

Contact Information

Department of Philosophy
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Academic Appointments

2018-present Assistant Professor of Philosophy, University of Nebraska, Omaha
Medical Humanities Faculty
2016–2018 Postdoctoral Fellow, Department of Philosophy & Philosophy-Neuroscience-
Psychology Program, Washington University in St. Louis

Education

2016 Ph.D., History and Philosophy of Science, University of Pittsburgh
2016 Graduate Certificate in Cognitive Neuroscience, Center for the Neural Basis of
Cognition (Carnegie Mellon & University of Pittsburgh)
2007 B.A., Biology with minor in Philosophy, *Magna cum laude*, Colorado College

Areas of Specialization

Philosophy of Neuroscience and Cognitive Science, Philosophy of Mind, Philosophy of Science

Areas of Competence

Philosophy of Biology, Moral Psychology, Biomedical Ethics (including Neuroethics)

Publications

Forthcoming McCaffrey, J. and Danks, D. "Mixtures and Psychological Inference in Resting State
fMRI." *The British Journal for the Philosophy of Science*.
2016 McCaffrey, J. and Machery, E. "The Reification Objection to Bottom Up Cognitive
Ontology Revision," commentary on "Précis of *After Phrenology: Neural Reuse and the
Interactive Brain*," by Michael Anderson, *Behavioral and Brain Sciences* (39), 1-45.
2015 McCaffrey, J. "The Brain's Heterogeneous Functional Landscape," *Philosophy of
Science*, 82(5), 1010-1022.
2015 McCaffrey, J. "Reconceiving Conceptual Vehicles: Lessons from Semantic
Dementia," *Philosophical Psychology*, 28(3), 337-354.
2013 McCaffrey, J. "Concepts in the Brain: Neuroscience, Embodiment, and
Categorization," *Protosociology*, 30, 167-190.
2012 McCaffrey, J. and Machery, E. "Philosophical Issues About Concepts," *Wiley*

Interdisciplinary Reviews: Cognitive Science, 3(2), 265-279.

- 2011 McCaffrey, J. and Galen, C. "Between a Rock and a Hard Place: Impact of Nesting Behavior on the Altitudinal Range of an Alpine Ant, *Formica neorufibarbis*," *Environmental Entomology*, 40(3), 534-540.

Fellowships and Awards

- 2017 Sub Award, Summer Seminars in Neuroscience and Philosophy (SSNAP) and Duke Institute for Brain Sciences (DIBS), "Philosophy, Neuroscience, and Cognitive Ontology" (\$6,615.00)
- 2017 Summer Seminars in Neuroscience and Philosophy (SSNAP) Fellowship, Duke University (\$1,500.00)
- 2016 Travel Award, Oral History Training Workshop, Chemical Heritage Foundation
- 2016 Young Investigator Travel Award, Rethinking the Taxonomy of Psychology
- 2016 Graduate Student Travel Award, Southern Society for Philosophy and Psychology
- 2015-2016 Josephine De Karman Fellowship Award
- 2015 Wesley C. Salmon Travel Fund
- 2014-2015 Center for Philosophy of Science Program Assistant Fellowship
- 2014 National Science Foundation Travel Grant, Philosophy of Science Association
- 2012 William James Prize for Best Graduate Student Essay, 38th Annual Meeting of the Society for Philosophy and Psychology
- 2011 Honorable Mention, National Science Foundation Graduate Research Fellowship Program Competition
- 2007 *Phi Beta Kappa*

Conference Presentations

Refereed Presentations

- 2016 "Does the Brain Respect Basic Emotion Theory? Pattern Classification and Correspondence in fMRI Research" Philosophy of Science Association, (Atlanta, GA) Nov.
—(talk, 2017) Southern Society for Philosophy and Psychology (Savannah, GA)
- 2016 "Neuroimaging and Cognitive Ontologies: Does Discriminability Warrant Kind Splitting?" (poster), Rethinking the Taxonomy of Psychology (London, Ontario) April
- 2016 "Is Memory (a form of) Episodic Simulation?" With Sarah Robins, Southern Society for Philosophy and Psychology, (Louisville, KY) March
—(poster), Society for Philosophy and Psychology, (Austin, TX) June
- 2015 "Pernicious Stipulations," with David Colaço and Joshua Alexander, Society for Philosophy and Psychology, (Raleigh-Durham, NC) June

- 2015 “The Brain’s Heterogeneous Functional Landscape,” Southern Society for Philosophy and Psychology, (New Orleans, LA) April
- 2014 “Neural Multi-Functionality and Mechanistic Role Functions,” Philosophy of Science Association, (Chicago, IL) Nov.
- 2014 “A Mechanistic Approach to Multi-Functional Brain Areas,” 30th Boulder Conference on the History and Philosophy of Science, (Boulder, CO) Oct.
- 2012 “The Investigative Role of Prefrontal Lobotomy,” History of Science Society, (San Diego, CA) Nov.
- 2012 “Reconceiving Conceptual Vehicles: Lessons from Semantic Dementia,” 38th Annual Meeting of the Society for Philosophy and Psychology, (Boulder, CO) June
- 2008 “Between a Rock and a Hard Place: Rock-Nesting as Thermoregulation in the Ant *Formica Neurofibarbis gelida wheeler*” (poster with Galen, C, Kelso, S, and McKinley, A), Ecological Society of America, (Milwaukee, WI) Aug.

Invited Presentations

- 2017 “The Brain’s Heterogeneous Functional Landscape: Functional Complexity in Human Brain Mapping.” University of Missouri, St. Louis Philosophy Colloquium (St. Louis, MO) Nov.
- 2017 “Cognitive Inferences in Multivariate Neuroimaging” St. Louis Area Philosophy of Science Association (SLAPSA), (St. Louis, MO) March
- 2017 “Are We Looking at a Network? Mixtures and Functional Inference in Resting State fMRI,” Washington University in St. Louis Philosophy-Neuroscience-Psychology/ Medical School series, (St. Louis, MO), January.
- 2015 “Cognitive Ontology Revision: Structure and Function,” Workshop on Free Will and Cognitive Ontologies, (Berlin) Feb.
- 2013 “Varieties of Neural Multi-Functionality” (poster), Conference on Experimentation in Neuroscience, (Pittsburgh, PA) Dec.

Teaching Experience

University of Nebraska, Omaha (Omaha, NE)

Instructor:

- 2018 Human Values in Medicine: Mind and Medicine
(2018) Critical Reasoning

Washington University in St. Louis (St. Louis, MO)

Instructor:

- 2018 PNP Seminar: Rethinking Psychological Kinds
2018 Inquiry in the Cognitive Sciences (co-taught with Carl Craver)
2017 Inquiry in the Cognitive Sciences (co-taught with Carl Craver)

2016 PNP Seminar- Philosophical Issues in Brain Imaging

University of Pittsburgh, History and Philosophy of Science, (Pittsburgh, PA)

Instructor:

2013 Morality and Medicine

2012 Myth and Science

Teaching Assistant

2011 Mind and Medicine (Advisor: Edouard Machery)

2010 The Nature of the Emotions (Advisor: James Lennox)

University of Missouri, Division of Biological Sciences, (Columbia, MO)

Teaching Assistant:

2009 Introduction to Biological Systems Laboratory (Advisor: Richard Daniels)

Dissertation: *Mental Function and Cerebral Cartography: Functional Localization in fMRI Research*

Committee Edouard Machery (Director; University of Pittsburgh, HPS)

Peter Machamer (Director; University of Pittsburgh, HPS)

Mazviita Chirimuuta (University of Pittsburgh, HPS)

David Plaut (Carnegie Mellon, Psychology)

David Danks (Carnegie Mellon, Philosophy)

Abstract My dissertation examines the relationship between human brain mapping and cognitive theorizing in neuroimaging (fMRI) research. Many researchers advocate using fMRI to test psychological hypotheses; others argue that brain scans cannot support or disconfirm cognitive theories. I argue that human brain mapping is radically changing due to new techniques (e.g., “resting state” fMRI) and theoretical approaches (e.g., network mapping). These shifts undermine the assumptions that traditionally make fMRI results speak to cognitive theories (e.g., “each region performs a unique function”). I conclude that at this stage of scientific development fMRI research should focus its efforts on reexamining these bridging assumptions.

Selected Graduate Courses

History and Philosophy of Science

Philosophy of Science Core, Philosophy of Cognitive Science, Moral Psychology, Method and Interpretation in Cognitive Neuroscience: A Science of Consciousness?, Central Problems in Systems Neuroscience, Explanations, Causes, and Mechanisms, The Gene: Transformation and Fragmentation of a Concept, Philosophy of Psychiatry, Robustness and Multi-Level Explanations in Biological Systems, Epistemology of Experimental Practices, Science and Values, Evolutionary Theory II, History of Science I & II, Advanced Logic

Center for the Neural Basis of Cognition

Fundamentals of Functional MRI, Cognitive Neuroscience, Advanced Cellular Neuroscience, Advanced Systems Neuroscience, Neurobiology of Disease, Introduction to Parallel Distributed Processing

Professional Service

Journal Referee

Philosophy Compass, Philosophy of Science, Philosophical Psychology, Synthese, Studies in the History and Philosophy of Science, Lato Sensu, Brain and Cognition, Mind and Language

Conference Organization

- 2018 Primary Organizer, “Fitting the Mind to the Brain: Deliberations on Cognitive Ontology” (<https://cognitiveontology2018.weebly.com/>) Washington University in St. Louis
- 2016–2017 Co-organizer, Washington University in St. Louis Philosophy and Neuroscience Colloquium series
- 2015 Program Assistant, Workshop on Diagrams as Vehicles for Scientific Reasoning, Center for Philosophy of Science, (Pittsburgh, PA) April
- 2015 Program Assistant, Philosophy Meets Cultural Diversity, Center for Philosophy of Science, (Pittsburgh, PA) March
- 2013 Conference Chairperson, 15th Annual Pitt-CMU Graduate Student Conference in Philosophy: Perception, Models, and Learning, (Pittsburgh, PA) April
- 2012 Organizing Committee Member, 14th Annual Pitt-CMU Graduate Student Conference in Philosophy: Mind, Method, and Morality, (Pittsburgh, PA) April

Center for the Neural Basis of Cognition

- 2012 Host and Organizer for Joshua Greene’s Colloquium Visit, (Pittsburgh, PA) Nov.

History and Philosophy of Science, University of Pittsburgh

- 2012-2013 Assistant Webmaster, (Pittsburgh, PA)

Society for Philosophy and Psychology

- 2018, 2015 William James Prize Selection Committee

Professional Membership

Philosophy of Science Association
Society for Philosophy and Psychology
Southern Society for Philosophy and Psychology
American Philosophical Association