

Jessica J. Green

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Education

2009-2012 Postdoctoral Scholar, Center for Cognitive Neuroscience, Duke University
July 2009 Ph. D., Department of Psychology, Simon Fraser University
July 2006 M. A., Department of Psychology, Simon Fraser University.
May 2004 B. A. (first class honours), Department of Psychology, Simon Fraser University.

Awards and Honours

2010-2012 Natural Sciences and Engineering Research Council Postdoctoral Fellowship (NSERC PDF; \$40,000/year)
2009 President's Research Stipend, Simon Fraser University (\$6,250)
2008-2010 Michael Smith Foundation for Health Research Senior Graduate Studentship (\$20,000/year)
2007 Frank A. Linville Graduate Scholarship in Sensory Science (\$6,000)
2006-2009 Natural Sciences and Engineering Research Council Post-Graduate Scholarship - Doctoral (NSERC PGS-D; \$21,000/year)
2005/6 Natural Sciences and Engineering Research Council Canada Graduate Scholarship (NSERC CGS-M; \$17,500)
2005 Graduate Fellowship, Simon Fraser University (\$5000)
2004 Special Graduate Entrance Scholarship, Simon Fraser University (\$6000)
2004 Psychology Alumni Honours Prize, Simon Fraser University (\$500)
2004 Lorne M. Kendall Memorial Scholarship in Psychology, Simon Fraser University (\$160)
2004 NSERC Undergraduate Student Research Award (\$4500)

Publications

Articles in Refereed Journals

1. **Green, J. J.**, Gamble, M. L., & Woldorff, M. G. (2013). Resolving conflicting views: Gaze and arrow cues do not trigger rapid reflexive shifts of attention. *Visual Cognition*, 21(1), 61-71.
2. McDonald, J. J., **Green, J. J.**, Jannati, A., & Di Lollo, V. (2013). On the electrophysiological evidence for the capture of visual attention. *Journal of Experimental Psychology: Human Perception and Performance*, 39(3), 849-860.
3. Doesburg, S. M., **Green, J. J.**, McDonald, J. J., & Ward, L. M. (2012). Theta modulation of inter-regional gamma synchronization during auditory attention control. *Brain Research*, 1431, 77-85
4. **Green, J. J.** & Woldorff, M. G. (2012). Arrow-elicited cueing effects at short intervals: Rapid attentional orienting or cue-target stimulus conflict? *Cognition*, 122(1), 96-101.

5. **Green, J. J.**, Doesburg, S. M., Ward, L. M., & McDonald, J. J. (2011). Electrical neuroimaging of voluntary audio-spatial attention: Evidence for a supramodal attention control network. *Journal of Neuroscience*, *31*(10), 3560-3564.
6. **Green, J. J.** & McDonald, J. J. (2010). The role of temporal predictability in the anticipatory biasing of sensory cortex during visuospatial shifts of attention. *Psychophysiology*, *47*(6), 1057-1065.
7. Doesburg, S. M., **Green, J. J.**, McDonald, J. J., & Ward, L. M. (2009). From local inhibition to long-range integration: A functional dissociation of alpha-band synchronization across cortical scales in visuospatial attention. *Brain Research*, *1303*, 97-110.
8. Doesburg, S. M., **Green, J. J.**, McDonald, J. J., & Ward, L. M. (2009). Rhythms of consciousness: Binocular rivalry reveals large-scale oscillatory network dynamics mediating visual perception. *PLoS One*, *4*(7), e6142.
9. Störmer, V., **Green, J. J.**, & McDonald, J. J. (2009). Tracking the voluntary control of auditory spatial attention with event-related brain potentials. *Psychophysiology*, *46*(2), 357-366.
10. McDonald, J. J., Hickey, C., **Green, J. J.**, & Whitman, J. C. (2009). Attention is biased against returning to previously attended locations. *Journal of Cognitive Neuroscience*, *21*(4), 725-733.
11. Prime, D. J., McDonald, J. J., **Green, J. J.**, & Ward, L. M. (2008). When crossmodal spatial attention fails. *Canadian Journal of Experimental Psychology*, *62*(3), 192-197.
12. McDonald, J. J. & **Green, J. J.** (2008). Isolating event-related potential components associated with voluntary control of visuo-spatial attention. *Brain Research*, *1227*, 96-109.
13. **Green, J. J.** & McDonald, J. J. (2008). Electrical neuroimaging reveals timing of attentional control activity in human brain. *PLoS Biology*, *6*(4), e81. doi:10.1371/journal.pbio.0060081
14. **Green, J. J.**, Conder, J. A., & McDonald, J. J. (2008). Lateralized frontal activity elicited by attention-directing visual and auditory cues. *Psychophysiology*, *45*, 579-587.
15. **Green, J. J.** & McDonald, J. J. (2006). An event-related potential study of supramodal attentional control and crossmodal attention effects. *Psychophysiology*, *43*, 161-171.
16. **Green, J. J.**, Teder-Sälejärvi, W. A., & McDonald, J. J. (2005). Control mechanisms mediating shifts of attention in auditory and visual space: A spatio-temporal ERP analysis. *Experimental Brain Research*, *166*(3-4), 358-369.

Book Chapters

1. McDonald, J. J., **Green, J. J.**, Störmer, V. S., & Hillyard, S. A. (2011). Cross-modal spatial cueing of attention influences visual perception. In M. M. Murray & M. T. Wallace (Eds.), *Frontiers in the neural basis of multisensory processes*. CRC Press: Boca Raton, FL.
2. **Green, J. J.**, & McDonald, J. J. (2009). A practical guide to beamformer source reconstruction for EEG. In T. C. Handy (Ed.), *Brain signal analysis: Advances in neuroelectric and neuromagnetic methods*. The MIT Press: Cambridge, MA.

Manuscripts Submitted/Under Review

1. **Green, J. J.**, Spalek, T. M., & McDonald, J. J. (submitted). *The role of expectancy in visuospatial orienting of attention*.

Manuscripts in Preparation

1. **Green, J. J.** & Woldorff, M. G. (in preparation). *Neural evidence for separable attention-induced and conflict-induced cueing effects*.
2. **Green, J. J.**, Roberts, K. C., & Woldorff, M. G. (in preparation). *Separable planning and execution stages for spatial shifts of attention*.

3. **Green, J. J.** & McDonald, J. J. (in preparation). *Inhibition of return across modalities: Electrophysiological evidence for crossmodal biasing of attention.*

Recent Conference Presentations (2008-present)

Talks

1. **Green, J. J.**, Boehler, C. N., Roberts, K. C., Chen, L., Krebs, R., Song, A., & Woldorff, M. G. (2012, October). *Delineation of attentional control networks with simultaneously recorded EEG and fMRI.* Paper presented at the 42nd annual meeting of the Society for Neuroscience, New Orleans, LA.
2. **Green, J. J.**, Gamble, M. L., Rosenthal, M., & Woldorff, M. G. (2011, April). *Arrow-elicited cueing effects at short intervals: Rapid attentional orienting or cue-target stimulus conflict?* Paper presented at the 18th annual meeting of the Cognitive Neuroscience Society, San Francisco, CA.
3. Doesburg, S. M., **Green, J. J.**, McDonald, J. J., & Ward, L. M. (2010, April). *From local inhibition to long-range integration: A functional dissociation of alpha-band synchronization across cortical scales in visuospatial attention.* Paper presented at the 17th annual meeting of the Cognitive Neuroscience Society, Montreal, Canada.
4. McDonald, J. J., **Green, J. J.**, Jannati, A., & Di Lollo, V. (2009, November). *Suppression of salient-but-irrelevant objects in visual search overcomes distraction: An ERP study.* Paper presented at the 50th annual meeting of the Psychonomic Society, Boston, MA.
5. McDonald, J. J., **Green, J. J.**, Jannati, A., & Di Lollo, V. (2009, August). *Dynamic interplay between bottom-up and top-down processes in visual search: An event-related potential study.* Paper presented at the 15th annual meeting of the Cognitive Science Association for Interdisciplinary Learning (CSAIL), Hood River, OR.
6. Ward, L. M., Doesburg, S. M., **Green, J. J.**, & McDonald, J. J. (2009, March). *Rhythms of consciousness: Binocular rivalry reveals large-scale oscillatory network dynamics mediating visual awareness.* Paper presented at the 16th annual meeting of the Cognitive Neuroscience Society, San Francisco, CA.
7. **Green, J. J.**, Doesburg, S. M., Ward, L. M., & McDonald, J. J. (2008, October). *Dynamics of voluntary attentional control in the auditory modality.* In P. Jolicoeur (Chair), *Brain mechanisms of auditory attention and auditory short-term memory.* Symposium conducted at the annual meeting of the Society for Psychophysiological Research, Austin, TX.

Posters

1. **Green, J. J.**, Boehler, C. N., Roberts, K. C., Chen, L., Krebs, R., Song, A., & Woldorff, M. G. (2012, April). *Simultaneous EEG/fMRI of top-down attentional control and pre-target biasing of sensory cortex.* Poster presented at the 19th annual meeting of the Cognitive Neuroscience Society, Chicago, IL.
2. **Green, J. J.**, Roberts, K. C., & Woldorff, M. G. (2010, November). *Separable planning and execution stages for spatial shifts of attention.* Poster presented at the 40th annual meeting of the Society for Neuroscience, San Diego, CA.
3. Jannati, A., **Green, J. J.**, Di Lollo, V., & McDonald, J. J. (2010, November). *Target selection in relevant and irrelevant visual search displays: Inter-trial effects.* Poster presented at the 51st annual meeting of the Psychonomic Society, St. Louis, MO.
4. Jaspers-Fayer, F., Galley, S. L., **Green, J. J.**, Taake, I., & Liotti, M. (2010, June). *An ERP investigation of a threat attenuated attentional blink in sub-clinical anxiety.* Poster presented at the 16th annual meeting of the Organization for Human Brain Mapping, Barcelona, Spain.

5. McDonald, J. J., Harms, V., **Green, J. J.**, Jannati, A., & Di Lollo, V. (2010, April). *To search or not to search: Tracking the deployment of attention in relevant and irrelevant visual displays*. Poster presented at the 17th annual meeting of the Cognitive Neuroscience Society, Montreal, Canada.
6. Liotti, M., **Green, J. J.**, Jaspers-Fayer, F. & Woldorff, M. G. (2009, October). *Auditory attention to targets in the congenitally blind enhances occipital gamma-band oscillatory activity*. Poster presented at the 49th annual meeting of the Society for Psychophysiological Research, Berlin, Germany.
7. **Green, J. J.** & McDonald, J. J. (2009, March). *Inhibition of return across modalities: Electrophysiological evidence for crossmodal biasing of attention*. Poster presented at the 16th annual meeting of the Cognitive Neuroscience Society, San Francisco, CA.
8. **Green, J. J.**, Spalek, T. M., & McDonald, J. J. (2008, November). *Expectancy modulates behavioural and ERP indices of inhibition of return*. Poster presented at the 49th annual meeting of the Psychonomic Society, Chicago, IL.
9. **Green, J. J.**, & McDonald, J. J. (2008, April). *Induced alpha-band EEG oscillations index anticipatory biasing of visual cortex during voluntary spatial attention*. Poster presented at the 15th annual meeting of the Cognitive Neuroscience Society, San Francisco, CA.

Invited talks and lectures

1. Delineation of attentional control networks with simultaneously recorded EEG and fMRI. Oct. 5th, 2012. Invited talk – Department of Psychology, University of South Carolina.
2. *The cortical circuitry of attention*. Feb. 6th, 2012. Invited talk – Department of Psychology, North Dakota State University.
3. *The cortical circuitry of attention: How the brain enables selective processing of information in a complex world*. Nov. 25th, 2011. Invited talk – Department of Psychology, Simon Fraser University.
4. *The cortical circuitry of attention: How the brain enables selective processing of information in a complex world*. Nov. 18th, 2011. Invited talk – Department of Psychology, University of South Carolina.
5. *Attentional Control in Vision and Audition*. September 10th, 2009. Invited talk – Center for Cognitive Neuroscience, Duke University.
6. *Electrophysiological Indices of Attentional Control in Vision and Audition*. June 4th, 2009. Invited talk – Center for Cognitive Neuroscience, Duke University.
7. *Cognitive Neuroscience Methods, Part I.*, Sept 15th, 2008. Guest lecture for undergraduate course “Cognitive Neuroscience”
8. *Introduction to Neurocognition*. March 7th, 2008. Guest lecture for undergraduate course “Introduction to Cognitive Psychology”
9. *Introduction to EEG and ERPs*. Jan 11th, 2008. Guest lecture for undergraduate course “Attention”
10. *Introduction to Beamformer Spatial Filtering*. Nov 13th, 2007. Invited talk - ERPLab, Department of Neurosciences, University of California, San Diego.
11. *Introduction to EEG and ERPs*. Sept 12th, 2007. Guest lecture for undergraduate course “Attention”
12. *Cognitive Neuroscience of Attention*. Mar 2nd, 2007. Guest lecture for undergraduate course “Cognitive Neuroscience”
13. *EEG Source Imaging*. Feb 27th, 2007. Guest lecture for graduate course “Special Topics – Educational Neuroscience: Background, Theory, and Methods”

Research Experience

- Sept '05 – Aug '09** **Lab Manager, Human Electrophysiology Lab, Dept. of Psychology, Simon Fraser University** *Supervisor – John McDonald*
 Duties included hiring and training research assistants, scheduling participants, and purchasing lab supplies and equipment. Also responsible for programming experiments using Presentation software, analyzing behavioural and EEG data using numerous software packages, including ERPSS, BESA, ASA, MATLAB, SPM, and AFNI.
- Oct '02 – Aug '05** **Research Assistant, Human Electrophysiology Lab, Dept. of Psychology, Simon Fraser University** *Supervisor – John McDonald*
 Duties included running participants in experiments while recording electrophysiological data and analysis of collected data.
- Jan – Apr 2004** **Research Assistant, Rhythms Research Lab, Dept. of Psychology, Simon Fraser University** *Supervisor – Ralph Mistlberger*
 Duties included data entry and assisting with animal surgeries, experimentation and animal care.

Funding

Submitted Grants

NIH application R21EY023800-01 Green (PI) 07/01/13-06/30/15
 Exploring the influence of sound frequency, visual spatial frequency, and individual differences in autism traits on audiovisual integration.
 Role: PI
 Amount Requested: \$250,000

Completed Research Support

NSERC PDF-388521-2010 Green (PI) 09/01/10-08/31/12
Multimodal imaging of the neural mechanisms of attention.
 Postdoctoral research support from the Natural Sciences and Engineering Research Council of Canada to investigate the neural underpinnings of attentional control using simultaneous recording of EEG and fMRI.
 Role: PI

NIMH R01-MH60415 Woldorff (PI) 09/01/09-08/31/10
Studies of Attention Using Combined ERPs and fMRI
 The goal of this project was to investigate intramodal visual and auditory attention using fMRI, EEG, and ERPs.
 Role: Postdoctoral fellow

MSFHR T-SGS-0109(07-1)CLIN Green (PI) 09/01/08-08/31/09
Neurophysiological markers of the control and deployment of attention in healthy individuals and individuals with attentional deficits.
 Graduate research support from the Michael Smith Foundation for Health Research (Canada) to examine attentional control processes in individuals with reading disabilities (dyslexia) using EEG and cutting-edge neural source estimation procedures.
 Role: PI

Teaching

Cognitive Psychology (PSYC 405; Fall 2013)

Dept. of Psychology, University of South Carolina

Undergraduate survey course on cognitive psychology (70 students)

Cognitive Neuroscience (PSYC 507; Fall 2012, 2013)

Dept. of Psychology, University of South Carolina

Senior undergraduate/graduate survey of cognitive neuroscience (~30 students)

Introduction to Neuroscience (SCHC 330P; Spring 2013)

South Carolina Honors College, University of South Carolina

Undergraduate honors seminar providing an introductory survey of the field of neuroscience

EEG Source Analysis (PSYC 888A; Spring 2013)

Dept. of Psychology, University of South Carolina

Advanced graduate seminar covering the theory and methods of neural source localization for electroencephalographic (EEG) data.

Introduction to Cognitive Psychology (Fall 2008, Spring 2009)

Dept. of Psychology, Simon Fraser University

Undergraduate survey course on cognitive psychology (200-300 students)

Teaching Assistantships, Dept. of Psychology, Simon Fraser University

Attention (x2), Cognitive Neuroscience (x2), Sensation, Critical Analysis of Issues in Psychology (writing instruction), Introduction to Data Analysis in Psychology, Introduction to Research Methods in Psychology

Supervisory Experience

I have provided training and mentorship in the design and implementation of cognitive neuroscience research to a number of students, including supervision of experimental design, programming, data collection and analysis, and reporting of research results.

Graduate Students

2009-present **Marissa Gamble** – Current PhD student at Duke University

2006-present **Fern Jaspers-Fayer** – Current PhD student at Simon Fraser University

2007-2008 **Viola Störmer** – Current postdoc at Harvard University

Undergraduate Honours Students

2008-2009 **Shawna Galley** – Thesis: An ERP investigation of the attentional bias to threat in sub-clinical anxiety. Current MSc student at the University of British Columbia

2005-2006 **Victoria Harms** – Thesis: Electrophysiological correlates of visual search. Current PhD student at the University of Saskatchewan

2005-2006 **Julie Conder** – Thesis: The role of lateralized frontal activity in attentional control: An event-related potential analysis using auditory and visual stimuli. Current PhD student at McMaster University.

Research Assistants

2012-present	Jeremy Nielsen – Current undergrad at USC
2010-2011	Michael Rosenthal – Current medical student at Florida Int'l University
2008-2009	Kevin Boate – Former BA student at Simon Fraser University
2006-2007	Victoria Harms – Current PhD student at the University of Saskatchewan
2004-2005	Julie Conder – Current PhD student at McMaster University
2004	Matthew Yanko – Current PhD student at Simon Fraser University
2004	Shannon Gaudry – Current Instructor, Native Education College,

Professional Memberships

Cognitive Neuroscience Society	Society for Neuroscience
Association for Psychological Science	Society for Psychophysiological Research
Canadian Society for Brain, Behaviour, and Cognitive Science	

Ad hoc Reviewer

<i>Attention, Perception & Psychophysics</i>	<i>Brain Research</i>
<i>Cerebral Cortex</i>	<i>Clinical Neurophysiology</i>
<i>Cognitive, Affective, and Behavioral Neuroscience</i>	
<i>Journal of Cognitive Neuroscience</i>	<i>Open Neuroscience Journal</i>
<i>PLoS ONE</i>	<i>Psychophysiology</i>
<i>Psychological Science</i>	<i>Visual Cognition</i>