

Allison Shapiro

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University of California, Santa Barbara
Dept. of Psych. & Brain Sciences
Action Lab & Brain Imaging Center

EDUCATION:

University of California, Santa Barbara	2013 – 2019
PhD candidate in Psychological and Brain Sciences	(expected)
<i>Focus:</i> Cognition, Perception, and Cognitive Neuroscience	
<i>Thesis:</i> Neural signatures of subjective value, certainty, and choice	
<i>Advisor:</i> Dr. Scott Grafton, MD	
<i>Committee Members:</i> Dr. Michael Gazzaniga, Dr. Barry Giesbrecht, Dr. Jonathan Schooler	
University of California, Berkeley	2006 – 2010
Bachelor of Arts with Honors in Cognitive Science	
<i>Focus:</i> Cognitive Neuroscience	
<i>Thesis:</i> Using stimulation to investigate the casual relationship between the brain and volition	
<i>Advisors:</i> Dr. Rich Ivry, PhD, Dr. Bill Prinzmetal, PhD	

AWARDS & HONORS:

National Science Foundation Graduate Research Fellowship, Honorable Mention	2015
Moss Rehabilitation Research Institute Educational Funds: Travel Grant	2012, 2013
Undergraduate Honors in Cognitive Science, University of California, Berkeley	2009 – 2010
Golden Key Honors Society Recognition and Invitation, University of California, Berkeley	2007
National Merit Commended Scholar, Commonwealth of Pennsylvania	2006

FELLOWSHIPS, GRANTS, AND SCHOLARSHIPS

Graduate Student Fellow, Kavli Summer Institute in Cognitive Neuroscience	2017
Graduate Affiliate, Interdisciplinary Humanities Center, UCSB	2015 – 2016
Graduate Student Mentor, Research Mentorship Program, UCSB	2014
Moss Rehabilitation Research Institute Educational Travel Grant	2012, 2013

MANUSCRIPTS IN PREPARATION *(recently completed research):*

Shapiro, A.D., Grafton, S.T (in prep). Functional neural signatures of choice certainty and ambivalence in value-based decision making.

Shapiro, A.D., Grafton, S.T (in prep). Representational similarity of BOLD responses to pain and exercise costs in value-based decision making.

PUBLICATIONS

- Barany, D. A., **Shapiro, A.D.**, Lee, T.G. (2015). Multivariate fMRI Approaches to Flexible Sensorimotor Maps in Parietal Cortex. *Journal of Neuroscience*, 35(34), 11763-11765.
- Buxbaum, L. J., **Shapiro, A. D.**, & Coslett, H. B. (2014). Reply: Apraxia: a gestural or a cognitive disorder? *Brain*, 138(3), e334-e334
- Buxbaum, L. J., **Shapiro, A. D.**, & Coslett, H. B. (2014). Critical brain regions for tool-related and imitative actions: a componential analysis. *Brain*, 137(7) 1971-1985.
- Kalénine, S., **Shapiro, A. D.**, Flumini, A., Borghi, A. M., & Buxbaum, L. J. (2014). Visual context modulates potentiation of grasp types during semantic object categorization. *Psychonomic Bulletin & Review*, 21(3), 645-651.
- Kalénine, S., **Shapiro, A. D.**, & Buxbaum, L. J. (2013). Dissociations of action means and outcome processing in left-hemisphere stroke. *Neuropsychologia*, 51(7), 1224-1233.

CONFERENCE ABSTRACTS:

- Shapiro, A.D.**, Okafor, G.N., Babenko, V., Bullock, T., Dundon, N.M., Giesbrecht, B., Grafton, S.T. Behavioral and Neural Signatures of the Subjective Value of Pain and Exercise. *Annual Meeting of the Cognitive Neuroscience Society*, March 23 – March 26, 2019, San Francisco, CA. **abstract submitted**
- Dundon, N.M., **Shapiro, A.D.**, Babenko, V., Grafton, S.T. Motor learning informs model-based computations of context-appropriate risk in the genesis of expertise. *Annual Meeting of the Cognitive Neuroscience Society*, March 23 – March 26, 2019, San Francisco, CA. **abstract submitted**
- Shapiro, A.D.**, Dundon, N.M., Okafor, G.N., Grafton, S.T. (2018). Painstaking choices: Distinguishing neural representations of subjective value, conflict, magnitudes, and contextual biases in deterministic decision making with mixed outcomes. *Annual Meeting of the Society for Neuroscience*, November 3 – November 7, 2018, San Diego, CA.
- Asturias, A., Elliott, J.C., **Shapiro, A. D.**, Babenko, V., Grafton, S.T. (2016). Predicting stimulus and response category in a multisensory simulated real world situation with fMRI and EEG. *Organization for Human Brain Mapping Annual Meeting*, June 25 – June 29, 2017, Vancouver, Canada..
- Shapiro, A.D.**, Volz, L.J., Lee, T.G., Grafton, S.T. (2016). Intentional binding with sustained visual feedback: A paradigm compatible with chronometric TMS. *Annual Meeting of the Society for Neuroscience*, November 12 – November 16, 2016, San Diego, CA.
- Elliott, J.C., Wang, W. Krnavek, D., Asturias, A., Babenko, V., **Shapiro, A. D.**, Connolly, P., Grafton, S.T. (2016). Predicting stimulus and response category in a multisensory simulated real world environment with fMRI and EEG. *Annual Meeting of the Society for Neuroscience*, November 12 – November 16, 2016, San Diego, CA.

- Shapiro, A.D.**, Kalénine, S., Flumini, A., Borghi, A.M., Buxbaum, L.J. (2013). Effect of visual context on the activation of move- and use-related actions during semantic object processing. *Annual Meeting of the Society for Neuroscience*, November 9 – November 13, 2013, San Diego, CA.
- Buxbaum, L.J., **Shapiro, A.D.**, Coslett, H.B. (2013). Separable components of object-related gesture production in the left hemisphere. *Annual Meeting of the Society for Neuroscience*, November 9 – November 13, 2013, San Diego, CA.
- Watson, C.E., Kington, A.G., **Shapiro, A.D.**, Buxbaum, L.J. (2013). Reduced activation strength of object use actions: evidence from left hemisphere stroke. *Annual Meeting of the Cognitive Neuroscience Society*, April 13 - April 16, 2013, San Francisco, CA.
- Kalénine, S., Buxbaum, L.J., & **Shapiro, A.D.** (2012). Dissociable representations of action means and outcome: Evidence from stroke. *Annual Meeting of the Cognitive Neuroscience Society*, March 31 - April 3, 2012, Chicago, IL.
- Prinzmetal, W., Landau, A.N., Elwan, D., **Shapiro, A.D.**, Holtz, S. (2009) Voluntary and involuntary attention vary as a function of impulsivity. *Fifteenth Annual Meeting of the Cognitive Science Association for Interdisciplinary Learning*, July 30 – August 3, 2009, Hood River, Oregon.
- Shapiro, A.D.**, Prinzmetal, W. (2009). Voluntary and involuntary attention vary as a function of impulsivity. *California Cognitive Science Conference*, May 3, 2009, Berkeley, CA.

INVITED LECTURES

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| Department of Psychological & Brain Sciences, UCSB
Cognition, Perception, and Cognitive Neuroscience Seminar
Lecture: Priceless: Neural representations of certainty and ambivalence in value-based choices | 2018 |
| Department of Psychological & Brain Sciences, UCSB
Action Intelligence (Course PSY163sg), Professor Scott Grafton
Invited Lectures: Action Affordances, Conscious Intention, Motor Control | 2018 |
| Kavli Summer Institute in Cognitive Neuroscience
Human Brain Dissection Demonstration and Neuroanatomy Lecture | 2017 |
| Interdisciplinary Humanities Center, UCSB
The Humanities, the Neurosciences, and the Brain Conference
Panel Chair: Interdisciplinary Perspectives & Historical Influences | 2016 |
| Department of Psychological & Brain Sciences, UCSB
Lecture: Neural mechanisms for perceived agency in action | 2015 |
| Moss Rehabilitation & Research Institute, Philadelphia, PA
Lecture Series: Theoretical & Practical Tutorial in Voxel-Based Lesion-Symptom Mapping | 2013 |
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RESEARCH POSITIONS

University of California, Santa Barbara, Dept. of Psych. & Brain Sciences Graduate Student Researcher Advisor: Scott Grafton	9/2013 - present
Moss Rehabilitation Research Institute, Philadelphia Research Assistant and Lab Manager Advisor: Laurel Buxbaum	7/2010 – 9/2013
University of California, Berkeley, Dept. of Psychology Undergraduate Research Assistant Advisor: Richard Ivry Advisor: William Prinzmetal	2009 – 2010 2008 – 2009
University of Pennsylvania, Philadelphia, Center for Cognitive Neuroscience Undergraduate Research Assistant Advisors: Gary Lupyan, Sharon Thompson-Schill	2009
RD Associates, Philadelphia Marketing Research Project Manager Supervisor: Richard Douglas	2007–2009

TEACHING POSITIONS

Teaching Associate (Instructor of Record) Department of Psychological and Brain Sciences, UCSB <i>Introduction to Cognitive Neuroscience</i>	Summers of 2016, 2017, 2018
Teaching Assistant Department of Psychological and Brain Sciences, UCSB	
<i>Action Intelligence</i>	Spring, 2018
<i>The Biological Basis of Psychology</i>	Summer, 2014; Summer, 2017
<i>Introduction to Experimental Psychology</i>	Summer, 2015; Summer, 2017
<i>Laboratory in Neuroanatomy</i>	Fall, 2016
<i>Cognitive Neuroscience</i>	Spring, 2015
<i>Human Mating Psychology</i>	Summer, 2015
<i>Introduction to Psychopathology</i>	Spring, 2015
<i>Laboratory in Attention</i>	Winter, 2014; Winter, 2015
<i>Introduction to Psychology</i>	Fall, 2013

OUTREACH & PUBLIC LECTURES

Brain Imaging Center, UCSB Real-Time Neuroimaging Lectures & Demonstrations Transcranial Magnetic Stimulation Lectures & Demonstrations	2013-2018
Psychological & Brain Sciences MiniCon, UCSB Conference Co-Chair	2016
School for Scientific Thought, UCSB Real-time Brain Imaging Demonstration Transcranial Magnetic Stimulation Demonstration	2014-2017
California Cognitive Science Conference, University of California, Berkeley Co-Founder & Co-Chair	2009, 2010
Cognitive Science Students Association, University of California, Berkeley President	2009-2010
Vice President	2008-2009
Treasurer	2007-2008

SKILLS AND QUALIFICATIONS

Technical Skills:

Coding & Data Analysis: R, Python, Bash, SPSS, Matlab*, Scheme*

Experimental design: PsychoPy, Open Sesame, E-prime, PsychToolBox*

Neuroimaging Analysis: FSL (fMRI data analysis), EEGLab* (EEG data analysis), ANTS* (brain warping/normalization), SPM* (fMRI data analysis), VoxBo (Voxel-based Lesion Symptom Mapping)

* denotes experience w/ limited expertise

Testing:

Functional Magnetic Brain Imaging (SIEMENS), Transcranial Magnetic Stimulation (MAGSTIM corp.), Electromyography, structural MRI, EEG, Eyetracking, transcranial direct current stimulation, Neuropsychological assessment, Flock of Birds (Ascension Corp.), Structural MRI, patient testing (stroke, CBS), control testing (young, older), tDCS

Non-profit Operations Assistant; *National Writing Project*
(01/2009-06/2010)

Operations management for an educational non-profit organization

Marketing Research Project Manager; *RD Associates*
(05/2007-08/2009)

Project manager, leadership role in directing and hiring employees

MENTORSHIP

Undergraduate Research and Creative Activities Mentor 2015-2016
(including mentorship of finalist in all-undergraduate research competition)

UCSB Research Mentorship Program 2014
(summer research internship for high school students)

Graduate Student Research Mentor

Alexandra Stump, UCSB undergraduate	10/2018 - current
Morgan Fitzgerald, UCSB undergraduate	10/2018 - current
Cepideh Razavi, UCSB undergraduate	01/2018 - current
Shefali Verma, UCSB undergraduate	09/2017 – current
Clarissa Marni, UCSB undergraduate	10/2017 – 9/2018
Gold Okafor, UCSB undergraduate & research specialist	05/2015 – 07/2018
Rory Fleming, research specialist	10/2017 – 03/2018
Sydney Smith, UCSB undergraduate	07/2016 - 12/2017
Alex Asturias, UCSB undergraduate & research specialist	07/2014 – 07/2017
Julia Hsueh, UCSB undergraduate	08/2016 – 06/2017
Megan Wong, UCSB undergraduate	03/2016 – 09/2016
Anne Brow, UCSB undergraduate	01/2016 – 06/2017
Kayli Berlin, UCSB undergraduate	03/2015 – 06/2016
Trinity Novak, UCSB undergraduate	09/2014 – 06/2016
Kally Zheng, Dos Pueblos High School student	06/2014 – 08/2014
Dylan Tweed, UCSB undergraduate	01/2014 – 03/2015

AFFILIATIONS

- UCSB Women in Science & Engineering (WiSE) 2016 – current
- American Psychological Association (APS) 2015 – current
- Society for Neuroscience (SfN) 2013 – current
- Cognitive Neuroscience Society (CNS) 2009 – current

Volunteer Positions

- Philadelphia Science Festival 2012, 2013
- Philadelphia Animal Care and Control 2010 – 2013
- The Franklin Institute 2005 – 2006

Research interests: cognitive neuroscience; decision making, neuroeconomics; cognition and action; volition, intention, and agency; executive control and inhibition; voluntary and involuntary attention and action; body schema; motor planning and control; action representations and action semantics; attention, experience and consciousness.

REFERENCES

Scott Grafton, MD

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Laurel Buxbaum, PsyD

Principal Investigator of Cognition and Action Laboratory
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Richard B. Ivry, Ph.D.

Professor, Helen Wills Neuroscience Institute and Department of Psychology
University of California, Berkeley
Tel: 510-642-7146
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William Prinzmetal, Ph.D

Adjunct Professor, Department of Psychology Psychology
University of California, Berkeley
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Gary Lupyan, Ph.D

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