

# Marshall Abrams

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## Current Position

Assistant Professor, Department of Philosophy, University of Alabama at Birmingham

## Education

NSF-sponsored Post-Doctoral Fellow, Center for Philosophy of Biology, Duke University, 2004–2005. Courses: Evolutionary Genetics, Animal Communication and Behavior

Ph.D. in Philosophy, University of Chicago, March 26, 2002.

Dissertation: *Probabilistic Foundations of Teleology and Content*.

Committee: William C. Wimsatt, Ruth G. Millikan, Murat Aydede

A.B. in Ontology and Cognition, with honors, University of California, Davis, June, 1983.

## Areas of Specialization

Philosophy of science, philosophy of biology, philosophy of mind/cognitive science.

## Areas of Competence

Metaphysics, epistemology, philosophy of language, symbolic logic, decision theory.

## Publications

“The Unity of Fitness”, forthcoming in *Philosophy of Science* 76(5), December 2009.

“What Determines Biological Fitness? The Problem of the Reference Environment”, *Synthese* 166(1), January 2009.

“How Do Natural Selection and Random Drift Interact?”, *Philosophy of Science* 74(5), December 2007.

“Fitness and Propensity’s Annulment?”, *Biology and Philosophy* 22(1), January 2007.

“Infinite Populations and Counterfactual Frequencies in Evolutionary Theory”, *Studies in History and Philosophy of Biological and Biomedical Sciences* 37(2), June 2006.

“Teleosemantics without Natural Selection”, *Biology and Philosophy* 20(1), January 2005.

## Presentations, etc.

“The Unity of Fitness”, Philosophy of Science Association, Pittsburgh, PA, November 6–9, 2008.

“Radical Pluralisms about Units of Selection”, European Philosophy of Science Association, Madrid, Spain, November 17, 2007.

“The Unity of Fitness”, International Society for the History, Philosophy, and Social Studies of Biology, Exeter, UK, July 29, 2007.

“Evolution by Natural Selection despite the Vagaries of Lives”, University of Alabama (Tuscaloosa), April 13, 2007.

“What Determines Biological Fitness? The Problem of the Reference Environment”, Florida Philosophical Association, Tampa, FL, November 9-11, 2006.

“How Do Natural Selection and Random Drift Interact?”, Philosophy of Science Association, Vancouver, BC, November 4, 2006.

“Comments on Scott James’ ‘The Caveman’s Conscience: Evolution and Moral Realism’”, Central States Philosophical Association, Memphis, TN, October 14, 2006.

“What Determines Biological Fitness? The Problem of the Reference Environment”, selected for discussion by Duke University Center for Philosophy of Biology Reading Group, September 12, 2006.

“Why Did Human Cognition Evolve?”, Department of Philosophy, George Washington University, November 18, 2005.

“The Interaction of Evolutionary Forces: Drift, Selection, and Components of Fitness”, DC History and Philosophy of Biology Group, Washington, DC, November 17, 2005.

“What is Chance? Philosophical Problems of Probability”, Physics and Philosophy Club, George Washington University, November 16, 2005.

“The Path Space Conception of Components of Fitness”, International Society for the History, Philosophy, and Social Studies of Biology, Guelph, ON, July 16, 2005.

“Biological Fitness as a Function of Interval-Valued Mechanistic Probabilities”, Society for Exact Philosophy, Toronto, ON, May 20, 2005.

“What Kind of Environmental Complexity Selects for Decision Theory?”, Conference on Recent Work in Biology and Philosophy: The Evolution of Cognition: Niche Construction, Culture, and Environmental Complexity, Duke University, Durham, NC, April 23, 2005

“Comments on Robert Lane’s ‘Oak Trees and Ashes: An Argument that Identity is Vague and Non-Transitive’”, Southern Society for Philosophy and Psychology, Durham, NC, March 24, 2005.

“The Propensity Interpretation of Fitness without Propensity”, Duke University Center for Philosophy of Biology Reading Group, September 7, 2004.

“Two Roles for Probability in a Theory of Fitness”, American Philosophical Association, Pacific Division, Pasadena, CA, March 26, 2004.

“Teleosemantics and Natural Selection”, American Philosophical Association, Eastern Division, Philadelphia, PA, December 29, 2002.

“Short-Run Mechanistic Probability”, Philosophy of Science Association, Vancouver, BC, November 3, 2000.

“Propensities in the Propensity Interpretation of Fitness”, Southwestern Philosophical Society, Tulsa, OK, October 23, 1998.

## **In Preparation, Under Review**

“Fitness ‘Kinematics’: Biological Function, Altruism, and Organism-Environment Development” (accepted pending revisions)

“Mechanistic Probability”

“The Units of Evolution”

“Uniqueness of convex sets under order-preserving, Lebesgue measure-preserving Euclidean metrics”

“Fitness Tradeoffs and Component Effects”

## **Employment**

### **University of Alabama at Birmingham**

- Assistant Professor, Department of Philosophy, 2006–present

Courses:

- The Scientific Enterprise
- Minds and Machines
- Topics in Philosophy: Evolution and Human Life
- Topics in Philosophy: Issues in Philosophy and Biology
- Introduction to Philosophy
- Contemporary Moral Issues

### **George Washington University**

- Visiting Assistant Professor, Department of Philosophy, 2005–2006.

Courses:

- Mind, Brain, and Artificial Intelligence
- Philosophy of Science
- Theory of Knowledge
- Introduction to Logic

### **Duke University**

- NSF-sponsored Post-Doctoral Fellow, Center for Philosophy of Biology, 2004–2005.

Duties:

- Taught seminar: Philosophy of Biology
- Organized conference: The Evolution of Cognition: Niche Construction, Culture, and Environmental Complexity  
April 23-24, 2005. (<http://www.duke.edu/philosophy/bio/conference.html>)

### **Colgate University**

- Visiting Assistant Professor, Department of Philosophy and Religion, 2002–2004.

Courses:

- 2003–2004:
- Advanced Topics in Philosophy: Foundations of Scientific Explanation
  - Philosophy of Mind
  - Western Traditions (liberal arts core, ancient Western thought)
- 2002–2003:
- Metaphysics
  - Philosophy of Mind
  - Logic
  - The Challenge of Modernity (liberal arts core, Western thought 1840–1940)

## University of Chicago

- Instructor, Fall 1998: Philosophical Perspectives on the Humanities (humanities core, ancient Western thought).
- Teaching Assistant, Spring 1988: History of Philosophy IV: Recent Philosophy. (early 20th Century analytic philosophy and phenomenology).
- Teaching Assistant, Autumn 1987: Elementary Logic.
- Grader, Spring 1986: Introduction to Metaphysics and Epistemology.

## St. Xavier University

- Instructor, Spring 1998: Logic and Argument.

## Center for the Advancement of Academically Talented Youth (JHU)

Lancaster, PA site. (A summer program offering college-level courses to teenagers.)

- Instructor, June 22–August 6, 1989 (two sessions): Logic.
- Instructor, July 16–August 7, 1988: Logic.

## Service

- Reviewer for *Biology and Philosophy* (2006–2008)  
*British Journal for the Philosophy of Science* (2008)  
*Journal of Theoretical Biology* (2008)  
*Synthese* (2006, 2008)
- Faculty Affairs Committee, UAB, 2007-2009.
- Freshman Discussion Group Facilitator, UAB, 2008.
- Secretary of the Faculty, UAB, 2007-2008.
- Faculty participant, student-run Physics and Philosophy Club, George Washington University, 2005-2006
- Thacher Lecture Committee, George Washington University, 2005-2006
- Organized conference: The Evolution of Cognition: Niche Construction, Culture, and Environmental Complexity April 23-24, 2005.  
(<http://www.duke.edu/philosophy/bio/conference.html>)
- Participated in Core Curriculum review, Colgate University, May 2004.

## Other work

Research Assistant in the Cognitive Science laboratory of Professor Lance Rips, University of Chicago, October 1985–April 1986.

Several years of part-time computer programming and system administration. Details available on request.

## Professional Affiliations

American Philosophical Association  
Philosophy of Science Association  
International Society for the History, Philosophy, and Social Studies of Biology  
Society for Exact Philosophy

## Languages

Reading knowledge of French.

## References

William C. Wimsatt, Department of Philosophy, University of Chicago  
1115 E. 58th Street, Chicago, IL 60637, U.S.  
(773) 702-8598, [wwim@midway.uchicago.edu](mailto:wwim@midway.uchicago.edu)

Murat Aydede, Department of Philosophy, University of British Columbia  
1866 Main Mall E370, Vancouver, BC V6T1Z1, Canada  
(352) 392-2084, [maydede@phil.ubc.ca](mailto:maydede@phil.ubc.ca)

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