

## Carol A. Seger

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### **EDUCATION**

- 1994 - 1998     Postdoctoral Training  
                    Stanford University
- 1994             Ph. D. in Psychology  
                    Major area Cognitive Psychology, minor area Behavioral Neuroscience  
                    University of California, Los Angeles
- 1991             M. A. in Psychology  
                    University of California, Los Angeles
- 1987             A. B. *cum laude* in Psychology. Cognitive Science concentration  
                    Harvard University.

### **ACADEMIC POSITIONS**

- 2015-2017       Chang Jiang Scholar Chair Professor, South China Normal University
- 2014             Visiting Professor, Department of Psychology, South China Normal University,  
                    Guangzhou, China
- 2010 - present   Professor, Colorado State University  
                    Department of Psychology  
                    Molecular, Cellular, and Integrative Neurosciences Program
- 2004 - 2010     Associate Professor, Colorado State University
- 2005 - 2006     Visiting Scholar, Department of Psychology, Stanford University  
2005 - 2006     Visiting Scholar, Department of Psychology and Helen Wills Neurosciences  
                    Institute. University of California at Berkeley.
- 1998 - 2004     Assistant Professor, Colorado State University

### **HONORS AND AWARDS**

- 1983             National Merit Scholar
- 1987             B. A. *cum laude*, Harvard and Radcliffe colleges

- 1989 - 1990 University Fellowship, University of California, Los Angeles  
 1994 - 1997 National Research Service Award from the National Institute of Mental Health  
 “Cognitive Neuropsychology of Implicit Learning”  
 2010 *NeuroImage* Editor’s choice award for best paper in Systems Neuroscience  
 2013 Fellow, Association for Psychological Science  
 2014 High-end Foreign Experts Recruitment Award, Guangdong Province, China  
 2015 Chang Jiang Scholar Chair Professor award, Ministry of Education, China

## **PUBLICATIONS**

- Seger, C. A., Braunlich, K., Wehe, H. S., & Liu, Z. (2015). Generalization in category learning: The roles of representational and decisional uncertainty. *The Journal of Neuroscience*, 35, 8802-8812.
- Liu, Z., Braunlich, K., Wehe, H. S., & Seger, C. A. (2015). Neural networks supporting switching, hypothesis testing, and rule application. *Neuropsychologia*.
- Liu, Z., Song, X. & Seger, C. A. (2015). An eye-tracking study of multiple feature value category structure learning: The role of unique features. *PLOS One*.
- Wehe, H. S., Rhodes, M. G., & Seger., C. A. (2015). Evidence for the negative impact of reward on self-regulated learning. *The Quarterly Journal of Experimental Psychology*, 1-18
- Seger., C. A., & Braunlich, K. (2015). Category Learning. *Brain Mapping: An Encyclopedic Reference*. Elsevier.
- Mo, C., Yu, M., Seger., C. A., & Mo, L. (2015). Holistic neural coding of Chinese character forms in bilateral ventral visual system. *Brain and Language* 141, 28-34.
- Braunlich, K., Gomez-Lavin, J., Seger, C.A. (2015). Frontoparietal networks involved in categorization and item working memory. *Neuroimage* 107:146-162.
- Braunlich, K. & Seger. C. A. (2013). Basal Ganglia. *Wiley Interdisciplinary Reviews: Cognitive Science*. 4:135–148.
- Lopez-Paniagua, D. & Seger, C. A. (2013). Coding of level of ambiguity within neural systems mediating choice. *Frontiers in Neuroscience*, 7, 229.
- Peterson, E. J. & Seger, C. A. (2013). Many hats: Intra-Trial and Reward-Level Dependent BOLD Activity in the Striatum and Premotor Cortex. *Journal of Neurophysiology*, 110, 1689-1702.
- Ryals, A. J., Cleary, A. M., & Seger, C. A. (2013). Recall versus familiarity when recall fails for words and scenes: The differential roles of the hippocampus, perirhinal cortex, and category-specific cortical regions. *Brain Research*, 1492, 72-91.
- Seger, C. A. (2013). The visual corticostriatal loop: Circuitry and function. *Frontiers in Systems Neuroscience*, 7, 104.
- Seger, C. A. & Peterson, E. J. (2013). Categorization = Decision Making + Generalization. *Neuroscience and Biobehavioral Reviews*, 37, 1187-1200
- Seger, C. A , Spiering, B. J., Sares, A., Alpeter, C. Quraini, S., David, J., & Thaut, M. (2013). Corticostriatal contributions to musical expectancy perception. *Journal of Cognitive Neuroscience*, 25, 1062–1077.
- Seger, C. A. & Spiering, B. A. (2011). A critical review of habit learning and the basal ganglia. *Frontiers in Systems Neuroscience*, 5 (66), 1-6.
- Lopez-Paniagua, D. & Seger, C. A. (2011). Interactions within and between corticostriatal loops during component processes of category learning. *Journal of Cognitive Neuroscience*, 23, 3068-83.

- Seger, C. A., Dennison, C. S., Lopez-Paniagua, D., Peterson, E. J., & Roark A. (2011). Dissociating hippocampal and basal ganglia contributions to category learning using stimulus novelty and subjective judgments. *NeuroImage*, *55*, 1739-1753.
- Seger, C. A. & Miller, E. K. (2010) Category learning in the brain. *Annual Review of Neuroscience*. *33*, 203-219.
- Seger, C. A., Peterson, E. J., Cincotta, C. M., Lopez-Paniagua, D., & Anderson, C. W. (2010). Dissociating the contributions of independent corticostriatal systems to visual categorization learning through the use of reinforcement learning modeling and Granger causality modeling. *Neuroimage*, *50*(2), 644-56.
- Schmidt, G. & Seger, C. A. (2009). Neural correlates of metaphor processing: The roles of figurativeness, familiarity and difficulty. *Brain and Cognition*, *71*, 375-386.
- Seger, C. A. (2009). The involvement of corticostriatal loops in learning across tasks, species, and methodologies. *Basal Ganglia IX: Proceedings of the International Basal Ganglia Society. Advances in Behavioral Biology series*; Springer Publishers.
- Richard, M. V., Clegg, B. A., & Seger, C. A. (2009). Implicit motor sequence learning is not represented purely in response locations. *Quarterly Journal of Experimental Psychology*. *62*(8), 1516-1522.
- Seger, C. A. (2008). How do the basal ganglia contribute to categorization? Their roles in generalization, response selection, and learning via feedback. *Neuroscience and Biobehavioral Reviews*, *32*, 265-278.
- Cincotta, C. M & Seger, C. A. (2007) Dissociation between striatal regions while learning to categorize via observation and via feedback. *Journal of Cognitive Neuroscience*, *19*, 249-265.
- Schmidt, G. L., DeBuse, C. J. & Seger, C. A. (2007). Right hemisphere metaphor processing? Characterizing the lateralization of semantic processes. *Brain and Language*, *100*, 127-141.
- Seger, C. A. & Cincotta, C. M. (2006). Dynamics of frontal, striatal, and hippocampal systems in rule learning. *Cerebral Cortex*, *16*, 1546-1555
- Seger, C. A. (2006). The basal ganglia in human learning. *The Neuroscientist*. *12*, 285-290.
- Seger, C. A. & Cincotta, C. M. (2005). The roles of the caudate nucleus in human classification learning. *Journal of Neuroscience*, *25*, 2541-2551.
- Seger, C. A. (2005). Long term memory. In N. Salkin (Ed.) *The encyclopedia of human development*. Thousand Oaks, CA: Sage.
- Seger, C. A. (2004). Does implicit learning require attention? *Contemporary Psychology*, *49*, 717-719. [Review of L. Jimenez (Ed.) Attention and Implicit Learning].
- Seger, C. A., Stone, M., & Keenan, J. P. (2004). Cortical activations during judgments about the self and an other person. *Neuropsychologia*, *42*, 1168-1177.
- Kisley, M. A., Davalos, D. B., Layton, H., Pratt, D., Ellis, J., & Seger, C. A. (2004). Small changes in temporal deviance modulate mismatch negativity amplitude. *Neuroscience Letters*, *358*, 197-200.
- Seger, C. A. (2003). Does the SOC theory avoid unconscious rule use? *Behavioral and Brain Sciences*, *25*, 353.
- Seger, C.A., & Cincotta, C. M. (2002). Striatal activation in concept learning. *Cognitive, Affective, & Behavioral Neuroscience*, *2*, 149-161.
- Seger, C. A., Desmond, J. E., Glover, G. H., & Gabrieli, J. D. E. (2000). fMRI evidence for right hemisphere involvement in processing unusual semantic relationships. *Neuropsychology*, *14*, 361-369.
- Seger, C. A., Poldrack, R. A., Prabhakaran. V., Zhao, M., Glover, G., & Gabrieli, J. D. E. (2000). Hemispheric asymmetries and individual differences in visual concept learning as measured by functional MRI. *Neuropsychologia*, *38*, 1316-1324.

- Seger, C. A., Prabhakaran, V., Poldrack, R. A., & Gabrieli, J. D. E. (2000). Neural activity differs between explicit and implicit learning of artificial grammar strings: An fMRI Study. *Psychobiology*, 28, 283-292.
- Seger, C.A., Rabin, L. A., Desmond, J. E., & Gabrieli, J. D. E. (1999). Verb generation priming involves conceptual implicit memory. *Brain and Cognition*, 41, 150-177.
- Poldrack, R. A., Prabhakaran, V., Seger, C. A., & Gabrieli, J. D. E. (1999). Striatal activation during cognitive skill learning. *Neuropsychology*, 13, 564-574.
- Seger, C. A. (1998). Independent judgment-linked and motor-linked mechanisms in artificial grammar learning. *Consciousness and Cognition*, 7, 259-284.
- Seger, C. A. (1997). Multiple forms of learning in implicit learning. In M. Stadler & P. Frensch (Eds.) *Handbook of Implicit Learning*. New York: Sage.
- Seger, C. A., Rabin, L. A., Zarella, M., & Gabrieli, J. D. E. (1997). Preserved verb generation priming in global amnesia. *Neuropsychologia*, 35, 1069-1074
- Seger, C. A. (1997). Two forms of sequential implicit learning. *Consciousness and Cognition*, 6, 108-131.
- Seger, C. A. (1994). Multiple mechanisms in implicit learning. In *Proceedings of the 16th Annual Conference of the Cognitive Science Society*, 794-799, Hillsdale, NJ: Lawrence Erlbaum.
- Seger, C. A. (1994). Implicit learning. *Psychological Bulletin*, 115, 163-196.
- Seger, C. A. (1994). Criteria for implicit learning: De-emphasize conscious access, emphasize amnesia. *Behavioral and Brain Sciences*, 17, 421-422.
- Seger, C. A. (1992). Implicit learning. UCLA Cognitive Science Research Program Technical Report #UCLA-CSRP-92-3.
- Kosslyn, S. M., Seger, C., Pani, J. R., & Hillger, L. A. (1990). When is imagery used in everyday life? A diary study. *Journal of Mental Imagery*, 14, 131-152.

### **CONTRACTS & GRANTS**

- 2007 – 2013 Corticostriatal Networks in Human Categorization.  
R01MH079182  
National Institute of Mental Health.  
Role: Principal Investigator
- 2001 - 2003 Neural Correlates of Concept Learning.  
R03MH063784  
National Institute of Mental Health.  
Role: Principal Investigator
- 1994 - 1997 Neural Substrates of Implicit Learning.  
National Research Service Award Post-doctoral fellowship,  
National Institute of Mental Health.

### **INVITED / REFERREED PRESENTATIONS AT PROFESSIONAL MEETINGS**

- Seger, C. A. (2010). Subjective experience of basal ganglia dependent learning. Presented at the triennial meeting of the International Basal Ganglia Society.

- Seger, C. A. (2008). The contributions of the basal ganglia to sequencing and rule learning in language. Presented at the symposium on Language, Mind, and Brain: Mechanisms of Learning, Brain Plasticity, and Critical Periods, McGill University.
- Seger, C. A. (2007). The many roles of the basal ganglia in human visual categorization: visual analysis, response selection, and learning via feedback. Presented at the triennial meeting of the International Basal Ganglia Society.
- Seger, C. A. (2005). Corticostriatal networks in category learning. Presented at the first meeting of the Computational Cognitive Neuroscience society.

### **OTHER INVITED PRESENTATIONS**

- Seger, C. A. (2015). The basal ganglia and corticostriatal networks in learning and decision making. Talk presented to the Neuroscience program, Pennsylvania State University, State College, PA.
- Seger, C. A. (2014). Categorization: An Emergent Function of Distributed Neural Systems. Talk presented to the Department of Psychology, East China Normal University, Shanghai, China.
- Seger, C. A. (2014). Categorization: An Emergent Function of Distributed Neural Systems. Talk presented to the Department of Psychology, Beijing Normal University, Beijing, China
- Seger, C. A. (2014). Category learning and decision making in the corticostriatal system. Talk presented to the Department of Psychology, Southwest University, Chongqing, China
- Seger, C. A. (2013). Categorization = Decision Making + Generalization + Learning. Talk presented to the Institute of Cognitive Science, University of Arizona, Tucson.
- Seger, C. A. (2012). The visual corticostriatal loop: Perceptual category learning and category working memory. Talk presented to the Institute for Cognitive Neuroscience, Beijing Normal University, Beijing, China.
- Seger, C. A. (2012). Decision making and learning in the corticostriatal system Talk presented to the Department of Psychology, University of Hong Kong, Hong Kong SAU.
- Seger, C. A. (2012). Learning in the Corticostriatal System. Talk presented to the Department of Psychology, East China Normal University, Shanghai, China.
- Seger, C. A. (2012). Category learning in the brain. Talk presented to the Department of Psychology, South China Normal University, Guangzhou, China.
- Seger, C. A. (2011). Decision making and learning in the corticostriatal system. Talk presented to the Institute of Cognitive Science, University of Colorado, Boulder.
- Seger, C. A. (2007). Exploring the many contributions of the basal ganglia to human learning and cognition using fMRI. Talk presented to the Department of Cognitive Science, University of California San Diego.
- Seger, C. A. (2007). Roles of the Basal Ganglia in Human Cognition: Visual Analysis, Response Selection, and Learning via Feedback. Talk presented to the Brain Imaging Center, University of Colorado Health Sciences Center.
- Seger, C. A. (2006). Categories and the caudate: How corticostriatal networks subserve human associative learning. Talk presented to the Department of Psychology, Stanford University.
- Seger, C. A. (2006). Categories, their consequences, and the caudate. Talk presented to the Institute of Cognitive Science, University of California, Berkeley.
- Seger, C. A. (2006). Categories, cortex, and the caudate. Talk presented to the Department of Psychology, University of California, Los Angeles.
- Seger, C. A. (2005). Roles of the Basal Ganglia in learning. Talk presented in the Brain Imaging Colloquium series, Stanford University.

Sege, C. A. (2003). FMRI studies of the striatal learning system. Talk presented to the Department of Psychology, University of Colorado, Boulder.

## **PRESENTATIONS AT PROFESSIONAL MEETINGS**

- Wehe, H.S. & Sege, C. (2014). Intrinsic Motivation to Learn: Can Individual Goals Decrease Susceptibility to the Undermining Effect? Poster presented at the Psychonomics Society Annual Meeting, Long Beach, CA.
- Wehe, H.S., Liu Z., Braunlich, K., & Sege, C. (2014), Neural Systems Involved in Rule Learning and Switching. Poster presented at the Cognitive Neuroscience Society Annual Meeting, Boston, MA.
- Peterson, E. J. & Sege, C.A. (2013). A precise problem in model-based fmri? Poster presented at the meeting of the Cognitive Neuroscience Society.
- Peterson, E. J. & Sege, C.A. (2013). Evidence for generalizable reward representations in the basal ganglia examined using fMRI and reinforcement learning Poster presented at the triennial meeting of the International Basal Ganglia Society.
- Braunlich, K., Gomez-Lavin, J., & Sege, C. A. (2012) Shared and Distinct Frontal, Parietal and Striatal Bases for Item and Category Working Memory. Poster presented at the meeting of the Organization for Human Brain Mapping.
- Braunlich, K., Mussell, K., Fan, G. & Sege, C. A. (2012). An fMRI investigation of the accumulation of information for categorization. Poster presented at the Society for Neuroscience Annual Meeting.
- Gomez-Lavin, J. Braunlich, K., & Sege, C. A. (2012). Frontal-Parietal Network Differences in Item and Category Working Memory. Poster presented at the meeting of the Cognitive Neuroscience Society.
- Gomez-Lavin, J. Braunlich, K., & Sege, C. A. (2012) Frontal-Parietal Network Differences in Item and Category Working Memory. Poster presented at the meeting of the Society for Philosophy and Psychology.
- Ryals, A. J., Cleary, A. M., & Sege, C. A. (2012) An Investigation into the Nature of Partial Recall Poster presented at the 51st annual meeting of the Psychonomic Society.
- Wehe, H., Sege, C., Smith, M., & Peterson, E. (2012). Conflicting Uncertainty: Dissociating generalization and conflict during categorization. Poster presented at the Society for Neuroscience Annual Meeting.
- Ryals, A. J., Cleary, A. M. & Sege, C. A. (2011) Recall and Familiarity for Words and Scenes: Shared and Independent Neural Components Poster presented at the meeting of the Cognitive Neuroscience Society.
- Spiering, B. J., Sares, A., Thaut, M. & Sege, C. A. (2011) Expectancy violation and functional connectivity in musical syntax processing. Poster presented at the meeting of the Society for Neuroscience.
- Spiering, B. J., Braunlich, K., & Sege, C. A. (2011) An fmri study of the basal ganglia's role across multiple category-learning systems Poster presented at the meeting of the Cognitive Neuroscience Society.
- Lopez-Paniagua, D. & Sege, C. (2010). Effective connectivity within and between corticostriatal loops during category learning. Poster presented at the 10th meeting of the International Basal Ganglia Society.
- Lopez-Paniagua, D., & Sege, C. (2010). Risky business: disambiguating ambiguity. Poster presented at the 4th annual meeting of the Social and Affective Neuroscience Society.

- Lopez-Paniagua, D., Seger, C., & Rhodes, M. (2010). Adaptive decision making under varying levels of ambiguity. Poster presented at the 51st annual meeting of the Psychonomic Society.
- Peterson, E. J. & Seger, C. A. (2010). Many hats: using fMRI to characterize the roles and reward sensitivity of the striatum across stimulus, response and feedback Poster presented at the 10th meeting of the International Basal Ganglia Society.
- Ryals, A. J., Pichardo, F. M., Lopez-Paniagua, D. Cleary, A. M., & Seger, C. A. (2010) Functional Magnetic Resonance Imaging (fMRI) Correlates of Recognition without Cued-Recall. Poster presented at the meeting of the Cognitive Neuroscience Society.
- Seger, C. A., Dennison, C. S., Lopez-Paniagua, D Peterson, E. J., & Roark A. Dissociating hippocampal and basal ganglia contributions to category learning using stimulus novelty and subjective judgments. Poster presented at the Society for Neuroscience Annual Meeting.
- Spiering, B. J., Gonzalez, A. H., & Seger, C. A (2010). An Investigation into Category Learning System Switching. Poster presented at the Society for Neuroscience Annual Meeting.
- Spiering, B. J., & Seger, C. A (2010). An Investigation into Category Learning System Switching. Poster presented at the 17th Annual Meeting of Cognitive Neuroscience Society.
- Thaut, M. , Spiering, B. J., Alpeter, C. Quraini, S. L., Sares, A., & Seger, C. A. (2010). Brain basis of expectancy in musical cadence perception. Poster presented at the Front Range Neuroscience Group Annual Meeting.
- Thaut, M. , Spiering, B. J., Alpeter, C. Quraini, S. L., Sares, A., & Seger, C. A. (2010). Brain basis of expectancy in musical cadence perception. Poster presented at the Society for Neuroscience Annual Meeting.
- Seger, C. A. & Anthony, A. (2009) Cortical and striatal sensitivity to decision bound and perceptual similarity in visual categorization. Talk presented at the meeting of the Society for Neuroscience.
- Spiering, B. J., Ennis, J. F., Ashby, F. G., & Seger, C. A. (2009) Neural Correlates of Information-Integration Category Learning. Poster presented at the meeting of the Society for Neuroscience
- Peterson, E., Seger, C. A., (2009) Reward-level dependent activity preceding and following response selection: an fMRI study. Poster presented at the meeting of the Society for Neuroscience.
- Seger, C. A. , Peterson, E., Lopez-Paniagua, D. & Cincotta, C. (2009, March). Exploring the contributions of corticostriatal loops to categorization using temporal difference modeling and Granger causality modeling. Poster presented at the meeting of the Cognitive Neuroscience Society, San Francisco.
- Lopez-Paniagua, D. & Seger, C. A. (2009, March). Effective and structural connectivity of the executive and motivational corticostriatal loops underlying feedback processing. Poster presented at the meeting of the Cognitive Neuroscience Society, San Francisco.
- Richard, M. V., Clegg, B. A., Verwey, W. B., & Seger, C. A. (2008, November). Quantity of Practice Leads to Effector-Dependent Learning in the Serial Reaction Time Task. Poster presented at the 49th Annual Meeting of the Psychonomic Society, Chicago, Illinois.
- Peterson, E. & Seger, C. A. (2008, April). To do the right thing: Temporal difference learning as a tool to dissect the role of feedback in the striatum. Presented at the meeting of the Cognitive Neuroscience Society, San Francisco.
- Lopez-Paniagua, D. & Seger, C. A. (2008, April). Temporal dynamics of feedback processing in the dorsal and ventral striatum are modulated by learning and expectancy. Poster presented at the meeting of the Cognitive Neuroscience Society, San Francisco.
- Seger, C. A. (2007, November). Four lessons from cognitive neuroscience for the field of category learning. Talk presented at the meeting of the Psychonomic Society.

- Richard, M. V., Clegg, B. A., & Seger, C. A. (2007, August). Response Types and Movements in Sequence Learning. Poster presented at the 115th Annual Meeting of the American Psychological Association, San Francisco, California.
- Seger, C. A., Lopez-Paniagua, D., DeGutis, J. M., & Cincotta, C. M. (2007, April). Categorization in the visual corticostriatal loop. Poster presented at the Cognitive Neuroscience Society meeting.
- Lopez-Paniagua, D., Richard, M. V., Towne, M. Seger, C. A. (2007, April). Modulation of the feedback related negativity by expectation and learning in a categorization task. Poster presented at the meeting of the Cognitive Neuroscience Society.
- Richard, M. V., Clegg, B. A., & Seger, C. A. (2006, November). Of Mice and Movement: Using a Computer Mouse in the Serial Reaction Time Task. Poster presented at the 47th Annual Meeting of the Psychonomic Society, Houston, Texas.
- Seger, C. A. & Cincotta, C. M. (2006, April). Dynamics of striatal, cortical, and hippocampal systems during rule learning. Poster presented at the 13th meeting of the Cognitive Neuroscience Society, San Francisco.
- Seger, C. A. & Cincotta, C. M. (2004, October). Neural systems underlying hypothesis testing, rule application, set shifting, and feedback processing in a concept learning task. Talk presented at the meeting of the Society for Neuroscience, San Diego, California.
- Schmidt, G. L. & Seger, C. A. (2004, October). Neural correlates of metaphor processing. Poster presented at the 44th meeting of the Society for Psychophysiological Research, Santa Fe.
- Philippe, M., Dakin, M. A., & Seger, C. A. (2004, October). ERP differences to grammatical and nongrammatical letters in an artificial grammar learning paradigm. Poster presented at the 44th meeting of the Society for Psychophysiological Research, Santa Fe.
- Schmidt, G. L. & Seger, C. A. (2004, April). Neural correlates of metaphor processing. Poster presented at the 11th meeting of the Cognitive Neuroscience Society, San Francisco.
- Seger, C. A. & Cincotta, C. M. (2004, April). Effects of feedback and stimulus-outcome contingency on striatal involvement in categorization. Poster presented at the 11th meeting of the Cognitive Neuroscience Society, San Francisco.
- Seger, C. A. (2003, April). The role of medial cortical regions in self-related and other person-related judgments. Poster presented at the 10th meeting of the Cognitive Neuroscience Society, New York.
- Schmidt, G. L., & Seger, C. A. (2003, April). ERP studies of verb generation. Poster presented at the Cognitive Neuroscience Society 10th Annual Meeting, New York, NY.
- Schmidt, G. L., & Seger, C. A. (2002, November). ERP studies of verb generation. Poster presented at the 43rd meeting of the Psychonomic Society, Kansas City, Missouri.
- Cincotta, C. & Seger, C. A. (2002, April). Differences in event related potentials as a function of category learning mode. Poster presented at the 9th meeting of the Cognitive Neuroscience Society, San Francisco.
- Kisley, M. A., Davalos, D. B., Layton, H., Pratt, D., Ellis, J., & Seger, C. A. (2002, April). Small changes in temporal deviance modulate mismatch negativity amplitude. Poster presented at the meeting of the Rocky Mountain Psychological Society, Salt Lake City, UT.
- Seger, C. A. (2001, April). Neural systems associated with rule formation and rule application in concept learning. Poster presented at the 8th meeting of the Cognitive Neuroscience Society, New York.
- DeLosh, E. L., Peterson, D. A., Cincotta, C. M., Merritt, P. S., Seger, C. A., & Reilly, C. N. (2000, April). Electrophysiological correlates of negative priming. Poster presented at the 7th meeting of the Cognitive Neuroscience Society, San Francisco.



- Dakin, M., Seger, C. A., Cincotta, C. M., Peterson, D. A., Merritt, P. S., & DeLosh, E. L. (2000, April). Neural correlates of inhibition in negative priming: An fMRI study. Poster presented at the 7th meeting of the Cognitive Neuroscience Society, San Francisco.
- Cincotta, C. M., & Seger, C. A. (2000, April). An fMRI study of expert and novice categorization. Poster presented at the 7th meeting of the Cognitive Neuroscience Society, San Francisco.
- Merritt, P. S., Peterson, D. A., Cincotta, C. M., DeLosh, E. L., Seger, C. A., & Reilly, C. N. (2000, April). ERP correlates of false recognition. Poster presented at the 7th meeting of the Cognitive Neuroscience Society, San Francisco.
- Seger, C. A. (1999, November). Attribution processes in implicit learning. Poster presented at the 40th meeting of the Psychonomic Society, Los Angeles.
- Peterson, D. A. & Seger, C. A. (1999, October) Selective attention to auditory stimuli: An application of the event related wavelet. Poster presented at the 29th meeting of the Society for Neuroscience, New Orleans.
- Cincotta, C. M., Peterson, D. A. & Seger, C. A. (1999, October). ERP evidence of object location and identity inhibition in negative priming. Poster presented at the 29th meeting of the Society for Neuroscience, New Orleans.
- Peterson, D. A. & Seger, C. A. (1999, April). Event related wavelet analysis in selective attention. Poster presented at the 6th meeting of the Cognitive Neuroscience Society, Washington, D. C.
- Seger, C. A., Poldrack, R. A., Prabhakaran, V., & Gabrieli, J. D. E. (1997, November). An fMRI study of visual concept learning. Poster presented at the 38th meeting of the Psychonomic Society, Philadelphia.
- Seger, C. A., Desmond, J. E., & Gabrieli, J. D. E. (1997, October). fMRI studies of verb generation priming and unusual verb generation. Paper presented at the 27th meeting of the Society for Neuroscience, New Orleans.
- Prabhakaran, V., Seger, C. A., Poldrack, R. A., Desmond, J. E., Glover, G. H., & Gabrieli, J. D. E. (1997, August). Neural correlates of categorization: An fMRI study of probabilistic classification using the weather prediction task. Poster presented at the 19th meeting of the Cognitive Science Society, Stanford, CA.
- Seger, C. A., Prabhakaran, V., Poldrack, R. A., Desmond, J. E. & Gabrieli, J. D. E. (1997, August). Implicit and explicit knowledge in artificial grammar learning: An fMRI study. Poster presented at the 19th meeting of the Cognitive Science Society, Stanford, CA.
- Stone, M. V., Seger, C. A., Prabhakaran, V., Gabrieli, J. D. E., & Glover, G. (1997, August). Studying privileged access with functional MRI. Poster presented at the 19th meeting of the Cognitive Science Society, Stanford, CA.
- Desmond, J. E., Gabrieli, J. D. E., Sobel, N., Rabin, L. A., Wagner, A. D., Seger, C. A., & Glover, G. H. (1996, November) An fMRI study of frontal cortex and cerebellum during semantic and working memory tasks. Poster presented at the 26th meeting of the Society for Neuroscience, Washington, D. C.
- Seger, C. A., Rabin, L. A., Keane, M. M., Zarella, M., & Gabrieli, J. D. E. (1996, November). Repeated verb generation in amnesic patients: Normal priming and verb specificity. Poster presented at the 26th meeting of the Society for Neuroscience, Washington, D. C.
- Seger, C. A., Prabhakaran, V., Poldrack, R., & Gabrieli, J. D. E. (1996, October). Judgment processes in artificial grammar learning: An fMRI study. Poster presented at the 37<sup>th</sup> meeting of the Psychonomic Society, Chicago.
- Seger, C. A., Rabin, L. A., & Gabrieli, J. D. E. (1996, July). The verb generation practice effect is due to verb-specific priming. Poster presented at the 8th meeting of the American Psychological Society, San Francisco.

- Seger, C. A. (1996, July). Implicit learning of invariants. Poster presented at the 18th meeting of the Cognitive Science Society, San Diego.
- Rabin, L. A., Seger, C. A., & Gabrieli, J. D. E. (1996, March) Verb generation task performance in amnesic patients shows normal practice effect and verb specificity. Poster presented at the 3rd meeting of the Cognitive Neuroscience Society, San Francisco.
- Seger, C. A. (1995, November). Independent implicit knowledge bases in artificial grammar learning. Poster presented at the 36th meeting of the Psychonomic Society, Los Angeles.

## **PROFESSIONAL ACTIVITIES AND AFFILIATIONS**

### Review Committees and Editorial Boards:

Regular Member, Mechanisms of Sensory, Perceptual, and Cognitive Processes  
(formerly Cognitive Neuroscience) Study Section,  
Center for Scientific Review National Institutes of Health  
Term of service: July 1, 2009 - June 30, 2015

Temporary member, Cognitive Neuroscience Study Section, Feb 2009

Temporary member, Cognition and Perception Study Section, Oct 2007

Associate Editor, *Frontiers in Human Neuroscience*, 2015-

Scientific Advisory Committee, The International Basal Ganglia Society, 2007

Participant, Workshop on Psychophysiology of Huntington's Disease, CHDI Foundation, 2010

Ad hoc Grant Refereeing: Israel Science Foundation. National Science and Engineering Research Council of Canada, National Science Foundation (USA), Wellcome Trust of Great Britain, Air Force Office of Scientific Research, USA.

Ad hoc Manuscript Refereeing: *Acta Psychologica*; *Addiction Biology*; *Behavioral and Brain Sciences*; *Behavioural Brain Research*; *Behavioral and Cognitive Neuroscience Reviews*; *Brain and Cognition*; *Brain Research*; *Cerebral Cortex*; *Cognition, Cognitive, Affective, and Behavioral Neuroscience*; *Cognitive Psychology*; *Cognitive Science*; *Cortex*; *Current Directions in Psychological Science*, *Experimental Brain Research*; *Frontiers in Neuroscience*; *Frontiers in Psychology*; *Human Brain Mapping*; *Journal of Cognitive Neuroscience*; *Journal of Experimental Psychology: Animal Learning and Cognition*; *Journal of Experimental Psychology: Learning, Memory, and Cognition*; *Learning and Memory*; *Journal of Neuroscience*; *Journal of Neurophysiology*; *Memory and Cognition*; *Neurobiology of Aging*; *Neurobiology of Learning and Memory*; *Neuroimage*; *Neuropsychologia*; *Neuropsychology*; *Neuroscience*; *Perception and Psychophysics*; *Proceedings of the National Academy of Sciences, USA*; *Progress in Neurobiology*; *Psychological Research*; *Psychological Science*; *Psychology and Aging*; *Psychological Bulletin*; *Psychonomic Bulletin and Review*; *The Quarterly Journal of Experimental Psychology*

### Memberships in Professional Societies:

American Association for the Advancement of Science  
Association for Psychological Science (Fellow)  
Cognitive Neuroscience Society  
International Basal Ganglia Society  
Psychonomic Society (Fellow)  
Society for Neuroscience

Society for Human Brain Mapping

**DEPARTMENTAL AND UNIVERSITY SERVICE**

Psychology Department

Search committee for Department Chair, 2011  
Search committee for Cognitive/Quantitative position, 1998-1999  
A wing renovation committee, 1998-2001  
Cognitive program graduate requirements committee, 1999  
Behavioral Neuroscience program graduate requirements committee, 1999  
Graduate committee, 1999 - 2001, 2007-2008; 2010-2015 Chair, 2000-2001, 2010-2015  
Executive committee, 2002-2003  
Perceptual and Brain Sciences section coordinator, November 2007-January 2009  
Cognitive program admissions committee, 2009 (chair), 2010, 2011, 2012  
Promotion and Tenure subcommittee for Dr. Deana Davalos, 2008 (chair)  
3rd year review subcommittee for Dr. Jennifer Harman, 2008  
Promotion and Tenure subcommittee for Dr. Michael Steger, 2010  
Promotion subcommittee for Dr. Benjamin Clegg, 2010 (chair)  
Promotion and Tenure subcommittee for Dr. Matthew Rhodes, 2011  
Promotion and Tenure subcommittee for Dr. Jennifer Harman, 2012 (chair)  
Promotion and Tenure subcommittee for Dr. Anne Cleary, 2013 (chair)  
Promotion and Tenure committee chair, 2014-2016

Molecular, Cellular, and Integrative Neurosciences program

Seminar committee, 2001-2003, 2013-2015; Chair, 2002-2003, 2014-2015  
Graduate Student Oral Examination Committee, 2009  
Executive committee, 2010-2012  
Admissions and Academics committee, 2010-2011, 2012-2013  
Research committee, 2011-2012

College of Natural Sciences and University

College of Natural Sciences representative, University Library Committee, 2003-2005  
College of Natural Sciences Sabbatical Committee, 2006-2009 (Chair in 2008)