# ALISON M. HARRIS, PhD

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#### RESEARCH INTERESTS

Cognitive neuroscience, event-related potentials (ERP), cognitive psychology

- Decision making: Decision neuroscience, neuroeconomics, behavioral economics
- Visual perception: Basic visual function, face and body perception, neural adaptation

### ACADEMIC APPOINTMENTS

July 2012-	Assistant Professor of Psychology
	Claremont McKenna College, Claremont, CA

Adjunct Professor of Neuroscience

W.M. Keck Science Department, Claremont, CA

Graduate Faculty in Applied Psychology
Claremont Graduate University, Claremont, CA

July 2012-April 2016 Visiting Associate

California Institute of Technology, Pasadena, CA

Sept 2009-June 2012 **Postdoctoral Scholar in Neuroeconomics** 

California Institute of Technology, Pasadena, CA

Oct 2005-Aug 2009 **Postdoctoral Researcher** 

University of Pennsylvania, Philadelphia, PA

### **EDUCATION**

2005 Ph.D. in Psychology

Harvard University, Cambridge, MA

<u>Dissertation</u>: Face selectivity of the M170 response in developmental prosopagnosia and double-pulse adaptation

2000 S.B. in Brain & Cognitive Sciences

Massachusetts Institute of Technology, Cambridge, MA

### **HONORS & AWARDS**

Harvard University Certificate of Distinction in Teaching. 2002, 2003.

National Science Foundation Graduate Student Fellowship. 2000-2003.

Barry M. Goldwater Scholarship. 1999.

#### **PUBLICATIONS**

# Articles in Refereed Journals

- \* Undergraduate or † graduate student co-author
  - \*Siqi-Liu A, **Harris A**, Atkinson AP, Reed CL. (2018). Dissociable processing of emotional and neutral body movements revealed by µ-alpha and beta rhythms. *Social Cognitive and Affective Neuroscience*. 13(12):1269-1279.
  - **Harris A**, Clithero JA, Hutcherson CA. (2018) Accounting for taste: A multi-attribute neurocomputational model explains the neural dynamics of choices for self and others. *Journal of Neuroscience*. 38(37):7952-7968.
  - †Green DJ, **Harris A**, \*Young A, Reed CL. (2018). Embodied valuation: directional action is associated with item values. *Quarterly Journal of Experimental Psychology*. 71(8):1734-1747.
  - \*Luna S, \*Lai D, **Harris A**. (2018). Antagonistic relationship between VEP potentiation and gamma power in visual snow syndrome. *Headache*. 58:138-144.
  - †Clay SN, Clithero JA, **Harris AM**, Reed CL. (2017). Loss aversion reflects information accumulation, not bias: A drift-diffusion model study. *Frontiers in Psychology*. 8:1708. doi: 10.3389/fpsyg.2017.01708.
  - **Harris A**, \*Vyas DB, Reed CL. (2016). Holistic processing for bodies and body parts: New evidence from stereoscopic depth manipulations. *Psychonomic Bulletin & Review*. 23(5): 1513-1519.
  - **Harris A**, Lim S-L. (2016). Temporal dynamics of sensorimotor networks in effort-based cost-benefit valuation: Early emergence and late net value integration. *Journal of Neuroscience*. 36(27): 7167-7183.
  - Sullivan N, Hutcherson C, **Harris A**, Rangel A. (2015). Dietary self-control is related to the speed with which health and taste attributes are processed. *Psychological Science*. 26(2): 122-134.
  - **Harris A**, Hare T, Rangel A. (2013). Temporally dissociable mechanisms of self-control: Early attentional filtering versus late value modulation. *Journal of Neuroscience*. 33(48):18917-18931.
    - This article was the subject of a commentary by: Greening SG, Lee T-H, Mather M. (2014). A dual process for the cognitive control of emotional significance: implications for emotion regulation and disorders of emotion. *Frontiers in Human Neuroscience*. April (B 253): 1-2.
  - **Harris A**, Adolphs R, Camerer C, Rangel A. (2011). Dynamic construction of stimulus values in the ventromedial prefrontal cortex. *PLoS ONE*. 6(6): e21074.
  - Kahn DA, **Harris A**, Wolk DA, Aguirre GK. (2010). Temporally distinct neural coding of perceptual similarity and prototype bias. *Journal of Vision*. 10(10):12.
  - **Harris A**, Aguirre GK. (2010). Neural tuning for face wholes and parts in human fusiform gyrus revealed by fMRI adaptation. *Journal of Neurophysiology*. 104(1): 336-345.
  - Liu J, **Harris A**, Kanwisher N. (2010). Perception of face parts and face configurations: An fMRI study. *Journal of Cognitive Neuroscience*. 22(1): 203-211.

- **Harris A**, Aguirre GK. (2008). The effects of parts, wholes, and familiarity on face-selective responses in MEG. *Journal of Vision*. 8(10):4, 1-12.
- **Harris A**, Aguirre GK. (2008). The representation of parts and wholes in face-selective cortex. *Journal of Cognitive Neuroscience*. 20(5): 863-878.
- **Harris A**, Nakayama K. (2008). Rapid adaptation of the M170 response: Importance of face parts. *Cerebral Cortex*. 18: 467-476.
- Harris A, Aguirre GK. (2007). Prosopagnosia. Current Biology. 17(1): R7-8.
- **Harris A**, Nakayama K. (2007). Rapid face-selective adaptation of an early extrastriate component in MEG. *Cerebral Cortex*. 17: 63-70.
- **Harris A**, Duchaine B, Nakayama K. (2005). Normal and abnormal face selectivity of the M170 response in developmental prosopagnosics. *Neuropsychologia*. 43: 2125-2136.
- Liu J, **Harris A**, Kanwisher N. (2002). Stages of processing in face perception: An MEG study. *Nature Neuroscience*. 5(9): 910-916.
- Epstein R, **Harris A**, Stanley D, Kanwisher N. (1999). The parahippocampal place area: Recognition, navigation, or encoding? *Neuron*. 23: 115-125.
- Kanwisher N, Stanley D, **Harris A**. (1999). The fusiform face area is selective for faces not animals. *Neuroreport*. 10:183-187.

# **Book Chapters**

**Harris A**. (2009). Magnetoencephalography. In Bruce Goldstein (Ed.), *The Sage Encyclopedia of Perception*.

#### MANUSCRIPTS UNDER REVISION AND REVIEW

- **Harris** A, \*Young A, \*Hughson L, †Green D, Doan S, Hughson E, Reed CL. Perceived relative social status and cognitive load influence acceptance of unfair offers in the Ultimatum Game. Manuscript submitted for publication September 2018.
- †Arciniega H, **Harris A**, Peterson DJ, \*McBride J, \*Kilgore-Gomez A, Berryhill ME. Working memory deficits in chronic mild TBI. Manuscript submitted for publication September 2018.

# MANUSCRIPTS IN PREPARATION

- **Harris A**, \*Young A. Differential time and frequency dynamics of directed attention in stimulus attribute weighting.
- **Harris A**, Frydman C, Chang T. Temporal dynamics of optimal versus suboptimal decision-making in a financial trading scenario.
- †Clay SN, **Harris A**, Reed CL. Loss aversion affects inhibitory processes for reward and loss as indicated by inhibition of return.
- **Harris A**, \*Jo A, \*Lodge M, Reed CL. Segmentation of the human body: How does the visual system define body parts?

### INVITED TALKS AND WORKSHOPS

- Harris A. Accounting for taste: Temporal dynamics of decision-making for oneself vs. others. Keck Neuroscience Program Research Symposium. Claremont, CA. September 24, 2016.
- Harris A. Discussant: "Testing salience theory of risky choice using eye-tracking data." Southern California Finance Conference. Claremont, CA. September 25, 2015.
- Harris A. Neural dynamics of financial decision-making: The disposition effect. Claremont Graduate University, Claremont, CA. October 24, 2014.
- Harris A. Event-related brain dynamics of value and cognitive control. Young Researcher Pre-Conference Workshop, Meeting of the Society for the Advancement of Behavioral Economics, Lake Tahoe, NV. July 21, 2013.
- Harris A. Cognitive neuroscience methods. Young Researcher Pre-Conference Workshop, Meeting of the Society for the Advancement of Behavioral Economics, Lake Tahoe, NV. July 21, 2013.
- Harris A. Event-related brain dynamics of value and self-control. University of California-Riverside, Riverside, CA. December 4, 2013.
- Harris A. Event-related brain dynamics of value and self-control. University of Nevada-Reno, Reno, NV. October 18, 2013.
- Harris A. Basics of event-related potentials. University of Nevada-Reno, Reno, NV. October 18, 2013.
- Harris A. Event-related brain dynamics of value and self-control. Claremont Graduate University, Claremont, CA. October 5, 2012.
- Harris A. Face-selective responses in MEG & fMRI represent both parts and wholes. "Words and Faces: An International Workshop on Cognitive Neuroscience in Honour of Professor Ryoji Suzuki," Macquarie University, Sydney, Australia. September 13-14, 2007.
- Harris A. Comparing fMRI & MEG markers of face perception. International Conference on Biomagnetism, Boston, MA. August 8-12, 2004.

#### CONFERENCE PRESENTATIONS

- Liu A, Harris A, Reed CL. Understanding you through me: Neural simulation of others' emotional body language. Poster to be presented at the Psychonomic Society Annual Meeting, New Orleans, LA. November 15-18, 2018.
- Harris A, Young A. Time and frequency dynamics of directed attention in stimulus attribute weighting. Talk to be presented at the Meeting of the Society for Neuroeconomics, Philadelphia, PA. October 5-7, 2018.
- Harris A, Young A. Time and frequency dynamics of directed attention in stimulus attribute weighting. Interdisciplinary Symposium on Decision Neuroscience, Ann Arbor, MI. June 1-2, 2018.
- Harris A, Jo A, Lodge M, Zeledon J, Saikley A, Reed CL. Segmentation of the human body: How does the visual system define body parts? Meeting of the Association for Psychological Science, San Francisco, CA. May 2018.

- Young A, Hughson L, Green D, Harris A, Doan S, Hughson E, Reed CL. Perceived relative social status and cognitive load influence acceptance of unfair offers in the Ultimatum Game. Meeting of the Association for Psychological Science, San Francisco, CA. May 2018.
- Harris A, Young A. Effects of directed attention on stimulus attribute weighting: An ERP study. Meeting of the Cognitive Neuroscience Society, Boston, MA. March 24-27, 2018.
- Green DJ, Harris A, Young A, Reed CL. Embodied valuation: Directional action is associated with item values. Meeting of the Psychonomic Society, Vancouver, Canada. November 9-12, 2017.
- Harris A, Young A. Effects of directed attention on stimulus attribute weighting: An ERP study. Meeting of the Society for Neuroeconomics, Toronto, Canada. October 6-8, 2017.
- Clithero J, Harris A, Hutcherson C. Accounting for taste: A multi-attribute neurocomputational model explains divergent choices for self and others. Meeting of the Society for Neuroeconomics, Toronto, Canada. October 6-8, 2017.
- Harris A, Clithero JA, Hutcherson CA. Accounting for taste: A multi-attribute neurocomputational model explains divergent choices for self and others. Meeting of the Social and Affective Neuroscience Society, Los Angeles, CA. March 16-18, 2017.
- Clay SN, Clithero JA, Harris AM, Reed CL. Loss aversion reflects information processing, not bias: A drift diffusion model study. Meeting of the Psychonomic Society, Boston, MA. November 17-20, 2016.
- Harris A, Hutcherson C. Temporal dynamics of decision-making for oneself versus others. Meeting of the Society for Neuroscience, San Diego, CA. November 12-16, 2016.
- Clay SN, Harris AM, Green DJ, Reed CL. Loss aversion is related to inhibitory processes for reward & loss: An IOR study. Meeting of the Vision Sciences Society, St. Pete Beach, FL. May 13-18, 2016.
- Reed CL, Vyas D, Harris A. Holistic processing of body postures. Meeting of the Vision Sciences Society, St. Pete Beach, FL. May 15-20, 2015.
- Harris A, Hutcherson C, Rangel A. Accounting for taste: Temporal dynamics of decision-making for oneself vs. others. Meeting of the Cognitive Neuroscience Society, San Francisco, CA. March 28-31, 2015.
- Harris A, Frydman C, Chang T. Neural dynamics of decision-making in a financial trading task. Meeting of the Society for Neuroeconomics, Miami, FL. September 26-28, 2014.
- Harris A, Frydman C, Chang T. Neural dynamics of decision-making in a financial trading task. Meeting of the Cognitive Neuroscience Society, Boston, MA. April 5-8, 2014.
- Kelly K, Moher J, Harris A, Song J-H. Sensorimotor dynamics of food choices revealed by reaching. Meeting of the Cognitive Neuroscience Society, Boston, MA. April 5-8, 2014.
- Colas JT, Harris AM, Rangel A. Effector-specific and effector-independent neural computations underlying value-based decision making. Meeting of the Society for Neuroscience, San Diego, CA. November 9-13, 2013.
- Harris A, Lim S-L, Rangel A. Temporal dynamics of neural computations for stimulus value and effort cost. Meeting of the Cognitive Neuroscience Society, San Francisco, CA. April 13-16, 2013.

- Sullivan N, Hutcherson C, Harris A, Rangel A. Using computer mouse movements to parse the temporal dynamics of value-based choices. Meeting of the Society for Neuroeconomics, Miami, FL. September 28-30, 2012.
- Harris A, Hare T, Rangel A. The temporal dynamics of value computations in decisions involving self-control. Meeting of the Society for Neuroeconomics, September 30-October 2, 2011.
- Harris A, Adolphs R, Camerer C, Rangel A. The dynamics of stimulus valuation in ventromedial prefrontal cortex. Meeting of the Society for Neuroscience, San Diego, CA. November 13-17, 2010.
- Harris A, Adolphs R, Camerer C, Rangel A. The time course of value computations at the time of decision making. Meeting of the Society for Neuroeconomics, Evanston, IL. October 15-17, 2010.
- Harris A, Aguirre GK. Flexible neural tuning for parts and wholes in human fusiform cortex. Meeting of the Society for Neuroscience, Washington, DC. November 15-19, 2008.
- Harris A, Aguirre GK. The effects of parts, wholes, and familiarity on face-selective responses in MEG. Meeting of the Vision Sciences Society, Naples, FL. May 9-14, 2008.
- Harris A, Aguirre GK. Familiarity modulates holistic processing in the Fusiform Face Area. Meeting of the Vision Sciences Society, Sarasota, FL. May 11-16, 2007.
- Harris A, Nakayama K. Face-selective adaptation of the M170 is sensitive to face parts, not face configuration. Meeting of the Vision Sciences Society, Sarasota, FL. May 5-10, 2006.
- Harris A, Nakayama K. Face-selective "double-pulse" adaptation of the M170 response. Meeting of the Vision Sciences Society, Sarasota, FL. May 6-11, 2005.

### **MEDIA OUTLETS**

- APS Observer. (2015). Processing speed helps determine whether we choose carrots over chocolates [WWW page]. URL:
  - http://www.psychologicalscience.org/index.php/publications/observer/obsonline/processing-speed-helps-determine-whether-we-choose-carrots-over-chocolates.html
- Wray, Herbert. (2014). Apple or ice cream? The mechanics of a healthy choice [WWW page]. URL: http://www.psychologicalscience.org/index.php/news/were-only-human/apple-or-ice-cream-the-mechanics-of-a-healthy-choice.html
- Harris AM, Aguirre GK. (2007) Toward a Neurofunctional Definition of "Face-Blindness." *Scientific American Mind Matters*. [WWW page]. URL: https://blogs.scientificamerican.com/news-blog/when-every-face-is-like-another/

### **COURSES TAUGHT**

Introduction to Psychology (PSYC 30) Sensation & Perception (PSYC 97) Neuroeconomics (PSYC/ECON 107)

### PROFESSIONAL SERVICE AND AFFILIATIONS

# Service to the Department and College

2018-2019 Chair, Academic Computing Committee

Student Recruitment Committee

Interdisciplinary Science Scholarship Committee Faculty Sponsor, Psychology Club and Psi Chi

Freshman Academic Advisor

**2017-2018** Academic Computing Committee

Student Recruitment Committee

Interdisciplinary Science Scholarship Committee

Faculty Participant, DecemberFest

Faculty Sponsor, Psychology Club and Psi Chi

Faculty Organizer, 5C Undergraduate Research in Psychology Symposium

Freshman Academic Advisor

2016-2017 Athenaeum Advisory Committee

Student Recruitment Committee

Interdisciplinary Science Scholarship Committee

Faculty Participant, DecemberFest

Evaluator, Best Senior Thesis in Psychology

**2014-2015** Student Recruitment Committee

Off-Campus Study Committee

Interdisciplinary Science Scholarship Committee

Search Committee, Cognitive Psychology Open-Rank Professor

Faculty Sponsor, Psychology Club and Psi Chi

Panelist, Parents Orientation O&A

External Review of Neuroscience Major (Keck Science)

Psychology Department Self-Assessment

2013-2014 Student Recruitment Committee

Psychology Department Self-Assessment

Panelist, Presidential Round Table Freshman Registration Advisor Panelist, Parents Orientation Q&A Faculty Participant, DecemberFest

Panelist, Claremont-Wide New Faculty Workshop

Freshman Academic Advisor

# **Professional Service**

Ad hoc reviewer for journals including: Cerebral Cortex; Neuropsychologia; Social Cognitive and Affective Neuroscience; Action, Perception & Psychophysics; Psychophysiology; European Journal of Neuroscience

# **Professional Affiliations**

Social and Affective Neuroscience Society, Society for Cognitive Neuroscience, Society for Neuroeconomics, Society for Neuroscience

### UNDERGRADUATE STUDENT RESEARCH SUPERVISION

- **2018-2019** Graham Spurrier (2-semester Psychology thesis); Nina Rathi (1-semester Neuroscience thesis); Jacob Cohen; Jessica Kim
- Yifan (Elva) Fu (2-semester Psychology thesis); Emilia Hagen (2-semester Neuroscience thesis, 2<sup>nd</sup> reader); Emily Joyce (2-semester Neuroscience thesis, 2<sup>nd</sup> reader); Daniel Lai (1-semester Neuroscience thesis); Siqi (Audrey) Liu (2-semester Psychology thesis, 2018 Best Thesis in Psychology); Jacob Cohen; Jessica Kim; Nina Rathi; Felipe Sant'Anna; Aleena Young; Kaitlyn Zeichick
- 2016-2017 Darius Bieganski (1-semester Psychology thesis); Saharai Cante (1-semester Neuroscience thesis, 2<sup>nd</sup> reader); Larissa Chern (1-semester Psychology thesis); Sebastian Luna (1-semester Neuroscience thesis); Ajlina Basic; Siqi (Audrey) Liu; Nina Rathi; Aleena Young
- 2014-2015 Samuel Dunham (2-semester Neuroscience thesis); Iris Lieuw (2-semester Neuroscience thesis); Kelly Chan (1-semester Psychology thesis); Megan Coleman (1-semester Psychology thesis); April Carlson; Saharai Cante; Sharon Chiang; Elizabeth Krawczak; Carol Lam; Huakai Liao; Siqi (Audrey) Liu; Lestter Yeh
- 2013-2014 Sibinee Jokela (2-semester Psychology thesis); April Carlson; Kelly Chan; Megan Coleman; Samuel Dunham; Elizabeth Krawczak; Carol Lam; Iris Lieuw; Alexander Mendoza; John Tuddenham

# GRADUATE STUDENT RESARCH SUPERVISION

Khemara Has (Ph.D. advisor, 2013-2016) Summer Clay (MA committee, 2013-present) Danielle Green (MA committee, 2014-2017) Ji Yong Park (Economics Ph.D. committee, 2015-2016)