in Alzheimer's disease and related dementias.'</i>	PI \$23,306
3/2009 – 2/2011	Office of Naval Research (ONR) , Award #N000140910036. <i>'The Effects of Neuromodulation on Human-Robot Interaction.'</i> PI: Jeffrey L. Krichmar, Ph.D., Dept. of Cognitive Sciences, UCI.	Co-PI \$299,319
7/2008 – 6/2010	National Institutes of Health (NIH) Loan Repayment Program Scholar . <i>'Neuroimaging of human visual cortex in Posterior Cortical Atrophy and Alzheimer's disease.'</i> NIH salary supplement awarded to top research proposals to encourage outstanding health professionals to pursue biomedical/behavioral/social/clinical research careers.	PI \$46,584.93
2006	American Medical Association (AMA) Seed Grant , Stanford University. <i>'Post-ictal and inter-ictal diffusion tensor imaging in patients with temporal lobe epilepsy.'</i> AMA encourages medical students, physician residents and fellows to enter the research field by supporting small research projects. Supervisor: Brian A. Wandell, Ph.D., Dept. of Psychology, Stanford University.	PI \$2,340
9/2002- 6/2006	M.D. / Ph.D. Pre-Doctoral National Research Service Award (NRSA) Grant , National Institute of Neurological Disorders and Stroke (NINDS), National Institutes of Health (NIH). #F30 NS044759. <i>'Human ventral occipito-temporal cortex.'</i> Supervisor: Brian A. Wandell, Ph.D., Neurosciences Program, Stanford University.	PI \$89,086
1998	Gerbode Scholar - Resident Medical Scholars Grant , Stanford University. <i>'Quantitative assessment of human aortic blood flow in age-matched atherosclerotic and non-atherosclerotic subjects during moderate exercise in a 1.5T magnet.'</i> Supervisors: Charles Taylor, Ph.D., Dept. of Bioengineering and Surgery; E. John Harris, M.D., Dept. of Vascular Surgery, Stanford University.	PI ~\$12,000
1996	Biological Sciences Laura Weinstein Teaching Award and Grant , Stanford University.	PI \$1,965

Awarded to the top undergraduate teaching assistant.

6/1995 - **Howard Hughes Medical Institute Summer Fellowship**, Stanford University. *'The role of the laterodorsal tegmentum in the induction and maintenance of REM sleep in freely-behaving rats.'* PI
 9/1995 ~\$3,000
 Supervisors: Craig Heller, Ph.D.; Dennis Grahn, Ph.D., Dept. of Biological Sciences, Stanford University.

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PUBLICATIONS

- 04/17/2015: **2,344 total citations** per Google Scholar, 1397 since 2010, **H-index = 13, i10-index = 14**
- Pubs UCI#17-36 involve work since starting at UCI; pubs UCI#1-16 are from work before UCI. Pubs UCI#1-15 were included in my hiring evaluation.
- Legend: JA - journal article; BC - book chapter; CP - conference proceeding [UCI #] denotes corresponding label in Review Profile database.

PEER-REVIEWED JOURNAL ARTICLES

JA - In prep	B. Barton, J.H. Venezia, K. Saberi, G. Hickok, A.A. Brewer . Auditory field maps beyond human primary auditory cortex.
JA - In prep	B. Barton, J.H. Venezia, K. Saberi, G. Hickok, A.A. Brewer . Audiovisual Processing: fMRI investigations into the relationships between human visual and auditory field maps.
JA - In prep, invited	A.A. Brewer , B. Barton. 'Maps of the Auditory Cortex.' <i>Annual Review of Neuroscience</i> , due 09/2015; to be published pending review in 2016. (Invited and peer-reviewed)
JA-Under Revision	B. Barton, A.A. Brewer . 'Clover Leaf' Clusters: A Fundamental Organizing Principle of the Human Visual System. Under revision, post review for <i>Nature Neuroscience</i> .
JA-Under Revision	A.A. Brewer , L. Lin, B. Barton. Sustained Functional Plasticity can be Induced in Human Parietal Cortex with Adaptation to Reversed Visual Input. Under revision, post review for <i>Cerebral Cortex</i> .

<p>JA-30 [UCI #35]</p>	<p>B. Barton, A.A. Brewer. (2015) FMRI of the Rod Scotoma: Cortical rod pathways and implications for lesion measurements. <i>Proc Natl Acad Sci (PNAS) U S A</i>. doi: 10.1073/pnas.1423673112.</p> <p>Impact Factor: 9.81</p>
<p>JA-29 [UCI #34]</p>	<p>E. Huber*, J. Webster*, A.A. Brewer, D. MacLeod, B. Wandell, A. Wade, I. Fine. [*joint first authors] (2015) A lack of experience-dependent plasticity after 12 years of recovered sight. <i>Psychological Science</i>. 26(4), 393-401. doi: 10.1177/0956797614563957.</p> <p>Impact Factor: 4.54</p>
<p>JA-27 [UCI #32]</p>	<p>B. Barton, A. Treister, M. Humphrey, G. Abedi, S.C. Cramer, A.A. Brewer. (2014) Paradoxical Visuomotor Adaptation to Reversed Visual Input Predicted by BDNF Val⁶⁶Met Polymorphism. <i>Journal of Vision</i>. 14(19):4. doi: 10.1167/14.9.4.</p> <p>Impact Factor: 3.38</p>
<p>JA-25 [UCI #30]</p>	<p>A.A. Brewer, B. Barton. (2014) Visual cortex in aging and Alzheimer's disease: Changes in visual field maps and population receptive fields. <i>Research Topic: Visual perception and visual cognition in healthy and pathological ageing. Frontiers in Psychology</i>. 5(74). doi: 10.3389/fpsyg.2014.00074.</p> <p>Paper was highlighted as one of the top 10 most viewed articles in Frontiers in Psychology in February and was featured on the Frontiers blog. (http://www.frontiersin.org/blog/Top_10_most_viewed_Psychology_research_articles_in_February_2014/693)</p> <p>Invited submission by special editor Prof. Mark Greenlee. (<i>invited and peer-reviewed</i>) <i>See supporting documents for list of contributing authors.</i></p> <p>Articles are available at: http://www.frontiersin.org/Perception_Science/researchtopics/Visual_perception_and_visual_c/862</p> <p>Impact Factor: 2.80</p>
<p>JA-24 [UCI #29]</p>	<p>D.E. Asher, A.B. Craig, A. Zaldivar, A.A. Brewer, J.L. Krichmar. (2013) A Dynamic, Embodied Paradigm to Investigate the Role of Serotonin in Decision Making. <i>Research Topic: Neurobiological circuit function and computation of the serotonergic and related systems at Frontiers in Integrative Neuroscience</i>. 7(78). doi: 10.3389/fnint.2013.00078.</p> <p>Invited submission by special editors Profs. KongFatt Wong-Lin and Kae Nakamura. (<i>invited and peer-reviewed</i>)</p> <p>Articles are available at: http://www.frontiersin.org/Integrative_Neuroscience/researchtopics/Neurobiological_circuit_functi/844</p> <p>Impact Factor: 2.00</p>

<p>JA-23 [UCI #28]</p>	<p>B. Barton & A.A. Brewer. (2013) Visual working memory in human cortex. <i>Psychology</i>. Special Issue on Advances in Cognitive Psychology. 4(8), 655-662. doi:10.4236/psych.2013.48093.</p> <p>Invited submission by Editor in Chief Prof. Seth Kunen for Special Issue on Advances in Cognitive Psychology (<i>invited and peer-reviewed</i>)</p> <p>Impact Factor: 0.98</p>
<p>JA-22 [UCI #26]</p>	<p>A.B. Craig, D.E. Asher, N. Oros, A.A. Brewer, J.L. Krichmar. (2013) Social contracts and human-computer interaction with simulated adapting agents. <i>Adaptive Behavior</i>. 21(5), 371-387. doi:10.1177/1059712313491612.</p> <p>Impact Factor: 1.15</p>
<p>JA-20 [UCI #25]</p>	<p>B. Barton, J.H. Venezia, K. Saberi, G. Hickok, A.A. Brewer. (2012) Orthogonal Acoustic Dimensions Define Auditory Field Maps in Human Cortex. <i>Proc Natl Acad Sci (PNAS) U S A</i>. 109(50), 20738-43. doi: 10.1073/pnas.1213381109.</p> <p>Impact Factor: 9.81</p>
<p>JA-19 [UCI #22]</p>	<p>A.A. Brewer, B. Barton. (2012) Effects of healthy aging on human primary visual cortex. <i>Health</i>. 4(9A), Special Issue I (Aging), 695-702 doi: 10.4236/health.2012.429109.</p> <p>Invited submission by editor Maggie Chen for Special Issue on Aging (<i>invited and peer-reviewed</i>)</p> <p>Impact Factor: 0.42</p>
<p>JA-17 [UCI #20]</p>	<p>D. Asher, A. Zaldivar, B. Barton, A.A. Brewer, J.L. Krichmar. (2012) Reciprocity and retaliation in social games with adaptive agents. <i>IEEE Transactions on Autonomous Mental Development</i>. 4(3), 226-238. doi:10.1109/TAMD.2012.2202658.</p> <p>Impact Factor: 1.35</p>
<p>JA-16 [UCI #18]</p>	<p>A.A. Brewer. (2009) Visual Maps: To merge or not to merge. <i>Current Biology</i>. 19(20):R945-7. doi:10.1016/j.cub.2009.09.016.</p> <p>Invited Dispatch by editor Geoffrey North (<i>invited and peer-reviewed mini-review about a paper and related 'hot topic' published in PNAS</i>)</p> <p>Impact Factor: 10.23</p>
<p>JA-14 [UCI #16]</p>	<p>B.A. Wandell, S.O. Dumoulin*, A.A. Brewer*. [*Authors had equal contribution.] (2007) Visual Field Maps in Human Cortex. <i>Neuron</i>. 56(2), 366-83. doi:10.1016/j.neuron.2007.10.012.</p> <p>Invited review by Neuron (<i>invited and peer-reviewed</i>)</p> <p>Impact Factor: 16.49</p>

<p>JA-13 [UCI #15]</p>	<p>B. A. Wandell, S.O. Dumoulin, A. A. Brewer. (2006) Computational Neuroimaging; Color Signals in the Visual Pathways. <i>Neuro-ophthalmology Japan</i>. vol. 23, 324-343.</p> <p>Impact Factor: 0.02</p>
<p>JA-12 [UCI #14]</p>	<p>S.M. Smirnakis, M. Schmid, A.A. Brewer, A.S. Tolia, A. Shuz, M. Augath, W. Inhoffen, B.A. Wandell, N.K. Logothetis. (2005) Neuroscience: Rewiring the adult brain (Reply). <i>Nature</i>. 438(7065), E3-E4. doi:10.1038/nature04360.</p> <p>Impact Factor: 42.35</p>
<p>JA-11 [UCI #13]</p>	<p>A.A. Brewer, J. Liu, A.R. Wade, B.A. Wandell. (2005) Visual field maps and stimulus selectivity in human ventral occipital cortex. <i>Nature Neuroscience</i>. 8(8), 1102-9. doi:10.1038/nn1507.</p> <p>Impact Factor: 14.98</p>
<p>JA-10 [UCI #12]</p>	<p>S.M. Smirnakis, A.A. Brewer*, M. Schmid*, A.S. Tolia, M. Augath, W. Inhoffen, A. Shuz, B.A. Wandell, N.K. Logothetis, [*Authors had equal contribution]. (2005) Lack of long-term cortical reorganization after macaque retinal lesions. <i>Nature</i>. 435(7040), 300-7. doi:10.1038/nature03495.</p> <p><i>News and Views</i> by M. I. Sereno (<i>Nature</i>. 435, 288-289).</p> <p>Impact Factor: 42.35</p>
<p>JA-9 [UCI #11]</p>	<p>R.F. Dougherty, M. Ben-Shacher, R. Bammer, A.A. Brewer, B.A. Wandell. (2005) Functional organization of human occipital-callosal fiber tracts. <i>Proc Natl Acad Sci U S A</i>. 102(20), 7350-5. doi:10.1073/pnas.0500003102.</p> <p>Impact Factor: 9.81</p>
<p>JA-8 [UCI #10]</p>	<p>B.A. Wandell, A.A. Brewer, R.F. Dougherty. (2005) Visual field map clusters in human cortex. <i>Philosophical Transactions of the Royal Society, Series B. (London)</i>. Vol: 360, 693-707. (Special theme issue 'Cerebral cartography 1905–2005'.) doi:10.1098/rstb.2005.1628.</p> <p>Impact Factor: 6.23</p>
<p>JA-7 [UCI #9]</p>	<p>B.A. Wandell, R.F. Dougherty, A. Brewer, M. Ben-Shachar, R. Bammer, G. Deutsch. (2004) Measuring activity and structure in the human brain. <i>Society for Industrial and Applied Mathematics News</i>. Vol: 37 (7).</p> <p>Impact Factor: not available</p>
<p>JA-6 [UCI #8]</p>	<p>R. F. Dougherty, V. M. Koch, A.A. Brewer, B. Fischer, J. Modersitzki, B. A. Wandell. (2003) Visual field representations and locations of visual areas V1/2/3 in human visual cortex. <i>Journal of Vision</i>. 3(10), 586-598. doi:10.1167/3.10.1.</p> <p>Impact Factor: 3.38</p>

JA-5 [UCI #7]	I. Fine, A.R. Wade, A.A. Brewer , M.G. May, D.F. Goodman, G.M. Boynton, B.A. Wandell, D.I. MacLeod. (2003) Long-term deprivation affects visual perception and cortex. <i>Nature Neuroscience</i> . 6(9), 915-916. doi: 10.1038/nn1102 . Impact Factor: 14.98
JA-4 [UCI #6]	A.A. Brewer , W. A. Press, N. K. Logothetis, B. A. Wandell. (2002) Visual areas in macaque cortex measured using functional magnetic resonance imaging. <i>Journal of Neuroscience</i> . 22(23), 10416-10426. Impact Factor: 6.91
JA-3 [UCI #5]	A.R. Wade, A.A. Brewer , B.A. Wandell. (2002) Functional Measurements of Human Ventral Occipital Cortex: Retinotopy and Color. <i>Philosophical Transactions of the Royal Society, Series B. (London)</i> . Vol: 357, No.1424, 963- 973. doi: 10.1098/rstb.2002.1108 . Impact Factor: 6.23
JA-2 [UCI #4]	H.A. Baseler, A.A. Brewer , L.T. Sharpe, A.B. Morland, H. Jägle, B.A. Wandell. (2002) Reorganization of human cortical maps caused by inherited photoreceptor abnormalities. <i>Nature Neuroscience</i> . 5(4), 364-70. doi: 10.1038/nn817 . Impact Factor: 14.98
JA-1 [UCI #3]	W.A. Press, A.A. Brewer , R.F. Dougherty, A.R. Wade, B.A. Wandell. (2001) Visual areas and spatial summation in human visual cortex. <i>Vision Research</i> . 41(10-11), 1321-32. doi: 10.1016/S0042-6989(01)00074-8 Impact Factor: 2.55

PEER-REVIEWED BOOKS

<i>In prep</i>	A.A. Brewer , B. Barton. (<i>under contract</i>) <i>Cortical Plasticity in the Human Visual System</i> . Springer.
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PEER-REVIEWED BOOK CHAPTERS

BC-28 [UCI #27]	B. Barton, A.A. Brewer . (<i>in press, accepted 8/2014</i>) 'Human Auditory Cortex' in <i>Neurobiology of Language</i> , eds. G. Hickok, S. Small. Elsevier. Invited submission by eds. G. Hickok and S. Small (<i>invited and peer-reviewed</i>)
BC-21 [UCI #23]	A.A. Brewer , B. Barton. (accepted 2013, published May 31, 2014) "Developmental Plasticity: fMRI Investigations into Human Visual Cortex," in <i>Advanced Brain Neuroimaging Topics in Health and Disease - Methods and Applications</i> , eds. T.D. Papageorgiou, George Christopoulos, Stelios Smirnakis. ISBN: 978-953-51-1203-7, InTech.

	<p>Available from: http://www.intechopen.com/books/advanced-brain-neuroimaging-topics-in-health-and-disease-methods-and-applications . doi: 10.5772/58256.</p> <p>Chapter is now at 217 downloads and is ranked as the most downloaded chapter in the book.</p> <p>Invited submission by editors: Drs. T. Dorina Papageorgiou, George Christopoulos, Stelios Smirnakis. (<i>invited and peer-reviewed</i>)</p> <p>≥1 citation</p>
<p>BC-18 [UCI #21]</p>	<p>A.A. Brewer, B. Barton. (2012) "Visual field map organization in human visual cortex," in <i>Visual Cortex- Current Status and Perspectives</i>, eds. Stephane Molotchnikoff and Jean Rouat. ISBN: 978-953-51-0760-6, InTech, 30-60. Available from: http://www.intechopen.com/books/visual-cortex-current-status-and-perspectives/visual-field-map-organization-in-human-visual-cortex . doi:10.5772/51914.</p> <p>Chapter was highlighted online for passing 1,000 downloads in 7/2013, is now at 1,914 downloads, and is ranked as the most downloaded chapter of the book.</p> <p>Invited submission by InTech Publishers. (<i>invited and peer-reviewed</i>) <i>See supporting documents for list of contributing authors.</i></p> <p>≥7 citations</p>
<p>BC-15 [UCI #17]</p>	<p>B.A. Wandell, S.O. Dumoulin, A.A. Brewer. Visual cortex in humans. (2009) Ed. L.R. Squire, <i>Encyclopedia of Neuroscience</i>. (Oxford: Academic Press) Vol. 10, pp. 251-257.</p> <p>Invited submission by editor Prof. L. Squire (<i>invited and peer-reviewed</i>)</p> <p>≥16 citations</p>

PEER-REVIEWED CONFERENCE PROCEEDINGS

<p>CP – Under Review</p>	<p>D. Ta, B. Barton, A.A. Brewer, Z.L. Lu, Y Wang. Characterizing Human Retinotopic Mapping Using Conformal Geometry: Conformal Distortion Analysis. Under review for <i>International Conference on Medical Imaging Computing and Computer Assisted Interventions (MICCAI)</i>.</p>
<p>CP-26 [UCI #31]</p>	<p>D. Ta, J. Shi, B. Barton, A.A. Brewer, Z.L. Lu, Y. Wang. (2014) Characterizing Human Retinotopic Mapping with Conformal Geometry: A Preliminary Study. <i>Proc. SPIE</i>. 9034, Medical Imaging: Image Processing, 90342A. doi: 10.1117/12.2043570.</p> <p>Impact Factor: 0.24</p>

BROADCAST MEDIA

- 2) [UCI #33] **'What is Reality?' - Part 1 of The Brain by Dr. David Eagleman - Exploration Into the Inner Cosmos.** (Filmed 8/23/2014; To appear 4/2015). Publisher: **PBS**, produced by Blink Films. Featured scientists in Part 1: Alyssa A. Brewer, M.D., Ph.D., Brian Barton, Ph.D., and David Eagleman, Ph.D.
- I was invited to contribute as a guest scientist to a landmark, 6 part series on the human brain filmed for PBS by Blink Films, a leading British television production company specializing in scientific, cultural and historical documentaries for international broadcast. My short-term [UCI #32] and long-term [in prep/submitted] prism visual-motor adaptation studies will be featured in the first hour-long segment entitled, 'What is Reality,' which discusses human perception. Filming of my visual adaptation work and of my discussions of human perception with series creator Dr. David Eagleman took place August 23, 2014, on UCI campus. The series will premiere in April, 2015, as part of the PBS "Think Wednesday" lineup.*
<http://www.pbs.org/about/news/archive/2014/the-brain-eagleman/>
- 1) [UCI #24] **'Topographic Visual Maps with Dr. Alyssa Brewer.'** (2013) Brain Matters Podcast, Episode 4; The University of Texas at Austin: <http://brainpodcast.com>; Freely available on iTunes: <https://itunes.apple.com/us/podcast/topographic-visual-maps-dr./id730239508?i=196985728&mt=2>

TECHNICAL REPORTS

- 2) [UCI #2] **A. Brewer, P. Fisher.** (1999) Review of conventional and alternative treatments for glioblastoma multiforme. Donated to **AGY Therapeutics** and the **National Brain Tumor Foundation**.
- 1) [UCI #1] **A. Brewer.** (1996) The role of the laterodorsal tegmentum in the induction and maintenance of REM sleep in freely-behaving rats. **The Stanford Biologist: A Journal of Undergraduate Research**. Vol. 1.

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CONFERENCE ABSTRACTS († PUBLISHED; * INVITED SPEAKER)

- 77) † B. Barton, J.H. Venezia, K. Saberi, G. Hickok, **A.A. Brewer** (2014) Auditory field maps beyond human primary auditory cortex. Society for Neuroscience Abstracts. Program No. 328.11. Neuroscience 2014 Abstracts. Washington, D.C.: **Society for Neuroscience**. Online.
- 76) † G. Hickok, **A.A. Brewer**, K. Saberi. (2013) Neural oscillations, temporal modulation rate filters, and periodicity maps in human auditory cortex. Toronto, Ontario, Canada: **The Psychonomic Society Annual Meeting**. Vol. 18. Online.

- 75) † J. Webster, E. Huber, A.A. Brewer, D. MacLeod, B. Wandell, I. Fine. (2013) A lack of experience-dependent plasticity in the ventral visual cortex after 12 years of recovered sight. Society for Neuroscience Abstracts. Program No. 31.06. Neuroscience 2013 Abstracts. San Diego, CA: **Society for Neuroscience**. Online.
- 74) † B. Barton, **A.A. Brewer** (2013) Filling-In of the Rod Scotoma: Linking fMRI to Perception. Society for Neuroscience Abstracts. Program No. 120.06. Neuroscience 2013 Abstracts. San Diego, CA: **Society for Neuroscience**. Online.
- 73) † **A.A. Brewer**, B. Barton. (2013) FMRI of the Rod Scotoma: Population Receptive Fields Silenced, Shifted, and Scaled. Society for Neuroscience Abstracts. Program No. 120.05. Neuroscience 2013 Abstracts. San Diego, CA: **Society for Neuroscience**. Online.
- 72) † B. Barton, **A.A. Brewer**. (2013) Cross-sensory activation of ‘clover leaf’ clusters in human visual and auditory cortex. Houston, TX: Optical Society of America, Fall Vision Meeting. **Journal of Vision**. 13(15), T18. doi: [10.1167/13.15.18](https://doi.org/10.1167/13.15.18).
- 71) J. Webster, E. Huber, **A.A. Brewer**, D. MacLeod, B. Wandell, A. Wade, I. Fine. (2013) A lack of experience-dependent plasticity in the ventral visual cortex after 12 years of recovered sight. Seattle, WA: **Institute for Systems Biology Annual Symposium** at the University of Washington.
- 70) † **A.A. Brewer**, B. Barton, J. Venezia, K. Saberi, G. Hickok. (2013) Cross-sensory activation of ‘clover leaf’ clusters in human auditory and visual cortex. San Francisco, CA: Cognitive Neuroscience Society Annual Meeting. **Journal of Cognitive Neuroscience**, 56.
- 69) † B. Barton, J. Venezia, K. Saberi, G. Hickok, **A.A. Brewer**. (2013) Orthogonal acoustic dimensions define auditory field maps in human cortex. San Francisco, CA: Cognitive Neuroscience Society Annual Meeting. **Journal of Cognitive Neuroscience**, 56.
- 68) † J. Venezia, B. Barton, K. Saberi, **A.A. Brewer**, G. Hickok . (2013) The distribution of cortical surface area dedicated to auditory temporal receptive fields is symmetric between hemispheres in human auditory core and belt. San Francisco, CA: Cognitive Neuroscience Society Annual Meeting. **Journal of Cognitive Neuroscience**, 175.
- 67) † J. Venezia, B. Barton, K. Saberi, **A.A. Brewer**, G. Hickok. (2012) The distribution of cortical surface area dedicated to auditory temporal receptive fields is symmetric between hemispheres in human auditory core and belt. San Sebastian, Spain: **Neurobiology of Language Conference**. Online.
- 66) **A.A. Brewer**, D.E. Asher, A.B. Craig, N. Oros, J.L. Krichmar. (2012) A Dynamic and Embodied Environment to Probe the Neural Correlates of Decision-Making and Social Signaling. New Orleans, LA: Collective Cognition - The Neurophysiology of Social Neuroscience; 20th Annual **Dynamical Neuroscience Satellite Symposium**.
- 65) † B. Barton, J. Venezia, K. Saberi, G. Hickok, **A.A. Brewer**. (2012) Audiovisual Processing: fMRI investigations into the relationships between human visual and auditory field maps. Society for Neuroscience Abstracts. Program No. 723.06. Neuroscience 2012 Abstracts. New Orleans, LA: **Society for Neuroscience**. Online.
- 64) † **A.A. Brewer** & B. Barton. (2012) Functional plasticity in human occipito-temporal visual field map clusters: adapting to reversed visual input. Society for Neuroscience Abstracts. Program No. 723.05. Neuroscience 2012 Abstracts. New Orleans, LA: **Society for Neuroscience**. Online. **≥3 citations**

- 63) † B. Barton, A. Treister, G. Abedi, M. Humphrey, S.C. Cramer, **A.A. Brewer**. (2012) BDNF Polymorphism Affecting Neural Plasticity Predicts Visuo-Motor Adaptation to Left-Right Visual Reversal. Vision Sciences Society. *Journal of Vision*. 12 (9), 1328. doi: [10.1167/12.9.1328](https://doi.org/10.1167/12.9.1328).
- 62) † **A.A. Brewer**. (2012) Functional Plasticity in Human Parietal Visual Field Map Clusters: Adapting to Reversed Visual Input. In Symposium: 'Human visual cortex: from receptive fields to maps to clusters to perception.' Vision Sciences Society. *Journal of Vision*. 12(9), 1398. doi: [10.1167/12.9.1328](https://doi.org/10.1167/12.9.1328). **≥1 citation**
- 61) † D.E. Asher, A. Zaldivar, B. Barton, **A.A. Brewer**, J.L. Krichmar. (2011) Effects of Neuromodulation on Adaptive Behavior on Reciprocity During Human-Robot Interactions. Society for Neuroscience Abstracts. Program No. 725.08. Neuroscience 2011 Abstracts. Washington, D.C.: **Society for Neuroscience**. Online.
- 60) † B. Barton, J. Venezia, K. Saberi, G. Hickok, **A.A. Brewer**. (2011) Orthogonal Maps of Tonotopy and Periodicity in Human Auditory Core. Society for Neuroscience Abstracts. Program No. 171.25. Neuroscience 2011 Abstracts. Washington, D.C.: **Society for Neuroscience**. Online.
- 59) † **A.A. Brewer**, B. Barton. (2011) 'Clover Leaf' Cartography: Connectivity Among Visual Field Map Clusters. Society for Neuroscience Abstracts. Program No. 851.01. Neuroscience 2011 Abstracts. Washington, D.C.: **Society for Neuroscience**. Online.
- 58) † **A.A. Brewer**, B. Barton. (2011) Aging and dementia in human visual cortex: Visual field map organization and population receptive fields. Optical Society of America, Fall Vision Meeting. *Journal of Vision* 11 (15), 28. doi:[10.1167/11.15.28](https://doi.org/10.1167/11.15.28).
- 57) † B. Barton, **A.A. Brewer**. (2011) fMRI of the Rod Scotoma: Filling-In, Rod Pathway Projections, and Insights into Plasticity. Optical Society of America, Fall Vision Meeting. *Journal of Vision* 11 (15), 9. doi:[10.1167/11.15.9](https://doi.org/10.1167/11.15.9). **≥1 citation**
- 56) † D.E. Asher, A. Zaldivar, B. Barton, **A.A. Brewer**, J. Krichmar. (2011) The Effects of Neuromodulation on Human-Robot Interaction in Games of Conflict and Cooperation. *International Joint Conference on Neural Networks (IJCNN)*, (San Jose, CA) p. 2087. doi:[10.1109/IJCNN.2011.6033484](https://doi.org/10.1109/IJCNN.2011.6033484). [CP, UCI# 19]
- 55) † B. Barton, **A.A. Brewer**. (2011) fMRI of the Rod Scotoma: Filling-In, Rod Pathway Projections, and How It Informs Plasticity. Toulouse, France: European Conference on Visual Perception. *Perception* 40 (ECP Abstract Supplement), 14. **≥1 citations**
- 54) † **A.A. Brewer**, B. Barton. (2011) 'Clover Leaf' Clusters in Human Visual Cortex. Toulouse, France: European Conference on Visual Perception. *Perception* 40 (ECP Abstract Supplement), 48. **≥1 citation**
- 53) B. Barton & **A.A. Brewer**. (2011) fMRI of the Rod Scotoma: Cortical Rod Projections, Filling-in, and Insights into Plasticity. San Diego, CA: **Joint Symposium on Neural Computation**.
- 52) ***A.A. Brewer**, B. Barton, L. Lin. (2011) Functional Plasticity in Human Parietal Cortex: Adapting to Reversed Visual Input. San Diego, CA: **Joint Symposium on Neural Computation. Invited Speaker**.
- 51) ***A.A. Brewer**. (2011) Functional plasticity in adult human cortex in response to an extreme alteration of visual input. Goettingen, Germany: **Neurowissenschaftliche Gesellschaft: Ninth**

Goettingen Meeting of the German Neuroscience Society, 33rd Goettingen Neurobiology Conference. Invited Speaker.

- 50) **A.A. Brewer** & B. Barton. (2011) Perceptual and fMRI Evidence for Filling-In of the Rod Scotoma Under Scotopic Conditions. Goettingen, Germany: **Neurowissenschaftliche Gesellschaft: Ninth Goettingen Meeting of the German Neuroscience Society, 33rd Goettingen Neurobiology Conference.**
- 49) B. Barton & **A.A. Brewer**. (2011) Pinwheel Cartography: Visual Field Map Clusters in Ventral-, Medial-, and Lateral-Occipital Cortex. Goettingen, Germany: **Neurowissenschaftliche Gesellschaft: Ninth Goettingen Meeting of the German Neuroscience Society, 33rd Goettingen Neurobiology Conference.**
- 48) B. Barton & **A.A. Brewer**. (2011) Perceptual and fMRI Evidence for Filling-In of the Rod Scotoma Under Scotopic Conditions. Irvine, CA: ***Southern California Cognitive Neuroscience Meeting.***
- 47) **A.A. Brewer** & B. Barton. (2011) 'Clover Leaf' Clusters in Human Visual Cortex. Irvine, CA: ***Southern California Cognitive Neuroscience Meeting.***
- 46) † B. Barton & **A.A. Brewer**. (2010) Pinwheel cartography: A fundamental organizing principle of the human visual system. Society for Neuroscience Abstracts. Program No. 19.1. Neuroscience 2010 Abstracts. San Diego, CA: ***Society for Neuroscience.*** Online.
- 45) † S.A. Drew, D.E. Asher, B. Barton, **A.A. Brewer**. (2010) Pinwheel cartography: New visual field map cluster in the human posterior parahippocampal complex. Society for Neuroscience Abstracts. Program No. 580.7. Neuroscience 2010 Abstracts. San Diego, CA: ***Society for Neuroscience.*** Online.
- 44) † D.E. Asher, S.A. Drew, B. Barton & **A.A. Brewer**. (2010) Pinwheel cartography: Novel visual field map cluster within human ventro-lateral occipital cortex. Society for Neuroscience Abstracts. Program No. 580.8. Neuroscience 2010 Abstracts. San Diego, CA: ***Society for Neuroscience.*** Online.
- 43) † **A.A. Brewer** & B. Barton. (2010) Pinwheel cartography: Visual field map clusters in posterior parietal cortex that subserve visual attention and working memory. Society for Neuroscience Abstracts. Program No. 580.9. Neuroscience 2010 Abstracts. San Diego, CA: ***Society for Neuroscience.*** Online.
- 42) † B. Barton & **A.A. Brewer**. (2010) Perceptual and fMRI Evidence for Filling-In of the Rod Scotoma Under Scotopic Conditions. Optical Society of America Fall Vision Meeting. ***Journal of Vision* 10 (15), 52.** doi:[10.1167/10.15.52](https://doi.org/10.1167/10.15.52).
- 41) † **A.A. Brewer** & B. Barton. (2010) Pinwheel Cartography: A fundamental organizing principle of the human visual system. Optical Society of America Fall Vision Meeting. ***Journal of Vision* 10 (15), 49.** doi:[10.1167/10.15.49](https://doi.org/10.1167/10.15.49).
- 40) † **A.A. Brewer** & B. Barton. (2010) Visual field map organization and connectivity in aging human visual cortex. Alzheimer's Association International Conference on Alzheimer's Disease. ***Alzheimer's & Dementia: The Journal of the Alzheimer's Association* Volume 6, Issue 4, July Supplement pg. S437, Abstract P2-405.** doi:[10.1016/j.jalz.2010.05.1458](https://doi.org/10.1016/j.jalz.2010.05.1458).
- 39) † B. Barton & **A.A. Brewer**. (2010) White and gray matter of visual cortex in Alzheimer's disease: Visual field maps, population receptive fields, and diffusion tensor imaging. Alzheimer's Association International Conference on Alzheimer's Disease. ***Alzheimer's & Dementia: The***

Journal of the Alzheimer's Association Volume 6, Issue 4, July Supplement pg. S284, Abstract P1-382. doi:[10.1016/j.jalz.2010.05.936](https://doi.org/10.1016/j.jalz.2010.05.936).

- 38) A.A. Brewer & B. Barton. (2010) Visual Field Map Organization and Connectivity in Aging Human Visual Cortex. *Alzheimer's Imaging Consortium* at the Alzheimer's Association International Conference on Alzheimer's Disease.
- 37) B. Barton & A.A. Brewer. (2010) White and gray matter of visual cortex in Alzheimer's disease: Visual field maps, population receptive fields, and diffusion tensor imaging. *Alzheimer's Imaging Consortium* at the Alzheimer's Association International Conference on Alzheimer's Disease.
- 36) L. Lin, B. Barton, & **A.A. Brewer**. (2010) Putting The Prisms Back On: Both Maps of Visual Space Persist, as Revealed by Cortical Adaptation to Left-Right Field Reversal. *Joint Symposium on Neural Computation*. University of California, Los Angeles.
- 35) † **A.A. Brewer**, B. Barton, & L. Lin. (2010) Putting The Prisms Back On: Both Maps of Visual Space Persist, as Revealed by Cortical Adaptation to Left-Right Field Reversal. Vision Sciences Society. *Journal of Vision* 10 (7), 899. doi:[10.1167/10.7.899](https://doi.org/10.1167/10.7.899).
- 34) † B. Barton & **A.A. Brewer**. (2010) Visual Working Memory Capacity in Retinotopic Cortex: Number, Resolution, and Population Receptive Fields. Vision Sciences Society. *Journal of Vision* 10 (7), 729. doi:[10.1167/10.7.729](https://doi.org/10.1167/10.7.729). ≥1 citation
- 33) † B. Barton, L. Lin, & **A.A. Brewer**. (2009) Functional plasticity in normal adult humans demonstrated by shifts in laterality of visual field representation in a wide array of visual field maps. Society for Neuroscience Abstracts. Program No. 404.5. Neuroscience 2009 Abstracts. Chicago, IL: *Society for Neuroscience*. Online.
- 32) † D.E. Asher, B. Barton, & **A.A. Brewer**. (2009) Novel foveal representations in human ventro-lateral cortex. Society for Neuroscience Abstracts. Program No. 453.5. Neuroscience 2009 Abstracts. Chicago, IL: *Society for Neuroscience*. Online.
- 31) † **A.A. Brewer**, B. Barton, D.E. Asher. (2009) Projections of rod pathways in human visual cortex. Society for Neuroscience Abstracts. Program No. 453.25. Neuroscience 2009 Abstracts. Chicago, IL: *Society for Neuroscience*. Online.
- 30) † L. Lin, B. Barton, D.E. Asher, & **A.A. Brewer**. (2009) Visual field mapping of visuomotor adaptation to reversing prisms. Society for Neuroscience Abstracts. Program No. 404.1. Neuroscience 2009 Abstracts. Chicago, IL: *Society for Neuroscience*. Online.
- 29) *† **A.A. Brewer**, B. Barton, & L. Lin. (2009) A Novel Use for Visual Field Maps: Tracking Functional Plasticity in Posterior Parietal Cortex. Optical Society of America, Fall Vision Meeting. *Journal of Vision* 9 (14), 19. doi:[10.1167/9.14.19](https://doi.org/10.1167/9.14.19). **Invited Speaker**.
- 28) † B. Barton, D.E. Asher, & **A.A. Brewer**. (2009) Rod Pathway Projections in Human Visual Cortex. Optical Society of America, Fall Vision Meeting. *Journal of Vision* 9 (14), 90. doi:[10.1167/9.14.90](https://doi.org/10.1167/9.14.90).
- 27) † B. Barton, L. Lin, D.E. Asher, & **A.A. Brewer**. (2009) Alteration of Visuomotor Processing Following Left-Right Prism Adaptation. Vision Sciences Society. *Journal of Vision* 9 (8), 763. doi:[10.1167/9.8.763](https://doi.org/10.1167/9.8.763). ≥1 citation
- 26) † D.E. Asher, **A.A. Brewer**. (2009) Hemispheric differences of color responses in human ventral visual cortex. Vision Sciences Society. *Journal of Vision* 9 (8), 776. doi:[10.1167/9.8.776](https://doi.org/10.1167/9.8.776). ≥2 citations

- 25) † **A.A. Brewer**, B. Barton, D.E. Asher, & D. Liu. (2009) Rod Signals in Human Ventral Cortex. Vision Sciences Society. *Journal of Vision* 9 (8), 777. doi:[10.1167/9.8.777](https://doi.org/10.1167/9.8.777).
- 24) † L. Lin, B. Barton, D.E. Asher, **A.A. Brewer**. (2009) Visual Field Mapping of Visuomotor Adaptation to Prisms. Vision Sciences Society. *Journal of Vision* 9 (8), 762. doi:[10.1167/9.8.762](https://doi.org/10.1167/9.8.762). ≥1 citation
- 23) B. Barton, L. Lin, & **A.A. Brewer**. (2009) Visuomotor Adaptation to an Extreme Alteration of Visual Input. *Annual Meeting of the Center for Cognitive Neuroscience*.
- 22) † S.O. Dumoulin, **A.A. Brewer**, M. Ben-Shachar, R.F. Dougherty, B.A. Wandell. (2006) Distinguishing visual field map clusters: a new paradigm. Vision Sciences Society. *Journal of Vision* 6 (6), 533. doi:[10.1167/6.6.533](https://doi.org/10.1167/6.6.533). ≥1 citation
- 21) † **A.A. Brewer**, J. Liu, A. Wade, B.A. Wandell. (2005) New subdivisions of the human VO cluster derived from visual field mapping and stimulus selectivity. Society for Neuroscience Abstracts. Program No. 582.11. Neuroscience 2005 Abstracts. Washington, D.C.: *Society for Neuroscience*. Online.
- 20) S.M. Smirnakis, {**A.A. Brewer**, M. Schmid}, A.S. Tolias, M. Augath, W. Inhoffen, A. Shuz, B.A. Wandell, N.K. Logothetis, [{}: Authors had equal contribution]. (2005) Adult macaque V1 fails to reorganize in the months following homonymous retinal lesions. *Stanford Medical Student Research Symposium*.
- 19) *† **A.A. Brewer**. Evaluation of visual field map organization in ventral occipital cortex. (2005) *Invited Speaker: Workshop on New Concepts of Cortical Retinotopy*. Vision Sciences Society. *Journal of Vision* 5 (8).
- 18) † **A.A. Brewer**, J. Liu, A.R. Wade, B.A. Wandell. (2004) Human ventral occipitotemporal cortex contains several visual field maps with differential stimulus selectivity. Society for Neuroscience Abstracts. Program No. 300.23. Neuroscience 2004 Abstracts. San Diego, CA: *Society for Neuroscience*. Online.
- 17) † S.M. Smirnakis, {**A.A. Brewer**, M. Schmid}, A.S. Tolias, M. Augath, W. Inhoffen, A. Shuz, B.A. Wandell, N.K. Logothetis, [{}: Authors had equal contribution]. (2004) V1 cortical reorganization revisited: fMRI and electrophysiology in macaque following retinal lesions. Society for Neuroscience Abstracts. Program No. 605.3. Neuroscience 2004 Abstracts. San Diego, CA: *Society for Neuroscience*. Online. ≥1 citations
- 16) **A.A. Brewer**, A.R. Wade, J. Liu, B.A. Wandell. (2004) Visual field maps in human ventral occipitotemporal cortex. *Stanford Medical Student Research Symposium*.
- 15) † J. Liu, **A.A. Brewer**, B.A. Wandell. Variations in temporal and chromatic responses across human visual cortex. (2004) Vision Sciences Society. *Journal of Vision* 4 (8), 318. doi:[10.1167/4.8.318](https://doi.org/10.1167/4.8.318).
- 14) † I. Fine, A.R. Wade, **A.A. Brewer**, M.G. May, D.F. Goodman, G.M. Boynton, B.A. Wandell, D.I. MacLeod. The behavioral and neural effects of long-term deprivation. (2004) *Investigative Ophthalmology and Visual Science* 45 (5), 4581.
- 13) † A.R. Wade, **A.A. Brewer**, M. Augath, N.K. Logothetis, B.A. Wandell. (2003) Color responses in human and macaque. Society for Neuroscience Abstract. Program No. 439.9. Neuroscience 2003 Abstracts. New Orleans, LA: *Society for Neuroscience*. Online. ≥2 citations

- 12) † J. Liu, **A.A. Brewer**, B.A. Wandell. (2003) Human visual areas differ in their amplification of S-cone signal. Society for Neuroscience Abstracts. Program No. 819.3. Neuroscience 2003 Abstracts. New Orleans, LA: **Society for Neuroscience**. Online.
- 11) † **A.A. Brewer**, A.R. Wade, J. Liu, B.A. Wandell. (2003) Visual field maps in human ventral occipitotemporal cortex. Society for Neuroscience Abstracts. Program No. 818.15. Neuroscience 2003 Abstracts. New Orleans, LA: **Society for Neuroscience**. Online.
- 10) **A.A. Brewer**, A.R. Wade, N.K. Logothetis, B.A. Wandell. (2003) Is V4-Dorsal alive and well in human ventral occipital cortex? **Stanford Medical Student Research Symposium**.
- 9) † **A.A. Brewer**, A.R. Wade, N.K. Logothetis, B.A. Wandell. (2002) Is V4-dorsal alive and well in human ventral occipital cortex? Society for Neuroscience Abstracts. Program No. 721.8. Neuroscience 2002 Abstracts. Orlando, FL: **Society for Neuroscience**. Online.
- 8) † I. Fine, A.R. Wade, **A.A. Brewer**, M.G. May, G.M. Boynton, B.A. Wandell, D.I.A. MacLeod. (2002) Long-term deprivation has differential effects on color, motion and pattern processing in human visual cortex. Society for Neuroscience Abstracts. Program No. 721.24. Neuroscience 2002 Abstracts. Orlando, FL: **Society for Neuroscience**. Online.
- 7) † S.M. Smirnakis, {**A. Brewer**, M. Schmid}, A.S. Tolias, W. Inhoffen, B.A. Wandell, N.K. Logothetis, [{}: Authors had equal contribution]. (2002) Macaque visual cortex reorganization after homonymous retinal scotoma probed by fMRI. Society for Neuroscience Abstracts. Program No. 760.2. Neuroscience 2002 Abstracts. Orlando, FL: **Society for Neuroscience**. Online.
- 6) † R.F. Dougherty, **A.A. Brewer**, A.R. Wade, B.A. Wandell. (2002) Measurement of human visual areas across individuals. Society for Neuroscience Abstracts. Program No. 658.12. Neuroscience 2002 Abstracts. Orlando, FL: **Society for Neuroscience**. Online.
- 5) **A.A. Brewer**, H.A. Baseler, L.T. Sharpe, A.B. Morland, H. Jägle, B.A. Wandell. (2002) Reorganization of human cortical maps caused by inherited photoreceptor abnormalities. **Stanford Medical Student Research Symposium. (First Place Poster)**.
- 4) † **A.A. Brewer**, A.R. Wade, B.A. Wandell. Visual field maps and color signals in human ventral occipital cortex. (2002) Vision Sciences Society. **Journal of Vision** 2 (7), 549. doi: [10.1167/2.7.549](https://doi.org/10.1167/2.7.549).
- 3) † A.R. Wade, R.F. Dougherty, **A. Brewer**, B.A. Wandell. (2001) Red Priests, Fast Houses: Cortical regions involved in reading color and motion specific adjectives. Society for Neuroscience Abstracts. Program No. 119.11. Neuroscience 2001 Abstracts. San Diego, CA: **Society for Neuroscience**. Online.
- 2) I. Fine, A. R. Wade, **A.A. Brewer**, G.M. Boynton, B.A. Wandell and D.I.A. MacLeod. (2001) Neural and functional effects of long-term visual deprivation. **Optical Society of America, Fall Vision Meeting**.
- 1) † B.A. Wandell, W.A. Press, **A.A. Brewer**, N.K. Logothetis. (2000) FMRI measurements of visual area and retinotopic maps in monkey. Society for Neuroscience Abstracts. Program No. 26.821. Neuroscience 2000 Abstracts. New Orleans, LA: **Society for Neuroscience**. Online. **≥3 citations**

IN THE MEDIA – MEDIA COVERAGE OF RESEARCH AND PUBLISHED WORK

- 2015 'Study sheds new light on low-light vision.' School of Social Sciences News, University of California, Irvine.
- 2015 'Man with restored sight provides new insight into how vision develops.' BrightSurf.com. April 16.
<http://www.brightsurf.com/news/headlines/108837/> ...
[Man with restored sight provides new insight into how vision develops .html](#)
- 2015 'Man with restored sight provides new insight into how vision develops.' Eureka.com. April 15.
http://www.eurekaalert.org/pub_releases/2015-04/uow-mwr041515.php
- 2015 'What color is the dress? UCI cognitive scientists weigh in on color perception debate.' School of Social Sciences News, University of California, Irvine. Feb 27.
<http://www.socsci.uci.edu/newsevents/news/2015/2015-02-27-dress-color.php>
- 2013 'The Sounds of Research: UC Irvine scientists probe hearing and speech from a variety of angles.' Orange County Register. September 30.
- 2012 'Brewer and Elyachar receive social sciences research excellence awards.' School of Social Sciences News, University of California, Irvine. August 28.
<http://www.socsci.uci.edu/newsevents/news/2012/2012-08-28-brewer-and-elyachar-receive-social-sciences-research-excellence-awards.php>
- 2012 'UCI researchers map new dimension in human auditory cortex.' School of Social Sciences News, University of California, Irvine. January 4.
<http://www.socsci.uci.edu/newsevents/news/2013/2013-01-04-uci-researchers-map-new-dimension-in-human-auditory-cortex.php>
- 2010 'Treating Blindness Takes More Than Meets The Eye.' National Public Radio (NPR). September 13.
<http://www.npr.org/templates/story/story.php?storyId=129731859>
- 2010 'Teaching the Brain to See.' KQUED QUEST Radio Report. March 1.
<http://science.kqed.org/quest/audio/teaching-the-brain-to-see/>
- 2010 'UCI cognitive scientists explore new frontiers in mind, brain and behavior research.' School of Social Sciences News, University of California, Irvine. February 4.
<http://www.socsci.uci.edu/newsevents/events/2010/2010-02-04-uci-cognitive-scientists-explore-new-frontier.php>
- 2008 'Retrieving Sight.' University of California New. October 27.
<http://news.uci.edu/features/retrieving-sight/>
- 2007 'Crashing Through - A True Story of Risk, Adventure, and the Man Who Dared to See,' a book by Robert Kurson (Random House). ISBN-13: 978-0812973686.
- 2005 'In Print and On the Air.' The Stanford Report. June 8.
<http://news.stanford.edu/news/2005/june8/inprint-060805.html>

- 2005 'Plasticity and Its Limits.' *News and Views* by M. I. Sereno. *Nature*. 435, 288-289.
<http://www.nature.com/nature/journal/v435/n7040/full/435288a.html>
- 2002 'Der sehende Blinde. Dworschak.' M., *der Spiegel*, 47. November 18.
<http://www.spiegel.de/spiegel/print/d-25718178.html>
- 2002 'Zurück aus der Dunkelheit.' *der Spiegel Television*.
<http://www.spiegel.de/sptv/a-225094.html>
- 2002 'Sight Unseen.' Abrams, M. *Discover Magazine*, 23(6). June 1.
<http://discovermagazine.com/2002/jun/featsight>
- 2002 'Outlook.' BBC World Service Radio.
- 2002 'The man who learnt to see.' BBC Documentary.

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PROFESSIONAL ACTIVITIES

SERVICE: PROFESSIONAL

PROFESSIONAL MEMBERSHIPS

2014 – present	National Institutes of Health (NIH), Mechanisms of Sensory, Perceptual and Cognitive Processes (SPC) Study Section, Early Career Reviewer Panelist
2013 – present	Member, Center for Cognitive Neuroscience and Engineering, University of California, Irvine
2013 – present	National Science Foundation (NSF) Peer Review Committee Panelist
2013 – present	Member, Center for Hearing Research, University of California, Irvine
2012 – present	Member, Cognitive Neurosciences Society
2010 – 2013	Elected Chair , Vision Division, Fall Vision Meeting, Optical Society of America
2010-2011	Member, International Society to Advance Alzheimer Research and Treatment
2010 – present	National Science Foundation Peer Review Committee, ad hoc reviewer
2009-2010	Elected Vice-Chair , Vision Division, Fall Vision Meeting, Optical Society of America
2009 – present	Member, Optical Society of America
2008 – present	Executive Committee Member , Center for Cognitive Neuroscience, University of California, Irvine

2002 – present	Member, Vision Sciences Society
2001 – present	Member, Society for Neuroscience
1997-2002	Member, American Medical Student Association

CONFERENCES / SYMPOSIA

October, 2013	Co-Chair: Extrastriate Cortex: Computational Neuroimaging, Annual Conference, Society for Neuroscience.
October, 2013	Moderator: Measuring Cortex without Vision. Fall Vision Meeting, Optical Society of America. Houston, Texas.
October, 2012	Co-Chair: Human Extrastriate Cortex: Imaging of Functional Organization. Nanosymposium, Annual Conference, Society for Neuroscience.
July, 2012	Co-Organizer: Auditory Neuroscience Workshop: Towards a “Closed-Loop” Neuro-Computational Model of Speech Processing, University of California, Irvine <i>Workshop Proposal Funding Award:</i> School of Social Science, UCI.
September, 2011	Moderator: Connectivity Maps in the Brain. Fall Vision Meeting, Optical Society of America. Seattle, Washington.
October, 2010	Moderator: Contributed Vision Session. Fall Vision Meeting, Optical Society of America. Rochester, New York.
2010 – 2013	Elected Chair, Vision Division, Fall Vision Meeting, Optical Society of America.
2009-2010	Elected Vice-Chair, Vision Division, Fall Vision Meeting, Optical Society of America.

INVITED TALKS

13)	October, 2013	Neuroscience Seminar Series, The University of Texas at Austin <i>‘Clover Leaf’ Clusters and Functional Plasticity In Human Visual Cortex</i>
12)	July, 2012	Auditory Neuroscience Workshop: Towards a “Closed-Loop” Neuro-Computational Model of Speech Processing, University of California, Irvine <i>Human Cortical Auditory Field Maps</i>
11)	February, 2012	Zhejiang University of Technology Program, Extension Program, University of California, Irvine <i>Visual Perception</i>
10)	January, 2012	Neuroscience Seminar Series, Baylor College of Medicine, Houston, TX <i>‘Clover Leaf’ Clusters and Functional Plasticity In Human Visual Cortex</i>
9)	August, 2011	Visiting Tibetan Scholar Seminar Series, University of California, Irvine <i>Brain Disorders</i>

- 8) August, 2011 INSIDE UCI: Freshman - Transfer Summer Start Series, University of California, Irvine
Visual Neuroscience
- 7) April, 2011 Brain Mapping Symposium, University of California, Irvine
'Clover Leaf' Clusters in Human Visual Cortex
- 6) February, 2010 The School of Social Science Expert Speaker Series, Inaugural Speaker, University of California, Irvine
Inducing plasticity in normal adult human cortex
- 5) October, 2009 The School of Social Sciences Chancellor's Club, University of California, Irvine
Inducing plasticity in normal adult human cortex
- 4) February, 2008 San Francisco Museum of Modern Art, San Francisco, California
Take your time: Olafur Eliasson. Visual Illusions
- 3) January, 2008 Center for Cognitive Neuroscience, University of California, Irvine
Visual Field Maps: from Properties to Plasticity in Human and Macaque Cortex
- 2) January, 2006 Department of Cognitive Sciences, University of California, Irvine
Visual field map properties and plasticity
- 1) December, 2005 Smith-Kettlewell Eye Research Institute, San Francisco, California
New subdivisions of the human VO cluster

REVIEW ACTIVITY

JOURNALS

- ◆ Frontiers Journal – Perception Science: **Editorial Board, Review Editor**
- ◆ **Ad hoc reviewer:** Alzheimer's Disease & Dementia, Cerebral Cortex, Current Biology, Hearing Research, Human Brain Mapping, Frontiers in Psychology - Perception Science, Journal of Cognition, Journal of Neurophysiology, Journal of Neuroscience, Journal of Vision, Journal of Visualized Experiments, NeuroImage, Neuron, Neuropsychologia, Neuroscience Research, Neuroscience, Peer J, Public Library of Science (PLOS) ONE, Proceedings of the National Academy of Sciences (PNAS)

GRANTS

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|---------|---|
| 05/2015 | Grant Reviewer Panelist , National Science Foundation (NSF) |
| 04/2015 | <i>Ad hoc</i> Grant Reviewer, Medical Research Council (MRC), United Kingdom |
| 04/2015 | Grant Reviewer Panelist , National Science Foundation (NSF) |
| 10/2014 | Grant Reviewer Panelist , National Science Foundation (NSF) |

10/2014	Grant Reviewer Panelist (<i>ad hoc</i>), Study Section – Mechanisms of Sensory, Perceptual and Cognitive Processes (SPC); Early Career Reviewer Program, National Institutes of Health (NIH)
5/2014	Grant Reviewer Panelist , National Science Foundation (NSF)
10/2013	Grant Reviewer Panelist , National Science Foundation (NSF)
2011 – present	<i>Ad hoc</i> Outside Grant Reviewer, National Institute of Health (NIH), for grants supported by the Institute for Clinical and Translational Science (ICTS) at the University of California, Irvine
2011 – present	<i>Ad hoc</i> Outside Grant Reviewer, Institute for Clinical and Translational Science (ICTS) at the University of California
2010 – 2011	<i>Ad hoc</i> Outside Grant Reviewer, National Science Foundation (NSF)
2009	Internal Grant Review Committee, Alzheimer’s Disease Research Center – MIND Institute at the University of California, Irvine
2008 – present	Annual Reviewer, Alzheimer’s Association

CONFERENCES

2009 – 2103	Annual Reviewer, Optical Society of America, Fall Vision Meeting
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SERVICE: CAMPUS, SCHOOL, AND DEPARTMENT

CAMPUS

SOCIAL AND BEHAVIORAL INSTITUTIONAL REVIEW BOARD (IRB)

1/2015 - 12/2016	Vice Chair , Social and Behavioral Institutional Review Board (IRB) Committee "C", University of California, Irvine
1/2015 - 12/2016	Full member , Social and Behavioral Institutional Review Board (IRB) Committee "E", University of California, Irvine

- 7/2014 - 12/2014 **Interim Vice Chair**, Social and Behavioral Institutional Review Board (**IRB**) Committee "C", University of California, Irvine
- 10/2013 – 9/2016 **Full member**, Social and Behavioral Institutional Review Board (**IRB**) Committee "C", University of California, Irvine
- 6/2011 Institutional Review Board: Association for Accreditation of Human Research Protection Program (AAHRPP) Site Visit, Faculty Participant. University of California, Irvine

OTHER

- 8/ 2011 Building Your Career: A Discussion Panel, Transfer Student Summer Start Program, University of California, Irvine; **Invited Talk:** *Career Planning*
- 1/2011 – present Internal and Extramural Grant Review Committee, Institute for Clinical and Translational Science at the University of California, Irvine
- 4/2009 Internal Grant Review Committee, Alzheimer's Disease Research Center at the University of California, Irvine
- 2/ 2008 Mesa Court Myth Busters, University of California, Irvine
Invited Talk: *Visual Neuroscience*

SCHOOL

- 5/2011 Panelist, Social Sciences Responsible Conduct of Research Seminar, University of California, Irvine
- 6/2008 Center for Cognitive Neuroscience Summer Fellowship Committee, University of California, Irvine
- 7/2007-present Cognitive Neuroscience Concentration Committee, University of California, Irvine

DEPARTMENT

- 9/2012 – 2/2013 Personnel Review Committee, Department of Cognitive Sciences, University of California, Irvine
- 5/2012 – 2/2013 Faculty Search Committee, Cognitive Sciences, University of California, Irvine
- 10/2010 Personnel Review Committee, Department of Cognitive Sciences, University of California, Irvine
- 5/2008 John I. Yellott Scholar Award Committee (Graduate student award), University of California, Irvine

STANFORD UNIVERSITY SCHOOL OF MEDICINE

2001-2002	Fifth Year Class Representative, Stanford Medical Student Association (SMSA), Stanford University School of Medicine
2000-2001	Class Secretary, Stanford Medical Student Association (SMSA), Stanford University School of Medicine
1997-1998	Admit Weekend Co-coordinator, Stanford University School of Medicine

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SERVICE: COMMUNITY OUTREACH PROGRAMS

'BRAIN DAY' ELEMENTARY SCHOOL PROGRAMS

10/2010 – present	'Brain Science Assembly,' Alyssa A. Brewer, Gregory Hickok, Jeffrey L. Krichmar Assemblies at Bonita Canyon, University Park, Stone Gate, and Turtle Rock Elementary Schools to introduce local elementary fifth grade students to the topics and career of cognitive neuroscience.
11/2011	'Brain Day' at Steve Luther Del Amo Elementary School; Cerritos, CA Brewer Lab provided training in basic neuroscience in age-appropriate formats for several grades (K-2, 2-4, 4-6) by (1) introducing students to the organization of the brain; (2) discussing the brain's importance and function; and (3) reviewing brain disease and damage.

GIRLS INC.

3/2012	'The Brilliant Brain': Workshop for the Eureka! Girls Inc. of Orange County. Tustin, CA. Special presentation on the organization, functions, and diseases of the brain by the Brewer Laboratory of Visual Neuroscience for the 6 th and 7 th grade girls and families.
7/2012	Summer Workshop: Week-long session for Girls Inc. Summer Camp by the Brewer Laboratory of Visual Neuroscience on the organization, functions, and diseases of the brain. Costa Mesa, CA

(upper division undergraduate-level; expansion of previously-created new course into Psych/Bio Sci cross-listing. Taught academic year and summer session, approx. 400 students enrolled per year)

2008 – present	Psychology 262: Functional Neuroanatomy (graduate-level; revision of previously created new course)
2008 – 2010	Psychology 263ABC: Current Topics in Visual Neuroscience Research (graduate-level; new course created)
2008 – 2009	Psychology 165: Brain Disorders (upper division undergraduate-level; new course created)
2007 – 2008	Psychology 269: Functional Neuroanatomy (graduate-level; new course created)
2007 – 2008	Psychology 269: Retinotopic Mapping and Diffusion Tensor Imaging (graduate-level; new course created)

COURSE COORDINATOR, STANFORD UNIVERSITY

1997-2001	Course Coordinator, Biology 44 (core Biology Laboratory), Stanford University - Plant Physiology and Animal Behavior Laboratory Systems [<i>The Course Coordinator designs and implements each lab system and teaches a quarter-long training course for the undergraduate and graduate Course Assistants for each lab system.</i>] Course Directors: Dr. Melanie Yelton & Dr. Shyamala Malladi, Lecturers in Biology. Laboratories: 1) Animal Behavior; 2) Plant Physiology
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TEACHING ASSISTANT, STANFORD UNIVERSITY

2002	Teaching Assistant, <i>Psychology 202 – Cognitive Neuroscience</i> , graduate-level Instructor: Dr. Brian Wandell, Professor of Psychology and of Electrical Engineering, by courtesy.
2001	Guest Lecturer, <i>Psychology 196 - Contemporary Issues and Research in Psychology: Proseminar for Advanced Psychology Majors</i> , undergraduate-level Instructor: Dr. Kalanit Grill-Spector, Assistant Professor of Psychology.
2001	Brain Day Speaker – Stanford Neuroscience students and faculty teach basic neuroscience to local middle school classes.
2000-2001	'Writing in the Major' <i>Scientific Writing Tutor, Biology 44</i> (core Biology Laboratory), undergraduate-level Course Directors: Dr. Melanie Yelton & Dr. Shyamala Malladi, Lecturers in Biology.
1998-2001	The Honors Biology Writing Tutor for Honors Biology Thesis Writers, undergraduate-level.

- 1998 Teaching Assistant, *Human Gross Anatomy*, Stanford University School of Medicine, medical/graduate-level
Instructors: Larry Mathers, M.D., Ph.D.; Eric Glasgow, M.D.; Ian Whitmore, M.D.; John Gosling, M.D.; Robert Chase, M.D.
- 1996 Course Assistant, *Human Behavioral Biology*, upper division undergraduate-level
Instructor: Dr. Robert Sapolsky, Professor of Biology, Neurology & Neurological Sciences, and Neurosurgery, by courtesy.
- 1993-1996 Course Assistant, *Biology 44 (core Biology Laboratory)*, Stanford University - Plant Physiology and Animal Behavior Laboratory Systems, undergraduate-level
Course Directors: Dr. Melanie Yelton & Dr. Shyamala Malladi, Lecturers in Biology.

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GRADUATE STUDENT SUPERVISION

THESIS ADVISOR

- 8/2008 – 12/2013 Brian Barton, Ph.D.
'Mapping Human Visual and Auditory Cortex, Tracking Plasticity, and Linking fMRI to Perception'
- ◆ (2/2014 - present) Postdoctoral Scholar, University of California, Irvine

THESIS CO-ADVISOR

- 9/2008 – 6/2014 Derrick E. Asher, Ph.D. (advisor: Jeffrey L. Krichmar, Ph.D.)
'Action Selection and Execution with Computational Neural Networks of Neuromodulation and Sensory Integration'
- 5/2008 – 12/2011 Veronica Eckstein, Ph.D. (advisor: Bruce Berg, Ph.D.)
'A novel model for pitch perception and functional localization of attentionally modulated pitch and loudness perception'
- 2/2008 – 12/2009 Ling Lin, Ph.D. (advisor: George Sperling, Ph.D.)
'Studies of human information processing: visual memory of contrast and adaptation to reversed visual inputs'
- ◆ (2009 – present) Clinical Researcher, AccuFocus Inc.

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POSTDOCTORAL SUPERVISION

- 3/2014 - present Brian Barton, Ph.D. ♦ Postdoctoral Fellow on NSF grant #1329255
 ♦ Supervisor: Professor Greg Hickok; Co-supervisors:
 Professor Kourosh Saberi & Professor Alyssa A. Brewer
- 6/2009 – 12/2010 Stefanie A. Drew, Ph.D. ♦ 2012 – present: Assistant Professor, California State
 University, Northridge
 ♦ 2010 - 2012: Lecturer, Pomona College, Claremont, CA
 ♦ 2010-2012: Post-doctoral Fellow, Western University of
 Health Sciences, Department of Psychology, College of
 Optometry, Pomona, CA

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DISSERTATION, CANDIDACY, AND CONCENTRATION COMMITTEES

DISSERTATION COMMITTEES

8/2014	Jonathan Venezia	Member, Dept. of Cognitive Sciences
5/2014	Derrick Asher	Co-advisor , Dept. of Cognitive Sciences
12/2013	Brian Barton	Advisor , Dept. of Cognitive Sciences
6/2013	Mike Avery	Member, Dept. of Cognitive Sciences
7/2012	Lavanya Krishna	Member, Dept. of Cognitive Sciences
6/2012	Anna Lisette Isenberg	Member, Dept. of Cognitive Sciences
12/2011	Veronica Eckstein	Co-advisor , Dept. of Cognitive Sciences
5/2011	Steven Thurman	Member, Dept. of Cognitive Sciences
12/2009	Ling Lin	Co-advisor , Dept. of Cognitive Sciences
5/2009	Stefanie Drew	Member, Dept. of Cognitive Sciences
6/2008	Pamela Jeter	Member, Dept. of Cognitive Sciences

ADVANCEMENT TO CANDIDACY COMMITTEES

3/2014	Leila Feinberg	Member, Dept. of Neurobiology and Behavior
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3/2014	Derek Huffman	Member, Depts. of Neurobiology and Behavior & Center for the Neurobiology of Learning and Memory
10/2013	Jonathan Venezia	Member, Dept. of Cognitive Sciences
2/2012	Anna Lisette Isenberg	Member, Dept. of Cognitive Sciences
9/2011	Derrick Asher	Co-advisor , Dept. of Cognitive Sciences
6/2011	Mike Avery	Member, Dept. of Cognitive Sciences
5/2011	Lavanya Krishna	Member, Dept. of Cognitive Sciences
4/2011	Brian Barton	Advisor , Dept. of Cognitive Sciences
3/2011	James Pooley	Member, Dept. of Cognitive Sciences
11/2010	David Bridwell	Member, Dept. of Cognitive Sciences
10/2010	Joyce Lacy	Member, Depts. of Neurobiology and Behavior & Center for the Neurobiology of Learning and Memory
10/2008	Steven Thurman	Member, Dept. of Cognitive Sciences
3/2008	Pamela Jeter	Member, Dept. of Cognitive Sciences

COGNITIVE NEUROSCIENCE CONCENTRATION COMMITTEES

03/2015	Laris Rodriguez Cintron	Member, Dept. of Cognitive Sciences
10/2012	Alexis Craig	Member, Dept. of Cognitive Sciences
9/2012	Jack Payne	Member, Dept. of Cognitive Sciences
10/2010, 5/2011	Andrew Zaldivar	Member, Dept. of Cognitive Sciences
11/2009	Brian Barton	Advisor , Dept. of Cognitive Sciences
11/2009	Derrick Asher	Advisor , Dept. of Cognitive Sciences
6/2009	Mike Avery	Member, Dept. of Cognitive Sciences
6/2009	Jonathan Venezia	Member, Dept. of Cognitive Sciences

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UNDERGRADUATE STUDENT SUPERVISION

UNDERGRADUATE RESEARCH OPPORTUNITIES GRANT PROGRAM (UROP) & SUMMER UNDERGRADUATE RESEARCH PROGRAM FELLOWSHIP (SURP)

11/2011 – 6/2013	Golroxan (Roxan) Shoa, <i>Visual Working Memory in Cortical Visual Field Maps</i>
10/2011 – 6/2012	Brianna Penley, <i>Comparative Analysis of Corollary Discharge between Normal Subjects and Patients with Visual Hemianopsia</i>
10/2011 – 6/2012	Aaron Craddolph, <i>Comparative Analysis of Corollary Discharge between Normal Subjects and Patients with Visual Hemianopsia</i>
11/2010 – 7/2012	Melanie Humphrey, <i>Visual-Motor Adaptation to Left-Right Reversed Visual Input</i>
8/2010 – 6/2012	Jacob Redmond (Previously: Messer), <i>Structural and Functional Analysis of Human Cortical and Subcortical Visual Pathways</i>

RESEARCH ASSISTANTS

12/2011 – 6/2012	Elhum (Ellie) Shamshiri
5/2011 – 6/2012	Mark Dennison
12/2010 – 6/2011	Alex Minick
4/2010 – 6/2012	Anne Nguyen
4/2010 – 9/2010	Anthony Bonilla
4/2010 – 3/2011	Benjamin Szu
4/2010 – 1/2011	Chandni Patel
4/2010 – 1/2012	Kelly Wang
4/2010 – 6/2012	Mike Ward
4/2010 – 6/2012	William Quezada
4/2010 – 8/2011	Elizabeth Orient
4/2010 – 6/2010	Yimy Villa
4/2009 – 6/2009	Martin Dean
4/2009 – 6/2009	Elizabeth Jordan
4/2009 – 6/2009	Saman Mohseni
1/2009 – 6/2009	Christine Mikhail
12/2008 – 6/2009	Christian Herrera
9/2008 – 6/2009	Myra Engalla

OTHER RESEARCH SUPERVISION

7/2008 – 12/2008	Cindy Shih	Advisor , Directed Individual/Independent Study
6/2008 – 5/2009	Robert Coleman	Supervisor , Internship
6/2008 – 4/2009	Danting (Dantian) Liu	Supervisor , Directed Individual/Independent Study
5/2008 – 1/2009	Nick Baitoo	Supervisor , Internship

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