

Gillian Barker

Curriculum Vitae

Address

Rotman Institute of Philosophy
University of Western Ontario
Department of Philosophy, Stevenson Hall 2150
London, ON
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Education

Post-doctoral	Philosophy	Simon Fraser University	1999-2000
Ph. D.	Philosophy/Science Studies	University of California, San Diego	1997

Dissertation: *Abstraction, Analogy and Induction: Toward a General Account of Ampliative Inference*
(Supervisor: Philip Kitcher)

M.A.	Philosophy/Science Studies	University of California, San Diego	1993
B.A.	History & Philosophy of Science	University of Toronto	1989

Academic Appointments

Assistant Professor, Department of Philosophy, University of Western Ontario	2008-2018
Assistant Professor, Department of Philosophy, Bucknell University	2000-2008
Visiting Assistant Professor, Indiana University, Bloomington	1995-1999

Areas of Specialization

Philosophy of Biology, Philosophy of Science, Environmental Philosophy

Areas of Competence

Feminist Philosophy of Science, Philosophy of Ecology, Biomedical Ethics, History of Philosophy of Science, Logic and Critical Thinking, Metaphysics and Epistemology

Awards

Philosophy of Science Association's Women's Caucus Prize in Feminist Philosophy of Science (for <i>Beyond Biofatalism: Human Nature for and Evolving World</i>)	2018
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Fellowships and Grants

Catalyst Grant, Rotman Institute of Philosophy, "The Place of Resilience in Sustainability Science" (\$10,000)	2012-2013
Seed Grant, Rotman Institute of Science and Values, "Biological Levers" (\$5000)	2010-2011
Seed Grant, Rotman Institute of Science and Values, "Methodology in Historical Sciences" (\$6000)	2010-2011

Social Sciences and Humanities Research Council of Canada, Research Communication Grant, “Integrating Complexity: Environment and History” (\$19,260)	2010
Social Sciences and Humanities Research Council of Canada, Research Communication Grant, “Feminism, Science and Values” (\$20,976)	2010
Rotman Institute Founding Grant, Rotman Family Foundation (with Charles Weijer, Robert Batterman, and Christopher Smeenk) (\$4,000,000)	2009-2014
McDonnell Post-Graduate Fellowship, Simon Fraser University (\$35,000)	1999-2000
University Humanities Dissertation Fellowship, UCSD (US\$12,000)	1993
University Humanities Fellowship, University of California, San Diego (US\$12,000)	1989
Southernton Wadhams Scholarship, University of Toronto	1988
Winifred Florence Hughes Scholarship, University of Toronto	1985, 1986

Publications

Books

Barker, G. (2015) *Beyond Biofatalism: Human Nature for an Evolving World*, Columbia University Press.

Barker, G. and P. Kitcher (2014) *Philosophy of Science: A New Introduction*, Oxford University Press.

Edited Volumes

Barker, G. E. Desjardins and T. Pearce (eds.) (2013) *Entangled Life: Organism and Environment in the Biological and Social Sciences*, Springer Series: History, Philosophy & Theory of the Life Sciences.

Journal Publications and Book Chapters

Desjardins, E., Donhauser, J., and Barker, G.: (forthcoming) “Ecological Historicity, Functional Goals, and Novelty in the Anthropocene.” Environmental Values.

Desjardins, E., Barker, G., Bzovy, J., and Shaw, J. (forthcoming) “Pluralism and the Geofunctional Perspective” in Desroches, Tyler, Frank Jankunis, and Byron Williston (eds.) *From North of the 49: New Perspectives in Canadian Environmental Philosophy*, McGill University Press.

Barker, G: “From Stability to Norm Transformation: Lessons about Resilience, for Development, from Ecology” Phenomenology and the Cognitive Sciences, 16.4 (2017): 571-584.

Desjardins, E.; Barker, G.; Dieleman, C.; Dussault, A. and Lindo, Z.: “Promoting Resilience.” Quarterly Review of Biology, 90.2 (2015): 147-165.

Barker, G.A. and Odling-Smee, J.: “Integrating Ecology and Evolution: Niche Construction and Ecological Engineering.” In Barker et al. (eds.), *Entangled Life: Organism and Environment in the Biological and Social Sciences*, Springer (2014), 187-211.

Desjardins, E.; Barker, G.A. and Madrenas, J.: “Thinking Outside the Mouse: Organism-Environment Interaction and Human Immunology.” In Barker et al. (eds.), *Entangled Life: Organism and Environment in the Biological and Social Sciences*, Springer (2014): 167-183.

Barker, G.A.: “Biological Levers and Extended Adaptationism.” Biology and Philosophy 23.1 (2008): 1-25.

- Barker, G.A., Derr, P., and Thompson, N.S.: "The Perils of Confusing Nesting with Chaining in Psychological Explanations," *Behavior and Philosophy* 32.2 (2004): 293-303.
- Barker, G.A.: Book Review: "Matthew Elton, Daniel Dennett: Reconciling Science and our Self-Conception." *Philosophy of Science* 72.3 (2005): 508-510.
- Barker, G.A.: "Models of Biological Change: Implications of Three Recent Cases of 'Lamarckian' Change." In Bateson, P.P.G., Klopfer, P.H., and Thompson, N.S., eds., *Perspectives in Ethology* 10. Plenum Press, (1993): 229-248.

Conference Presentations

- "Coming to Terms with the Organic: Regeneration and the Global Environmental Crisis"
Regeneration Across Living Systems
International Society for the History, Philosophy, and Social Studies of Biology Off-Year Workshop
Woods Hole Marine Biological Laboratory, October 22, 2018
- "From Co-option to Co-Control: Biological Levers as a Bridge from Development to Ecology"
30 years after *The Dialectical Biologist*.
New Frontiers in Ecological Developmental Biology Microbiota-Host Co-construction
University of Bordeaux,
Bordeaux, June 15, 2016
- "The GeoFunctions Project: Collaborative Research for Systems Innovation"
Socially Relevant Philosophy of/in Science and Engineering,
University of Texas, Dallas, May 21, 2016
- "Beyond Biofatalism: Human Nature for an Evolving World: Replies to Downes, Hourdequin, and Odenbaugh"
Book Symposium, American Philosophical Association Pacific Division Meeting,
San Francisco, April 2, 2016
- "Resilience and Ecological Function"
International Society for the History, Philosophy and Social Studies of Biology,
Montpellier, 2013
- "Resilience: Stability, Adaptation and Transformation in Ecology and Psychology"
On the Future of Development: Challenges, Insights and New Concepts
Concordia University, 2013
- "Rediscovering the Depths?: Philosophy and the Environment after the 20th Century"
Underground Ecocriticism
University of Western Ontario, 2012
- "Thinking Outside the Mouse: Human Immunology, Animal Models and Organism-Environment Interaction"
(in collaboration with Eric Desjardins)
Canadian Society for the History and Philosophy of Science
Wilfrid Laurier University and the University of Waterloo, 2012
- "Uncertainty, Resilience and Robustness in Adaptive Ecological Management"
(in collaboration with Eric Desjardins and Spencer Hey)
New Sciences, New Risks
University of Pittsburgh, 2012

“Altruism and Biological Leverage”

International Society for the History, Philosophy and Social Studies of Biology, 2011

“Thinking Ecologically”

SPARK!,

University of Western Ontario, 2011

“The Return of the Organism: The Role and Fate of some Romantic Themes in Contemporary Evolutionary Biology”

Romanticism and Evolution

University of Western Ontario, 2011

“Women’s Representation in Philosophy and the Sciences: Situation and Causes”

Women in Philosophy and the Sciences: Challenges and Strategies,

University of Western Ontario, 2010

“Naturalism in Biology”

Symposium: Naturalism in Science: Necessity or Bias?

Kansas State University, 2008

“How Systems Fail: Function, Malfunction, Dysfunction”

International Society for the History, Philosophy and Social Studies of Biology, 2007

“Feedback Structures, Causal Identity and Natural Teleology”

International Society for the History, Philosophy and Social Studies of Biology, 2001

Invited Talks:

“Functions, Agents, and the Global Environmental Crisis: Shifting Perspectives for Response and Strategy”

Université du Québec à Montréal, Department of Philosophy, March 24, 2017

“From Dewey to GeoFunctions: Pragmatism, Organic Holism, and Environmental Ethics”

Columbia University, Department of Philosophy, February 12, 2017

“GeoFunctions: A New Concept for Understanding and Managing Global Change”

University of South Florida, Department of Philosophy, February 12, 2016

“Human Nature in Darwin’s World”

Keynote Presentation, University of South Florida Darwin Day,

University of South Florida, Departments of Integrative Biology and Philosophy, February 11, 2016

“Geo-Functions: A New Perspective for Understanding and Managing Global Change”

University of Miami, Department of Philosophy, April 13, 2015

“Resilience: What Psychology Can Learn from Ecology”

Queen’s University, Department of Philosophy, February 7, 2014

“Understanding Resilience and Ecological Function”

Concordia University, Department of Philosophy, October 31, 2013

“Evolution, Gender and Human Possibilities: Lessons from Ecology and Development”

Wilfrid Laurier University, Department of Philosophy, November 19, 2010

“Evolution, Gender and Human Possibilities: Lessons from Ecology and Development”
Keynote Address at Diotima Graduate Conference, University of Western Ontario,
September 25, 2010

“Naturalism and the Organism-Artifact Analogy in the Functions Debate”
University of Western Ontario, Department of Philosophy. February 4, 2008

“Naturalism and the Organism-Artifact Analogy in the Functions Debate”
University of California, Irvine, Department of Logic and Philosophy of Science.
January 21, 2008

“Towards a Unified Account of Function”
Simon Fraser University, Department of Philosophy, 1999

“Towards a Unified Account of Function”
University of British Columbia, Department of Philosophy, 1999

“Scientific Relativism and Objectivism: The Debate in Context”
Northwestern University, Department of Philosophy, 1998

“What Analogies and Ideal Models Can Tell Us about Induction”
Indiana University, Department of History and Philosophy of Science, 1997

“Deriving an 'Is' from an 'Ought': Moral Issues in the Debate over Cognitive Relativism”
Indiana University, Department of History and Philosophy of Science, 1996

“Abstraction, Analogy and Induction”
Cornell University, Department of Science & Technology Studies, 1994

Public Talks:

“Understanding Evolving: Ideas for Teaching Evolution, from Philosophy and Psychology”
University of South Florida Darwin Day Teachers’ Workshop, Museum of Science and Industry,
Tampa, February 13, 2016

“Philosophy, Science, and Practice: The Geo-Functions Project”
Carolinian Canada Forest Garden Convergence (sponsored by Rotman Institute of Philosophy)
June 6, 2015

“Ecological Thinking about Climate Change: A New Paradigm?”
London Public Library (sponsored by Rotman Institute of Philosophy), October 15, 2014

Teaching

Teaching Awards

USC Honour Roll for Teaching Excellence, University of Western Ontario	2015-2016
USC Honour Roll for Teaching Excellence, University of Western Ontario	2010-2011

University of Western Ontario

Introductory	<i>Big Ideas</i> <i>Questions of the Day</i>
Intermediate	<i>Philosophy of Climate Change</i> <i>Nature, Ecology and the Future (Environmental Philosophy)</i> <i>Power, Privilege, and Oppression</i> <i>Philosophy of Biology</i> <i>Introduction to Theory of Knowledge</i> <i>Origins of Analytic Philosophy</i> <i>Philosophical Issues in Modern Biology</i> <i>Philosophy of Biology for Biologists</i> <i>The Ethics of Science/The Science of Ethics</i> <i>The Ethics of Science/ The Science of Ethics Part II – Community Engaged Learning</i>
Advanced	<i>Philosophy of Molecular Biology (Reading Course)</i> <i>The Neo-Darwinian Synthesis (Reading Course)</i> <i>Empiricism and Values in Logical Positivism (Reading Course)</i> <i>Early Analytic Philosophy (Reading Course)</i> <i>Topics in Philosophy of Science: Naturalism in Science and Philosophy</i> <i>Topics in Philosophy of Science: Modality, Normativity, Teleology, Intentionality</i>
Graduate	<i>Science and Values</i> <i>Biology and Philosophy (crosslisted with Biology; co-taught with Prof. Brent Sinclair, Dept. of Biology)</i> <i>Evolutionary Approaches to Ethics and Epistemology</i> <i>Teleology, Intentionality and Normativity</i> <i>Survey of Philosophy of Biology</i> <i>Survey of Philosophy of Science</i>

Bucknell University

Introductory	<i>Introduction to Logic</i>
Intermediate	<i>Analytic Philosophy</i> <i>Philosophy of Science</i> <i>Philosophy of Biology</i> <i>Ecology, Nature and the Future (Environmental Philosophy)</i>
Advanced	<i>Senior Seminar: Ethics and the Natural World</i> <i>Senior Seminar: Philosophy of Mind</i>

Simon Fraser University

Introductory	<i>Logic and Scientific Reasoning</i>
Advanced	<i>Philosophy of Science</i>
Graduate	<i>Seminar in Philosophy of Science</i>

Indiana University, Bloomington.

Introductory	<i>Understanding Scientific Reasoning</i>
Advanced	<i>Ethics and the Natural World</i>
Graduate	<i>Seminar in Philosophy of Biology: Selective Accounts of Design, Meaning, and Knowledge</i> <i>Seminar in Philosophy of Science: Inference</i> <i>Seminar in Philosophy of Biology</i> <i>Independent Study: Complexity and Functional Explanation</i>

Conferences Organized

Integrating Complexity: Environment and History

University of Western Ontario, October 7-10, 2010

International Association of Women Philosophers Symposium: Feminism, Science and Values

University of Western Ontario, June 25-28, 2009

Referee

Acta Biotheoretica

Biology and Philosophy

Canadian Philosophical Association

Canadian Society for History and Philosophy of Science

Law and Philosophy

National Science Foundation (Science and Technology Studies General Advisory Panel)

Philosophy of Science

Social Studies of Science

Synthese

Professional Associations

American Philosophical Association (APA)

International Society for the History, Philosophy, and Social Studies of Biology (ISHPSSB)

Philosophy of Science Association (PSA)

Society for Philosophy of Science in Practice (SPSP)

Consortium for Socially Responsible Philosophy of/in Science and Engineering (SRPoiSE)

Departmental Service

Undergraduate Affairs Committee	2008-2018
Graduate Affairs Committee	2008-2018
Appointments Committee	2008-2011, 2013-2014
Graduate Admissions Committee	2015-2018
Nominating Committee	2012-2013, 2017-2018
Rotman Institute Steering Committee	2009-2011, 2014-2018
Undergraduate Recruitment Committee	2010-2012, 2013-2018
Visiting Speakers Committee	2008-2009
Website and Social Media	2014-2015
Committee for Women's Concerns	2008-2009, 2010-2011
High School Liaison	2013-2018
Undergraduate Club Advisor	2016-2018
Graduate Program Area Committees:	
Feminist Philosophy	2008-2018, Chair: 2014-2018
Mind and Language	2008-2018
Philosophy of Science	2008-2018, Chair: 2014-2015
Metaphysics and Epistemology	2008-2011

Non-Academic Service

City of London Advisory Committee on Trees and Forests

London Environmental Network, Board of Directors