

Rick Morris**E-mail:** jemorr@ucdavis.edu**Website:** <http://www.rickmorrisphil.com/>**Position:** Doctoral candidate in Philosophy, University of California-Davis (UCD)**Dissertation**

The dissertation, titled *Evolutionary Mishmash: Conceptual Issues In Evolutionary Mismatch*, focuses on unpacking and resolving conceptual problems with evolutionary mismatch (EM) hypotheses. EM is a proposed class of phenomena which result from exposing organisms (or populations) which evolved in one environment to a substantially different environment. EM plays a substantial and explicit conceptual role in evolutionary medicine and evolutionary psychology, but has deeper roots in ecology and evolutionary biology. Extended dissertation abstract on final page of CV. * below denotes dissertation work.

Areas

- Areas of specialization: philosophy of science (particularly biology), normative ethics.
- Areas of competence: feminist philosophy, bioethics and practical ethics, just war theory, logic, philosophy of religion.

Education

- 2016: Doctoral candidate in Philosophy, UCD.
- 2013: MA in Philosophy, San Jose State University.
- 2010: BA in Philosophy, American Military University.
- 2006: AA in Chinese-Mandarin, Defense Language Institute Foreign Language Center.

Scholarly publications

- *[“Stranger in a strange land: an optimal-environments account of evolutionary mismatch.”](#) *Synthese*. First online: September 5, 2018.
- [“Praise, blame, and demandingness”](#). *Philosophical Studies*. July 2017, Volume 174, Issue 7: 1857-1869.

Under review

- *At *Biological Theory*: “To everything a season: environments as spatio-temporal trajectories”.
- *At *Biology and Philosophy*: “Be fruitful and multiply: fitness and health in evolutionary mismatch and clinical research”.

Popular publications

- “The Warring Dead” in *The Ultimate Walking Dead and Philosophy*. Open Court Books, 2016.

Awards

- 2018: Second Place: Award for Excellence, American Association for the Advancement of Science, Pacific Division. Section: History and Philosophy of Science.
- 2018-2019: Provost's Dissertation Year Fellowship, UC Davis College of Letters and Sciences.
- 2018: Spring Travel Award, Graduate Student Association, UCD.
- 2017: Summer Travel and Research Award, Institute for Social Sciences, UCD.
- 2017: Honorable Mention: Award for Excellence, American Association for the Advancement of Science, Pacific Division. Combined sections of Education, History and Philosophy of Science, and General and Interdisciplinary Studies of the General Student Paper Competition.
- 2017: UC Davis Graduate Studies Travel Award.
- 2015: Summer Travel and Research Award, Institute for Social Sciences, UC Davis.
- 2013-2014: UC Davis Graduate Scholars Fellowship.

Presentations

- *"Be fruitful and multiply: Fitness and health in evolutionary mismatch and clinical research". American Association for the Advancement of Science Pacific Division 2018: Pomona, CA.
- "No size fits all: match, mismatch, and universal selection". Social and Conceptual Issues in Astrobiology (SoCIA) 2018: Reno, NV.
- *Symposium: "Stranger in a strange land: an optimal-environments account of evolutionary mismatch". American Philosophical Association Central Division 2018: Chicago, IL.
- *"Stranger in a strange land: a forecasting account of evolutionary mismatch". European Philosophy of Science Association 2017: Exeter, UK.
- *"Stranger in a strange land: a forecasting account of evolutionary mismatch". International Society for the History, Philosophy, and Social Studies of Biology 2017: São Paulo, Brazil.
- *"Evolutionary mishmash: an optimal-environments account of evolutionary mismatch". American Association for the Advancement of Science Pacific Division 2017: Waimea, HI.
- *Poster: "Evolutionary Mishmash: Defining Evolutionary Mismatch to Understand Environmental Discordance". Species in the Age of Discordance 2017: Salt Lake City, UT.
- *"Evolutionary mismatch: three problems". Philosophy of Science Association 2016: Atlanta, GA.
- Symposium: "Praise, Blame, and Demandingness". American Philosophical Association Pacific Division 2016: San Francisco, CA.
- "Praise, Blame, and Demandingness". National University of Singapore, 2016.
- *"Against the grain: an investigative model for the ancestral health movement". European Philosophy of Science Association 2015: Düsseldorf, Germany.
- *"Against the grain: an investigative model for the ancestral health movement". International Society for the History, Philosophy, and Social Studies of Biology 2015: Montreal, Quebec.
- "Praise and Blame". Northwest Student Philosophy Conference 2015: Bellingham, WA.

Popular presentations

- "The Problem of Suffering," First Baptist Church, Davis, CA, February 11, 2018.

Teaching

- Summer Session I 2018, UCD: Philosophy 38, *Introduction to Philosophy of Biology*.

- Summer Session II 2017, UCD: Philosophy 108, *Philosophy of Biological Science*.
- Summer Session II 2016, UCD: Philosophy 108, *Philosophy of Biological Science*.
- Summer Session II 2015, UCD: Philosophy 5, *Critical Reasoning*.
- Summer Session I 2014, UCD: Philosophy 12, *Introduction to Symbolic Logic*.

Guest lectures

- 2016, Fall Quarter, UCD: Philosophy 189D, *Ethics Topics*, covering three chapters from *Hogwarts For Muggles*.
- 2014, Spring Quarter, UCD: Philosophy 105, *Philosophy of Religion*, covering Peter van Inwagen on the argument from design.

UCD teaching assistantships

- 2018, Spring Quarter: Philosophy 10/Cognitive Science 1, *Introduction to Cognitive Science*.
- 2018, Winter Quarter: Philosophy 7Y, *Philosophical Perspectives on Sexuality*.
- 2017, Fall Quarter: Philosophy 31, *Appraising Scientific Reasoning*.
- 2017, Spring Quarter: Philosophy 13G, *Minds, Brains, and Computers*.
- 2017, Winter Quarter: Philosophy 30, *Introduction to Philosophy of Science*.
- 2016, Fall Quarter: Philosophy 38, *Introduction to Philosophy of Biology*.
- 2016, Spring Quarter: Philosophy 105, *Philosophy of Religion*.
- 2016, Winter Quarter: Philosophy 38, *Introduction to Philosophy of Biology*.
- 2015, Fall Quarter: Philosophy 108, *Philosophy of Biological Science*.
- 2015, Spring Quarter: Philosophy 118, *Political Philosophy*.
- 2015, Winter Quarter: Philosophy 1, *Introduction to Philosophy*.
- 2014, Fall Quarter: Philosophy 15, *Introduction to Bioethics*.

Diversity-promoting activities

- 2018: Wrote duplicate-identifying/removing Python script for the [Computational History of Philosophy of Science \(Comp HOPOS\) dataset](#).
- 2018: Seminar, 'From Dialogue to Action,' Graduate Diversity Orientation Program Extension (GDOPx), UCD.
- 2018: Certificate of Completion, Inclusive Mentorship Seminar Series, UCD Graduate Studies.
- 2017: Seminar, 'Building Supportive Learning Environments for Critical Conversations', UCD Center for Educational Effectiveness.
- 2017-present: Minorities and Philosophy (MAP), UCD chapter.

Data science experience and training

- 2018, noted above: Wrote duplicate-identifying/removing Python script for the [Computational History of Philosophy of Science \(Comp HOPOS\) dataset](#).
- 2018: Certificate of Completion, MITx 6.00.1x, *Introduction to Computer Science and Programming Using Python*, through edX.
- 2018: UC Davis Data Science Initiative Software Carpentry Workshop (Unix shell, Git, R).

Reading groups

- 2016-present (sporadic): Philosophical Pizza “Munch”. California Academy of Sciences, San Francisco, CA.
- 2014-present: Griesemer-Millstein Philosophy of Biology Lab. UC Davis.
- 2013-2014 (sporadically till present): Davis Group in Ethics and Related Subjects (DaGERS). UC Davis.

Academic service

- 2018: Panelist, “Grad Student Life”, TIPS 2018, UCD.
- 2018: Session chair at Berkeley-Stanford-Davis Graduate Philosophy Conference, Stanford University, 2018.
- 2017: Graduate coordinator, Davis Ethics Extravaganza 2017.
- 2017: Panel organizer, “Grad Student Life”, TIPS 2017, UCD.
- 2017: Guest speaker at UCD Undergraduate Philosophy Club, May 11.
- 2017: Referee for papers at Berkeley-Stanford-Davis Graduate Philosophy Conference, 2017.
- 2016: Panel organizer, “Being a Grad Student”, TIPS 2016, UCD.
- 2016: Referee for papers at Berkeley-Stanford-Davis Graduate Philosophy Conference, 2016.
- 2015: Referee for papers at Berkeley-Stanford-Davis Graduate Philosophy Conference, 2015.
- 2014: Chair, philosophy panel, Davis Animal Studies Group Conference 2014.
- 2014-2015: graduate volunteer coordinator for UCD Philosophy symposia.
- 2014: Referee for papers at Berkeley-Stanford-Davis Graduate Philosophy Conference, 2014.

References

- Dissertation advisor: Roberta Millstein, Professor of Philosophy, UC Davis (rmillstein@ucdavis.edu).
- James Griesemer, Professor of Philosophy, UC Davis (jrgriesemer@ucdavis.edu).
- Tina Rulli, Assistant Professor of Philosophy, UC Davis (trulli@ucdavis.edu).
- Sean Valles, Associate Professor of Philosophy, Michigan State (valles@msu.edu).

Professional memberships

- 2018-present: Philosophy of Science Association.
- 2018-present: Society of Christian Philosophers.
- 2017-present: American Association for the Advancement of Science, Pacific Division.
- 2015-present: European Philosophy of Science Association.
- 2015-present: International Society for the History, Philosophy, and Social Studies of Biology.
- 2015-present: American Philosophical Association.

DISSERTATION ABSTRACT FOLLOWS ON NEXT PAGE.

Dissertation abstract

Evolutionary mismatch is a putative set of problems which occur when an organism undergoes an environmental change such that its new environment is now very different from its ancestral environment. In my dissertation, “Evolutionary Mishmash: Conceptual Issues In Evolutionary Mismatch”, I argue for three novel claims: (1) evolutionary mismatch is best understood as a relation between an organism’s current environment and its optimal environment; (2) mismatch can serve as a heuristic in evolutionary medicine but not always as an explanation, due to the differences between clinical health and evolutionary fitness; (3) environments should be understood as spatiotemporal trajectories rather than, e.g., synchronic sets of selection pressures. I conclude the dissertation by (4) laying out the problem set for clinical researchers who wish to use evolutionary mismatch as a heuristic. I will give a quick sketch of each of these projects.

Both prior philosophical attempts (Lloyd et al 2011 and Cofnas 2016) to define the mismatch concept run into challenges which I avoid with my optimal-environments account of mismatch. The first claim defended in my dissertation, (1) above: the ‘optimal environment’ is that environment where an organism’s fitness (given its genotype and various developmental factors) is maximized. On the view I develop, an evolutionary mismatch obtains when an organism is in an environment where its fitness is reduced relative to its fitness in the posited optimal environment. I have presented this chapter repeatedly and published it as a paper in *Synthese*.

Some health problems, such as myopia (near-sightedness), seem clearly enough to be a negative health outcome, but it is not at all obvious that myopic individuals have reduced evolutionary fitness in contemporary developed societies. Evolutionary medicine researchers have attempted to describe some health problems, including myopia, as caused by a human evolutionary mismatch. One problem in this approach, however, is that while evolutionary explanations are typically concerned with reproductive (evolutionary) fitness, clinical practice is typically concerned with health. These two can come apart, as the myopia example shows. In order to address this tension between fitness and health, (2): I argue that while the connection between health and fitness will often be unclear to health care providers, evolutionary mismatch can serve a heuristic purpose: treating clinical research as regular biological research to develop novel hypotheses and interventions. I have presented this chapter, as well.

Defining the concept of ‘environment’ has occupied a number of biologists and philosophers. Since evolutionary mismatch places so much explanatory emphasis on the causal role of environmental change, I argue that (3) environments should be understood as trajectories rather than simple spatiotemporal locations. That is, an environment is not merely a location but, rather, a diachronic set of environmental factors to which an organism is exposed over the course of its life. Individuating environments in this fashion sensitizes researchers to ensure that research projects consider not merely an organism (or population’s) present habitat, but all the habitats encountered over the course of its life.

Finally, (4): some attempts to apply evolutionary insights to human health have made their way into the popular literature, mostly notably (though not exclusively) with the so-called Paleo diet (roughly, the view that modern humans should consume a diet similar to that of ancestral hunter-gatherers). Critics have identified a number of conceptual and evidential problems with (some arguments for) the Paleo diet. Building particularly on my work in (2) above, I flesh out the issues involved in order to facilitate a more sophisticated discussion of mismatch as a clinical heuristic: to expose real vulnerabilities and to ensure that criticism is well-targeted.