December, 2019

Department of Psychology, Boston College 300 McGuinn Hall (617) 552-6993 andrea.heberlein@bc.edu

# **EMPLOYMENT**

**Boston College**, Department of Psychology, Chestnut Hill, MA. (July 2018-present). Senior Lecturer (full-time)

**Boston College**, Department of Psychology, Chestnut Hill, MA. (July 2012-2018). Lecturer (full-time) [on leave July-December 2015]

**Boston College**, Department of Psychology, Chestnut Hill, MA. (July 2011-June 2012). Visiting Assistant Professor

Harvard University, Mind Brain and Behavior Program. (July 2009-June 2011).

Postdoctoral fellowship mentored jointly by Daniel Wegner, Ph.D. (Department of Psychology) and Moshe Bar, Ph.D. (Massachusetts General Hospital, Martinos Center for Biomedical imaging)

**Harvard University**, Department of Psychology, Cambridge, MA. (July 2006-May 2009) Lecturer.

**Harvard University**, Department of Psychology, Cambridge, MA. (July 2006-June 2009). Research associate in the labs of Mahzarin Banaji, Ph.D. and Daniel Wegner, Ph.D.

University of Pennsylvania/Children's Hospital of Philadelphia, Philadelphia, PA. (September 2002-June 2006)

Postdoctoral fellowship, under the supervision of Martha Farah, Ph.D., Dept. of Psychology, University of Pennsylvania. Funded by NIH training grant T32-NS07413 through the Children's Hospital of Philadelphia [on leave Jan-Jun 2005].

## **EDUCATION and TRAINING**

**Harvard University**, Mind Brain and Behavior Program. (July 2009-June 2011).

Postdoctoral fellowship mentored jointly by Daniel Wegner, Ph.D. (Department of Psychology) and Moshe Bar, Ph.D. (Massachusetts General Hospital, Martinos Center for Biomedical imaging)

**Harvard University**, Department of Psychology, Cambridge, MA. (July 2006-June 2009). Research associate in the labs of Mahzarin Banaji, Ph.D. and Daniel Wegner, Ph.D.

University of Pennsylvania/Children's Hospital of Philadelphia, Philadelphia, PA. (September 2002-June 2006)

Postdoctoral fellowship, under the supervision of Martha Farah, Ph.D., Dept. of Psychology, University of Pennsylvania. Funded by NIH training grant T32-NS07413 through the Children's Hospital of Philadelphia [on leave Jan-Jun 2005].

**University of Iowa**, Neuroscience Graduate Program, Iowa City, IA. (August 1997- July 2002)

Doctoral dissertation defended June 2002, under the supervision of Ralph Adolphs, Ph.D., Dept. of

Neurology. Title: *Neural substrates for social cognition from motion cues: Lesion studies in humans.* 

University of Pennsylvania, Philadelphia, PA. (August 1991- May 1995)Bachelor of Arts cum laude in Biological Basis of Behavior, Behavioral Ecology concentration (with departmental honors).

## **RESEARCH INTERESTS**

- Empathy control in medicine. Understanding the challenges faced by physicians in communicating with patients; applying basic psychological research on mind perception and empathy mechanisms to aid in the development of more effective empathy training for physicians and other health care professionals.
- Interaction between psychological states and mind perception processes, e.g.: How does being in a state of competition with another affect how we perceive that person's mind? Or how we perceive minds in general? Does thinking about one's own feelings make us more or less likely to attend to others' feelings? What about to their goals or agency?
- The interaction of bottom-up (stimulus-driven) and top-down (conceptual) processes in mind perception processes and in judgments of animacy, agency, emotion, and personhood
- Neural substrates for social cognition, including: emotion recognition; judgments of animacy, agency, and personhood; personality trait attribution; anthropomorphizing; and empathy

### PEER-REVIEWED PAPERS: published or in press

- Kraft-Todd GT, Reinero, DA, Kelley JM, **Heberlein AS**, Baer L, Riess H (2017). Empathic nonverbal behavior improves ratings of both warmth *and* competence in a medical context. <u>PLOS One</u> 12(5): e0177758.
- Olson KR, **Heberlein AS**, Kensinger E, Spelke ES, Dweck CS, Banaji MR (2013). The role of forgetting in undermining good intentions. PLOS One 8(11): e79091.
- Gray, K, Jenkins, AC, **Heberlein AS**, Wegner DM (2011). Distortions of mind perception in psychopathology. <u>Proceedings of the National Academy of Sciences</u> 108(2), 477-79.
- Gillihan SJ, Xia C, Padon AA, **Heberlein AS**, Farah MJ, Fellows LK (2011). Contrasting roles for lateral and ventromedial prefrontal cortex in transient and dispositional affective experience. <u>Social</u>, <u>Cognitive</u>, and <u>Affective Neuroscience</u> 6(1), 128-137.
- **Heberlein AS**, Atkinson AP (2009). Neuroscientific evidence for simulation and shared substrates in emotion recognition: Beyond faces. Emotion Review 1(2): 162-177.
- **Heberlein AS**, Padon AA, Gillihan SJ, Farah MJ, Fellows LK (2008). Facial emotion recognition impairments consequent to ventromedial frontal lobe damage. <u>Journal of Cognitive Neuroscience</u>. 20(4):721-733.
- Atkinson A., **Heberlein AS**, Adolphs R. (2007). Spared ability to recognise fear from static and moving whole-body cues following bilateral amygdala damage. <u>Neuropsychologia</u>. 45(12): 2772-2782.
- Farah MJ, **Heberlein AS.** (2007). Personhood and neuroscience: Naturalizing or nihilating? <u>American Journal of Bioethics</u>. 7(1): 37-48.

- Farah MJ, **Heberlein AS**. (2007). Response to Open Peer Commentaries on "Personhood and neuroscience: Naturalizing or nihilating?": Getting Personal. <u>American Journal of Bioethics</u>. 7(1): W1-W4.
- Bigelow NO, Paradiso S, Adolphs R, Moser DJ, Arndt S, **Heberlein AS**, Nopoulos P, Andreasen NC. (2006) Perception of socially relevant stimuli in schizophrenia. Schizophrenia Research 83 (2-3): 257-267.
- **Heberlein AS**, Saxe RR. (2005) Dissociation between emotion and personality judgments: Convergent evidence from functional neuroimaging. <u>NeuroImage</u>. 28:770-777.
- Fellows LK, **Heberlein AS**, Morales DA, Shivde G, Waller S, Wu D. (2005) Method matters: An empirical study of impact in cognitive neuroscience. <u>Journal of Cognitive Neuroscience</u>. 17: 850-858.
- **Heberlein AS**, Adolphs R, Tranel D, Damasio H. (2004) Cortical regions for judgments of emotions and personality traits from pointlight walkers. <u>Journal of Cognitive Neuroscience</u>. 16: 1143-1158.
- **Heberlein AS**, Adolphs R. (2004) Perception in the absence of social attribution: selective impairment in anthropomorphizing following bilateral amygala damage. <u>Proceedings of the National Academy of Sciences</u> 101(19):7487-7491.
- **Heberlein AS**, Pennebaker JW, Tranel D, Adolphs R (2003) Effects of damage to right-hemisphere brain structures on spontaneous emotional and social judgments. Political Psychology 24(4): 705-726.
- Crawford JD, Cook AP, **Heberlein AS**. (1997) Bioacoustic behavior of African fishes (Mormyridae): Potential cues for species and individual recognition in Pollimyrus. <u>Journal of the Acoustical Society of America</u> 102 (2): 1200-1212.

#### **BOOK CHAPTERS AND INVITED REVIEWS**

- **Heberlein AS**, Chen JA, Trinh N (2019). Implicit bias in mental health care. In: <u>Sociocultural Psychiatry:</u> A Casebook and Curriculum, N. Trinh and J. Chen (eds.), New York: Oxford University Press.
- Atkinson AP, **Heberlein AS**, and Adolphs R (2010). Are people special? A brain's eye view. In: <u>The Science of Social Vision</u>, R.B. Adams, Jr., N. Ambady, K. Nakayama, and S. Shimojo (eds.), New York: Oxford University Press.
- **Heberlein AS** (2008). Animacy and intention in the brain: Neuroscience of social event perception. In: <u>Understanding Events: How Humans See, Represent, and Act on Events</u>, T. F. Shipley and J. Zacks (eds.), New York: Oxford University Press.
- **Heberlein AS**, Adolphs R. (2007). Neurobiology of emotion recognition: Current evidence for shared substrates. In: <u>Social Neuroscience: Integrating Biological and Psychological Explanations of Social Behavior</u>, E. Harmon-Jones and P. Winkielman (eds.) New York: Guilford Press.
- **Heberlein, AS**, Adolphs R. (2005). Functional anatomy of human social cognition. In: <u>The Cognitive</u> Neuroscience of Social Behaviour, N. Emery and A. Easton (eds.) Philadelphia: Psychology Press.
- Adolphs R, **Heberlein AS**. (2002) Emotion. In: <u>Encyclopedia of the Brain</u>, V.S. Ramachandran (ed.). New York: Academic Press.

#### **OTHER PAPERS**

- **Heberlein AS**, Birks HL, Fernald A. (1998) Twelve-month-old infants predict human action from both positive and negative directed emotional expressions. *Unpublished manuscript*.
- Otten M\*, **Heberlein AS**\*, Wegner DM, Banaji MR. (2011) De-Minding: Interpersonal Competition reduces Mind Perception. \*Contributed equally. *Unpublished manuscript*.

#### TEACHING and SUPERVISING

## **Teaching:**

## **Boston College**

Instructor, Psychology 4443 (443 before 2014-2015 year), Research Practicum in Social and Cognitive Methods

Instructor, Psychology 121, Research Methods (Spring 2013)

Instructor, Psychology 5540 (540 before 2014-2015 year), Advanced Topics in Social Psychology

Instructor, Psychology 2241 (2241 before 2014-2015 year), Social Psychology

Instructor, Psychology 1032 (032 before 2014-2015 year), *Emotion* (note that this is a Core course for non-Psychology majors)

Instructor, Psychology 445, Research Practicum in Social Cognition

Instructor, Psychology 343, Emotion

### **Harvard University**

Instructor, Psychology 950, Psychology Live (Fall 2007, Fall 2008)

Instructor, Psychology 1703, Emotion (Spring 2007, Spring 2008)

Instructor, Psychology 1309, Cognitive Neuroscience (Fall 2006, Spring 2009)

## University of Iowa

Instructor, Psychology 012, Introduction to Brain and Behavior (Fall 2001).

Teaching assistant, Psychology 016, Introduction to Cognitive Psychology (Spring 2001)

Teaching assistant, Biology 040, Biology of the Brain (Spring 1999).

### **Stanford University**

Teaching assistant, Psychology 110, Culture and Human Development (Spring 1997).

#### University of Pennsylvania

Teaching assistant, Psychology 343, Lab Course in Neuroethology (Fall 1994).

#### **Supervising and mentoring:**

## **Boston College, Department of Psychology:**

9 senior theses (5 of them departmental honors theses) and one MA thesis completed under my supervision over the past 4 years. 2 senior theses in progress for this upcoming year, 2 additional honors thesis students this year (2017-2018). Numerous independent study students. Served on committee for MA thesis (for PhD student); serving on two PhD committees.

# **Boston College**: Mays Minority Mentor

Meet monthly, informally, with undergraduate student.

## Harvard University, Department of Psychology:

Mentored four undergraduate thesis students, 2 as primary advisor and 2 as reader (two finished Spring 2008; two finished Spring 2009). Primary advisee won Gordon Allport Prize (departmental honors) in Spring 2009.

Undergraduate research assistants (2-4/semester, beginning Fall 2006)

## University of Pennsylvania, Center for Cognitive Neuroscience, Department of Psychology:

Undergraduate independent study projects (2 during academic year 2004/2005; 2 during academic year 2003/2004; 1 during Spring/Summer 2003)

#### University of Iowa, Cognitive Neuroscience Laboratory, Department of Neurology:

Honors undergraduate project (Fall 2002- Spring 2004).

Undergraduate research assistant (6 hrs/week; Spring-Fall 2002).

Summer Undergraduate Research Program student (40 hrs/week; Summer 2001).

High School Science research student from Iowa City's City High school (6 hrs/week; Fall 1999-Summer 2000).

Two student research interns from Germany (40 hrs/week; Fall 1999-Spring 2000).

Medical student doing summer research (40 hrs/week; Summer 1999).

# **HONORS AND AWARDS**

Mind, Brain and Behavior postdoctoral fellowship, Harvard University, 2 years beginning July 2009. Certificate of Distinction, Bok Center for Teaching, Harvard University, 2009.

Nominated for Marquand Award for Exceptional Advising and Counseling, Harvard University, Spring 2008 (one of 125 nominees across the University)

Fellowship recipient, McDonnell Summer Institute in Cognitive Neuroscience, Squaw Valley, CA, 2003. Travel Award recipient, Wisconsin Symposium on Emotion, 2001.

Fellowship recipient, McDonnell Summer Institute in Cognitive Neuroscience, Dartmouth College, NH, 2001.

Chapters Graduate Student Travel Award recipient, Society for Neuroscience, 2000.

Iowa/Presidential Fellowship recipient 1997-2001 (20-25 fellowships given each year among all entering graduate students in the University).

Benjamin Franklin Scholar 1991-1995 (honors program, University of Pennsylvania).

University Scholar 1994-1995 (research honors program, University of Pennsylvania).

National Merit Scholar.

# **CONFERENCE PRESENTATIONS AND ABSTRACTS**

- Reinero, D., Kraft-Todd, G., Baer, L., **Heberlein, A.**, Kelley, J.M., & Riess, H. (May 21-24, 2015). Nonverbal Signals of Physician Empathy Increase Ratings of Both Warmth and Competence. *27th Association for Psychological Science (APS) Annual Convention*, New York, NY.
- **Heberlein AS**, Ford J, Wegner DM (2010) Mental state attribution in medicine: Differential effects of focus on experience vs. agency. *Poster presented at the Society for Personality and Social Psychology annual meeting.*
- Henri-Bhargava A, **Heberlein AS**, Lancaster K, Banaji MR, Fellows LK (2008) Does the ventromedial prefrontal cortex represent implicit social knowledge, stimulus valence, or some combination of the two? Implicit association test (IAT) effects after ventromedial prefrontal damage. *Cognitive Neuroscience Society Abstracts*.
- Atkinson AP, **Heberlein AS**, Adolphs R (2006) Spared ability to recognise fear from whole-body cues following bilateral amygdala damage. *Society for Neuroscience Abstracts*.
- Padon AA, **Heberlein AS**, Gillihan SJ, Farah MJ, Fellows LK (2005) Dissociation between emotion recognition and subjective emotional experience in subjects with frontal lobe damage. *Cognitive Neuroscience Society Abstracts*.
- Gillihan SJ, Fellows LK, Padon AA, **Heberlein AS**, Farah MJ (2005) Mood reactivity and recovery in patients with lesions of dorsolateral and ventromedial prefrontal cortex. *Cognitive Neuroscience Society Abstracts*.

- **Heberlein AS** and Saxe RR (2004) Double dissociation between the neural substrates of emotion and personality judgments revealed via fMRI. *Society for Neuroscience Abstracts* 203.12
- Russell T, Carter J, Joiner A, **Heberlein A** (2004) Perception of emotional pointlight displays in paranoid schizophrenia. 3<sup>rd</sup> Australian Conference for Cognitive Neuropsychology and Cognitive Neuropsychiatry, MacQuarie Center for Cognitive Science.
- **Heberlein AS**, Scheer K, Vijayaraghavan L, Adolphs R. (2004) Damage to basal ganglia impairs recognition of emotion from body movement. *Cognitive Neuroscience Society Abstracts*.
- Morales DA, Fellows LK, Ford S, **Heberlein AS**, Shivde G, Waller S, Wu D (2004) Converging methods in cognitive neuroscience: are we walking the walk? *Cognitive Neuroscience Society Abstracts*.
- **Heberlein AS**, Pennebaker JW, Tranel D, Adolphs R (2002) Subjects with right somatosensory cortex damage use fewer affect words in describing an abstract animated video: a computerized word count analysis. *Society for Neuroscience Abstracts* 517.12.
- **Heberlein AS**, Tranel D, Damasio H, Adolphs R. (2001) Damage to right somatosensory cortex impairs recognition of basic emotions, but not of personality traits, from biological motion stimuli. *Society for Neuroscience Abstracts* 120.8.
- **Heberlein AS**, Ravahi SM, Adolphs R, Tranel D, Damasio AR. (2000) Emotion and personality attributions from point-light films: impairments consequent to bilateral amygdala damage. *Society for Neuroscience Abstracts* 754.9.
- **Heberlein AS**, Ravahi SM, Adolphs R, Tranel D, Damasio AR. (2000) Deficits in attributing emotion to moving visual stimuli consequent to amygdala damage. *Cognitive Neuroscience Society Abstracts* 2000: 56.
- **Heberlein AS**, Adolphs R, Tranel D, Kemmerer D, Anderson S, Damasio AR. (1998) Impaired attribution of social meanings to abstract dynamic geometric patterns following damage to the amygdala. *Society for Neuroscience Abstracts* 463.5.
- Bechara A, Tranel D, Wilson J, **Heberlein AS**, Ross M, Damasio AR. (1998) Impaired decision-making in peripheral neuropathy. *Society for Neuroscience Abstracts* 463.8.
- Birks HL, **Heberlein AS**, Fernald A. (1998) Infants' use of emotional expressions to predict adult action. *Poster presented at the International Conference on Infant Studies, Atlanta, GA*.
- **Heberlein AS**, Cook AP, Crawford JD. (1997) Courtship sounds of African fishes: Cues for species and individual recognition. *Talk presented at the Animal Behavior Society annual meeting, University of Maryland*.
- Vaidya CJ, Gabrieli JDE, Rypma B, Mak J, **Heberlein A**, Desmond JE, Glover GH, Austin G, Krikorian GJ, Ridlehuber HW, Strauss HW, Annis FL, Schell H. (1997) fMRI of frontal lobe function in children with attention deficit disorder on and off ritalin. *Society for Neuroscience Abstracts* 341.5.
- Crawford JD, Cook AP, **Heberlein AS**. (1995) Species differences in the acoustic signals of congeneric electric fishes: *Pollimyrus isidori & P.adspersus* (Mormyridae). In: <u>Neural mechanisms of Behavior</u>, Proc. 4th Int. Cong. Neuroethology, Cambridge, GB. Georg Thieme Verlag, Stuttgart.

#### **INVITED TALKS**

- "The neuroscience of seeing mind in movement." Boston College, March 2011.
- "Neuroscience of social cognition." Wesleyan University, April 2009.
- "Neuroscience of social cognition." Wellesley College, November 2007.
- "Emotion vs. Intention: A perfusion fMRI comparison of the neural basis of two social attribution processes." University of Pennsylvania Autism Research Retreat, March 2006.
- "Social judgments from movement cues: What can dissociations tell us about the relationships between attribution processes?" Symposium on Social Cognitive and Affective Neuroscience, Princeton University, May 2005.
- "Judgments of emotion and personality from pointlight walkers and moving triangles: neuropsychological and functional imaging studies." Department of Psychology Colloquium, Rutgers University, Newark campus, January 2005.
- "Simulation and social attribution: dissociable systems for different attributions?" Rutgers Center for Cognitive Science, *What is cognitive science?* talk series, November 2004.
- "The role of the amygdala in anthropomorphizing." Symposium on the amygdala in social cognition, American Psychological Society annual meeting, May 2004.
- "Neural systems for social cognition from movement." University of North Carolina/Duke University autism research center, April, 2004.
- "Neural systems for social perception from movement." *Behavioral and Cognitive Neuroscience Retreat*, University of Pennsylvania, March 2004.
- "Social cognition from movement stimuli: emotion, personality, and anthropomorphizing." *Social/Affective Neuroscience Series*, Department of Psychology, Harvard University, February 2004.
- "Neural systems for recognizing emotion and personality from movements." *Dance and the Brain* Symposium, Ballett Frankfurt, Germany, January 2004.
- "Lesion studies of emotion recognition in humans: faces and body movements." *About faces: A multidisciplinary approach to the science of face perception*. Princeton University. September, 2003.
- "Neural substrates for social cognition from motion cues: Lesion studies in humans." University Scholars alumni research lunch, University of Pennsylvania. February, 2003.
- "Roles of amygdala, right somatosensory cortex, and left frontal operculum in recognition of emotion and personality from pointlight stimuli." *Cognition, Brain, and Behavior Colloquium*, University of California, Berkeley. November, 2001.
- "Roles of amygdala and right somatosensory cortex in emotion and personality recognition." Center for Cognitive Neuroscience, University of Pennsylvania. September, 2001.
- "Recognition of emotion and personality traits from point-light walkers: Impairments consequent to amygdala and right somatosensory cortex damage." Institute of Medical Psychology and Behavioral Neurobiology, Eberhard-Karls-University, Tuebingen, Germany. May, 2001.

## PROFESSIONAL MEMBERSHIPS

American Psychological Society (2004-2005, 2009-2014) Society for Neuroscience (1998-present) Society for Personality and Social Psychology (2009-2014) Cognitive Neuroscience Society (1999-present) Animal Behavior Society (1995-1997)

#### **AD-HOC REVIEWING:**

#### Journals:

BioMedCentral Neuroscience; Brain Research 3: Cognitive and Behavioral Neuroscience; Cerebral Cortex; Child Development; Cognition; Cognitive Psychology; Current Biology; Emotion; Journal of Cognitive Neuroscience; Journal of Experimental Psychology: Human Perception and Psychophysics; Journal of Neuroscience; NeuroImage; Neuropsychologia; Perception and Psychophysics; Psychological Science; Social Cognitive and Affective Neuroscience

#### **Textbooks:**

Oxford University Press (Emotion text)

#### **Institutions:**

University of Vienna (Internal proposal); National Institutes of Health (Intramural grant)

## **OUTREACH AND SERVICE**

Boston College, Department of Psychology, Committee on Undergraduate Education (2016-2017)

Boston College, Department of Psychology, Committee on Teaching Evaluation (2014-2015); Committee on Peer Teaching

**Boston College Department of Psychology, Colloquium Committee** (2012-present). **Boston College, Department of Psychology, MA thesis Committee** (for PhD student; 2014).

## **Boston College, Department of Psychology**

Spoke on panel of Women in Psychological Science (Spring 2014)

#### **Boston College**

Spoke to high school students as part of Women in Science and Technology series (Spring 2014)

University of Pennsylvania KidsJudge committee (Spring 2004).

**Iowa Children's Museum** Member of Science and Engineering Development Team (2001).

University of Iowa Brain Awareness Week committee Co-chair; partnered with the Iowa Children's Museum and the National Kids Judge! (SM) Neuroscience Fairs Partnership to organize and implement Iowa's first Kids Judge! Neuroscience Fair. More information available at <a href="https://www.kidsjudge.org">www.kidsjudge.org</a>. (Academic year, 2000-01). Co-chair of other BAW activities 1999-2000.

University of Iowa, Careers in Biosciences Seminar Committee (Fall 1999- Spring 2001).

University of Iowa, Neuroscience Graduate Program Curriculum Committee. (Fall 1998-Spring 2000).