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CURRICULUM VITAE

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I. Education

Degrees:

Ph.D., University of Hawaii, 1970, Philosophy

M.A., Boston University, 1965, Philosophy

B.S., Massachusetts Institute of Technology, 1962, Mathematics

II. Academic Positions

J. P. Scott Center for Neuroscience, Mind & Behavior

Professor of Philosophy, Bowling Green State University, 1981-present; Associate Professor of Philosophy, 1976-1981; Assistant Professor of Philosophy, 1970-1976; Instructor of Philosophy, 1968-1970

Visiting Fellow, Center for the Philosophy of Science, University of Pittsburgh, Academic Year 1992-3

Visiting Professor, History and Philosophy of Science Department, Indiana University, Bloomington, spring 1986.

Visiting Scholar in Population Genetics, Museum of Comparative Zoology, Harvard University, January-August 1984

NEH Fellow in Residence, Princeton University, 1976-1977

III. Publications

Books

The Secret Chain: Evolution and Ethics in Philosophy and Biology Series edited by David Shaner, SUNY Press (1995)

Anthologies

The Applied Turn in Contemporary Philosophy, Bowling Green Studies in Applied Philosophy, vol. 5, coedited with Nicholas Rescher and Thomas Attig, (Bowling Green, 1983).

Social Justice, Bowling Green Studies in Applied Philosophy, vol. 4, coedited with David Braybrooke (Bowling Green, 1982).

Reason and Decision, Bowling Green Studies in Applied Philosophy, vol. 3, coedited with Kenneth Sayre (Bowling Green, 1981).

Action and Responsibility, Bowling Green Studies in Applied Philosophy, vol. 2, coedited with Myles Brand (Bowling Green, 1980).

Editor

Biology and Philosophy, 14, 2, 1999. This is a special issue of the journal honoring Dick Lewontin. I was the guest editor.

Articles

“Karl Popper's Evolutionary Philosophy,” to appear in a forthcoming Cambridge UP volume “Companion to Karl Popper”

“Evolutionary Epistemology,” to appear in the Routledge Encyclopedia of American Philosophy.

“Evolution and Normativity,” to appear in *The Handbook for the Philosophy of Biology* edited by Chris Stephens and Mohan Matthen, Elsevier.

Biographical Entry for E. B. Ford (3500 words), to appear in *The New Dictionary of Scientific Biography* edited by Noretta Koertge, Scribners.

“Models and Metaphors in Science: The Metaphorical Turn” [Chinese translation] to appear in *Journal of Shandong University*, No.3. 2006

“Karl Popper’s Evolutionary Epistemology,” to appear in a forthcoming CUP volume on *The Philosophy of Karl Popper*

“Naturalism and Evolutionary Epistemology”, in *Handbook of Epistemology*, edited by Illka Niiniluoto, Matti Sintonen, and Jan Woleński, Kluwer Academic Publishers, 2004.

‘Sociobiology and the Roots of Normativity,’ in *Think*, **6**, 2004.

‘Mendel’s Monastery,’ in Newsletter for ISHPSB, Fall 2003.

‘The new science of memetics: the case against,’ in *Think*, **5**, 2003.

“Quinean Dreams, or Prospects for a Scientific Epistemology,” in Dale Jaquette (ed.), *Philosophy, Psychology, and Psychologism: Critical and Historical readings on the Psychological Turn in Philosophy*, Kluwer Academic Publishers, 2003

“Individualism and Holism in the Social Sciences,” *Analyse & Kritik*, **24**, pp. 87-99, 2003

“Sociobiological Imperialism and the State of Epistemology,” [forthcoming]

“Evolutionary Epistemology,” (with Bill Harms), *Stanford Encyclopedia of Philosophy*, <http://plato.stanford.edu/contents.html>, 2001

“Scientific Progress,” for Routledge Encyclopedia of the Philosophy of Science [forthcoming]

“Evolutionary Epistemology,” for Routledge Encyclopedia of the Philosophy of Science [forthcoming]

“The Metaphysical Foundations of Campbell’s Selectionist Epistemology”, in Cecilia Heyes and David Hull (eds.) *Selection Theory and Social Construction: The Evolutionary Naturalistic Epistemology of Donald T. Campbell (Suny Series in Philosophy and Biology)*, State University of New York Press, 2001.

“A discipline matures”, *Biology and Philosophy*, **15**, 575-593, 2000

“The Non-Reductive Unity of the Social Sciences”, *Economics and Philosophy*, **16**, 147-159, 2000.

“From a meme’s eye point of view”, *Free Inquiry*, Summer 2000

“Lewontin’s Legacy,” *Biology and Philosophy* , **14**, 157-158., 1999

“Science and Metaphor,” *Biology and Philosophy* , **14**, 159-166, 1999

“Darwin and the 18th century British Moral Tradition”, in van der Dennen, J. M. G., David Smillie, and Daniel R Wilson, eds. *The Darwinian Heritage and Sociobiology*, Westport, CN: Praeger, 1999.

“Scaling the metaphorical brick wall”, *Behavioral and Brain Sciences*, **22**, Dec 1999.

“The Status of Animals in Eighteenth Century British Moral Philosophy,” in Michael Ruse and Jane Maienschen (eds.). *Biology and the Foundation of Ethics*, Cambridge University Press, 1999.

“Evolutionary Game Theory meets the Social Contract”, *Biology and Philosophy*, **14**, 607-613, 1999

“Evolutionary Epistemology,” in *The Handbook of Economic Methodology*, 1998.

“Models and metaphors in science: The metaphorical turn,” *Protosociology*, **12**, 305-318, 1998.

“Explanation as Redescription” in *Metaphor and Symbol*, vol 13, No 2, pp 125-139, 1997.

“Darwin and the Animals,” *Biology & Philosophy*, **12**, 73-88, 1997.

“Una Evaluación de la Epistemología Evolucionista,” in *Epistemología evolucionista*, S Martinez y L Olivé (eds), Paidós, México, pp. 243-284, 1997. [Translation of “Assessing Evolutionary Epistemology”]

“Quine as an Evolutionary Epistemologist,” *Epistemologica*, **XX**, 319-354, 1997.

“Ontic Realism and Scientific Explanation,” in *Philosophy of Science*, Supplementary Volume Oct. 1996.

“Taking Popper Seriously,” *Biology and Philosophy*, **11**, 259-270, 1996.

“Metaphors, Rhetoric and Science,” in *Science, Rhetoric and Reason*, edited by H. Krips, J. E. McGuire, and T. Melia. Pittsburgh, PA: University of Pittsburgh Press, 1995, 269-277.

“Models and Metaphors in Science and Religion” *Zygon*, 30, No. 2, 336-342, 1995.

“Metaphors and mechanisms in vehicle-based selection theory” in *Behavioral and Brain Sciences*, 17, 4, Dec. 1994.

“What does evolutionary biology tell us about philosophy and religion?,” *Zygon*, 29. no. 1, 45-53, 1994.

“Epistemology From an Evolutionary Point of View,” in Elliott Sober (ed.) *Conceptual issues in evolutionary biology*, Second Edition. Cambridge, Mass: MIT Press, 1994.

“Darwin and the Moral Status of Animals,” in Dag Prawitz and Westerstahl, eds. *Logic and Philosophy of Science in Uppsala*, Kluwer: Dordrecht, NL, 1994, 499-509)

"Ethics and Evolution: The Biological Basis of Morality," in *Inquiry* , 36, 199-217, 1992.

"Darwin's Legacy," in *Biology and Philosophy*, 7, pp. 111-126, 1992.

“The Evolution of Scientific Lineages,” in *PSA 1990*, Vol. 2, The Philosophy of Science Association, pp. 245-254, 1991.

"Should Epistemologists Take Darwin Seriously?" in *Evolution, Cognition and Realism: Studies in Evolutionary Epistemology*, N. Rescher (ed.) , University Press of America, Lanham, 1990, pp. 33 - 38.

"The Implications of Evolutionary Biology for Ethics," in *Reports of the 13th International Wittgenstein Symposium*, R. Weingartner & G. Schwarz (eds.), Wien, 1989.

"Evolutionary Epistemology as Naturalized Epistemology." in *Issues in Evolutionary Epistemology*, K. Hahlweg & C. A. Hooker (eds), SUNY Press, 1989, pp. 393-412.

"Russell's Scientific Realism," in *Russell*, 8, 195-208, 1988.

"Metaphors in Science," in *Abstracts of the 8th International Congress of Logic, Methodology and Philosophy of Science*, Vol.5, 1987.

"Coming of Age in the Philosophy of Biology," *Inquiry*, 30, 459-75, 1987.

"Assessing Evolutionary Epistemology" in *Biology and Philosophy*, 4, 401-459, 1986.

“Metaphore, modelli e realismo scientifico,” in *Pegosa - scienza e filosofia*, 1, no. 1, pp. 51-60, 1985. [reprint of Bradie (1980)]

"Recent Developments in the Physics of Time and Cosmology," in *Journal of*

Chinese Philosophy, 12, 371-395, 1985.

"The Metaphorical Character of Science," in *Philosophia Naturalis*, 21, 229-243, 1984.

"Rationality and the Objectivity of Values," in *The Monist* 67, 3, pp. 467-482, 1984.

"Teleology and Natural Necessity in Aristotle" (with Fred Miller), *History of Philosophy Quarterly*, Vol. 1, no. 2, pp. 133-146, 1984.

"Annotated Bibliography for Teaching the Philosophy of Biology," Council for Philosophic Studies (with M. Sagoff, H. Longino, R. Sattler and P. Lewin), 1983.

"Science as Model and Metaphor," in *Abstracts of the 7th International Congress of Logic, Methodology and Philosophy of Science*, Vol. 6, 1983.

"Criteria for Event Identity," in *Philosophy Research Archives*, Vol. IX, pp. 29-77, 1983.

"A Course in the Philosophy and Physics of Space and Time," (with G. C. Duncan), *Teaching Philosophy*, 5:2, April 1982, 109-116.

"Adequacy Conditions and Event Identity," *Synthese* 49, 1981, 337-374.

"The Status of the Principle of Natural Selection," (with Mark Gromko), *Nature and System* 3, 1981, 3-12.

"Comments on Sayre," *Reason and Decision*, Applied Philosophy Program, 1981.

"Models, Metaphors and Scientific Realism," *Nature and System* 2, 1980, 3-20.

"Meaning, Truth and Evidence," (with Andrew Altman), *Southern Journal of Philosophy*, XVIII, 2, 1980, 113-122.

"Pragmatism and Internal Realism," *Analysis*, January 1979, 4-10.

"On Doing Without Events," (with Andrew Altman and Fred Miller), *Philosophical Studies*, 1979, 301-307.

"A Survey of Teaching Practices in Philosophy of Science," (with J. Mynatt), *Teaching Philosophy*, Vol. 2, 1977, No. 2, 147-152.

"The Development of Russell's Structural Postulates," *Philosophy of Science*, September 1977, 441-463.

"On Writing Popperian History," *British Journal for the Philosophy of Science*, December 1976, 398.

"The Causal Theory of Perception," *Synthese* 33, June 1976, 41-74.

"Russell and Ayer on Naive Realism," *PSA 1976, Vol. 1*, ed. F. Suppes and P. D. Asquith, PSA Association, East Lansing, 1976, 175-181.

"Supererogatory Evidence," *The Southwestern Journal of Philosophy*, November 1975, 109-120.

"Is Scientific Realism a Contingent Thesis?," in *Boston Colloquium for the Philosophy of Science (PSA 1972)*, August 1974, 367-373.

"Polanyi on the Meno Paradox," *Philosophy of Science*, June 1974, 203.

Book Reviews

"An Information Theoretic Approach to Evolutionary Epistemology"
Review of William Harms, *Information and Meaning in Evolutionary Processes*,
in *Biological Theory*.

The Kantian Legacy in Nineteenth-Century Science, edited by Michael Friedman
and Alfred Nordmann, for the *Quarterly Review of Biology*

EXPLANATIONS : STYLES OF EXPLANATION IN SCIENCE. Edited by John
Cornwall. Oxford: Oxford University Press. [Quarterly Review of Biology]

*THE EPISTEMOLOGY OF DEVELOPMENT, EVOLUTION AND GENETICS:
SELECTED ESSAYS*. By Richard M. Burian. [Quarterly Review of Biology]

Why we lie: The evolutionary roots of deception and the unconscious mind by
David Livingstone Smith. [Human Nature Review]

Natural Ethical Facts: Evolution, Connectionism, and Moral Cognition, William
D. Casebeer, A Bradford Book, The MIT Press, Cambridge, MA, 2003, to appear
in *Philosophy of Science*.

Genes: A philosophical inquiry by Gordon Graham, Routledge in *Human Nature
Review*

What Genes Can't Do, by Lenny Moss, The MIT Press, 2003 in *Human Nature Review*

The Romantic Conception Of Life: Science And Philosophy In The Age Of Goethe. By Robert J. Richards. Chicago: The University of Chicago Press. 2002. in *Quarterly Review of Biology*, **78**, 2003.

The Nature of Life: Readings in Biology, edited by Nancy Carr, Joseph Coulson, Mike Levine, Gary Schoepfel, Donald Whitfield, and Mark Stefanski. in *Quarterly Review of Biology*, **78**, 2003.

Is there a duty to die? (Eds) Humber and Almeder, in *Quarterly Review of Biology*.

The Splendid Feast Of Reason. By S. Jonathan Singer. Berkeley: University of California Press., in *Quarterly Review of Biology*, **77**, 2002.

What Functions Explain: Functional Explanations And Self-Reproducing Systems. Cambridge Studies in Philosophy and Biology. By Peter Mclaughlin. Cambridge: Cambridge University Press 2001, in *Quarterly Review of Biology*, **77**, 2002

Anthony O'Hear, *Beyond Evolution: Human Nature and the Limits of Evolutionary Explanation*, *Philosophy and Phenomenological Research*, **LXII**, Jan. 2001.

Richard Creath and Jane Maienschein, *Biology and Epistemology*, in *Quarterly Review of Biology*, **76**, June 2001, p. 215.

Review of Stephen Rose's *Lifelines*, *Behavioral and Brain Sciences*, **22**, Oct. 1999.

Without Miracles, by Gary Cziko, in *Philosophical Psychology*, **10**(3), 399-402, 1997.

Harmon R. Holcomb III, *Sociobiology, Sex, and Science*, ESS Newsletter No. 41, April, 1996.

Robin Fox, *The Red Lamp of Incest*, (*Ethics* Oct, 1992)

Jeremy Griffith, *FREE: The End of the Human Condition*, *Ohio Journal of Science*, **90**, 1, March 1990.

Baker, G. and Clark, L. *Explanation: An Introduction to the Philosophy of*

Science in Teaching Philosophy, 12:3, 291-293.

Michael Ruse. *Taking Darwin Seriously* in *ISIS*, 79: 2: 297, 286-7, 19

Murad Akhundov. *Conceptions of Space and Time: Sources, Evolution, Directions*, in *History and Philosophy of the Life Sciences* 11, (1988), 166-168.

Rescher, N. (ed) *Current Issues in Teleology*. *Canadian Philosophical Reviews*, 7, 22-24, January 1987.

I. B. Cohen *Revolutions in Science*. *Teaching Philosophy* 10, 157-158, June 1987.

Reidl *Biology of Knowledge*, *American Naturalist*, Nov. 1986.

Theories of Light From Descartes to Newton, by A. I. Sabra: *Seventeenth Century News*, Spring/Summer 1983, Vol. XLI, Nos. 1-2.

The Philosophy of Charles Sanders Peirce, by R. Almeder and *Peirce's Philosophy of Science*, by N. Rescher: *Teaching Philosophy*, 5:3, July 1982.

Scientific Method, by J. K. Feibleman: *Philosophy of Science*, September 1973.

Metaphysics and the Philosophy of Science, by G. Buchdahl; *Philosophy of Science*, June 1972 (with J. Stuart).

IV. Papers Read

‘What’s wrong with methodological naturalism?’ at a conference on Science and Religion at the University of Toledo, April 8-10, 2006

‘The changing metaphorical landscape in contemporary developmental biology’ at the biannual meeting of ISHPSSB, Guelph, Ontario, July 2005.

‘The changing metaphorical landscape in contemporary developmental biology’ at the Pittsburgh Center for the Philosophy of Science, 5th Quadrennial International Fellows Conference, in Rytro, Poland, May 2004.

‘The changing metaphorical landscape in contemporary developmental biology’ at the Konrad Lorenz Institute, Vienna, June 2004

‘Sociobiological Imperialism,’ at the biannual meeting of the International Society for the History, Philosophy and Social Studies of Science, Vienna, Summer 2003.

‘Moritz Schlick and The Philosophical Reception of Einstein’s Theory of Relativity’, for Ann Arbor Relativity Group, Spring 2003.

“Moritz Schlick and the Philosophical Reception of Einstein’s theory of relativity,” BGSU Physics Colloquium, 4/6/00

“Campbell’s Concept of Evolutionary Epistemology”, ISHPPB Meeting, Oaxaca, Mexico, July 7-12, 1999

“Campbell’s Selectionist Model of Scientific Change,” LMPS99 Meeting, Krakow, Poland, August 1999

“Normalizing Naturalized Epistemology”, for the XX World Congress of Philosophy, August 1998.

“Normalizing Naturalized Epistemology” at Pacific Division APA, San Francisco, April 1997

“Dennett’s Algorithmic Darwin” at ISHPSSB meetings in Seattle, WA (July 1997)

“Explanation as Metaphorical Redescription,” Pittsburgh Center for the Philosophy of Science Fellows Conference in Castelgioncello, Italy, May 1996.

“Ontic Realism and Scientific Explanation,” Philosophy of Science association meeting held in Cleveland, Oct 1996.

“Darwin and the 18th century British Moral Tradition” presented at the conference on History, Philosophy, and Social Studies of Biology, Leuven, Belgium, July 1995

“Darwin and the 18th century British Moral Tradition,” presented at the European Sociobiology Society meeting in Cambridge, England, August 1995.

“Trees and Tropes” presented at the 10th International Congress of Logic, Mathematics and Philosophy of Science in Florence, Italy, August 1995

“Darwin and the Tradition” at University of Guelph, October 1995

“Classification Metaphors in Biology” at Ecology and Systematics Colloquium, University of Guelph, Guelph, Ontario, October 1995.

“Trees and Tropes: Classification metaphors in Biology and Linguistics,” at the

Center for the Philosophy of Science In House Conference, University of Pittsburgh, October 1994.

“Hutcheson and Darwin on Benevolence and Self-Love” at the 300th Anniversary Conference for Francis Hutcheson, Glasgow, April 1994.

“Ontic Realism and Scientific Explanation,” at the Pacific Division meetings, Mar 25, 1993.

“The Cognitive Dimensions of Science” at the XIXth ICHS meetings in Zaragaso, Spain, August 1993.

“Trees and Tropes: Classification Schemas in Biology and Linguistics,” presented at the ISHPSSB (Philosophy of Biology) meetings in Brandeis, July 1993.

“Expanding the circle,” at the ISHPSSB (Philosophy of Biology) meetings in Chicago, July 1991.

“Darwinism and the Moral Status of Animals,” at the 9th International Congress of Logic, Methodology and Philosophy of Science, in Uppsala, August 7-14, 1991.
"The evolution of conceptual lineages," Philosophy of Science Association meeting, October, 1990.

"Ethics and Evolution," presented at the Human Behavior and Evolution Society meeting at Northwestern University, August 25-27, 1989.

"Ethics and Evolution: the Biological Basis of Morality," presented at the International Society for the History, Philosophy and Social Studies of Biology meeting at the University of Western Ontario, June 21-25, 1989.

"Beyond Realism and Relativism or Transcending the Cookie Cutter/Dough Gap," presented at Central Division meeting of the American Philosophical Association, April 1989.

"Justification and Evidence," commentary at Ohio Philosophical Association meeting, March 1989.

Should Epistemologists Take Darwin Seriously?" presented at Seventh Annual Conference on Philosophy of Science, Pittsburgh, Dec. 10-11, 1988.

"Evolution and Ethics," presented at the 13th Wittgenstein Symposium, Kirchberg, Austria Aug. 25, 1988.

"Metaphors in Science," presented at the 8th International Congress of Logic, Methodology and Philosophy of Science, Moscow, USSR, August 1987.

"Evolutionary Epistemology as Naturalized Epistemology," presented at the conference on History, Philosophy, and Social Studies of Biology, Blacksburg, VA, June 1987 and at the International Congress on Evolutionary Epistemology, Newcastle, Australia, July 1987.

"Species Problems and Populations Solutions," (with Mark Gromko), presented at the conference on History, Philosophy, and Social Studies of Biology, Blacksburg, VA, June 1987

"Metaphors and Analogies in d'Arcy Thompson's On Growth and Form," at American Zoological Society meetings in Baltimore, Dec. 28, 1985.

"An Aristotelian Model of Space and Time," (with C. Duncan) at Society for Ancient Greek Philosophy meeting, New York, Oct. 24, 1985.

"Assessing Evolutionary Epistemology," at conference on History and Philosophy of Biology, St. Mary's, June 1985.

Commentator on panel on "Asian Philosophy and Contemporary Physics," at Society for Asian and Comparative Philosophy at Western Division Meetings. April 25-27, 1985.

"Comments on Achinstein's 'Taking Models Seriously'," presented at a symposium on Language and Mind, John Carroll University, Cleveland, Ohio (October 12-14, 1984).

"Metaphors in Science," presented at the International Conference on System Research Informatics and Cybernetics, Baden-Baden, West Germany (August 1-5, 1984).

"Russell's Scientific Realism," presented at A Conference on Russell's Early Technical Philosophy, held at Trinity College, University of Toronto (June 21-24, 1984).

"Metaphors in Biology," presented at the Population Biology Seminar, Museum of Comparative Zoology, Harvard University (May 17, 1984).

"Science as Model and Metaphor," presented at the 7th International Congress of Logic, Methodology and Philosophy of Science, Salzburg, Austria (July 1983).

"The Mind and the Blue Guitar," presented at Midwest Cognitive Science Meeting,

Denison University, Granville, Ohio (July 1983).

"Science as Model and Metaphor," presented at the Ohio Philosophical Association Meeting (March 1983).

"Is the Extinction Theorem Really Relevant to Testing the Special Theory of Relativity?" (with C. Duncan), presented at the Ohio Physical Society Meeting (October 1982).

"A Darwinian Approach to the Evolution of Science," presented at the Ohio Philosophical Association Meeting (March 1982).

"Comments on Sayre," presented at the Third Annual Conference in Applied Philosophy, Bowling Green State University, Bowling Green, Ohio (May 1981).

"A Contextualist Critique of Goldman's Epistemology," (with A. Altman), presented at the Western Division Meetings of the American Philosophical Association, Milwaukee, Wisconsin (April 1981).

"Kraut on 'The Semantic and the Epistemic'," presented at the Ohio Philosophical Association Meeting (March 1981).

"A Course in the Philosophy and Physics of Space and Time," (with C. Duncan), presented at the Philosophy of Science Association Meeting (October 1980).

"Teaching an Interdisciplinary Course in the Philosophy of Evolution," (with M. Gromko), presented at the Philosophy of Science Association Meeting (October 1980).

"Massive Error," presented at the Ohio Philosophical Association Meeting (March 1980).

"Pragmatism and Internal Realism," presented at the Western Division Meetings of the American Philosophical Association, Cincinnati, Ohio, (April 1978).

"Models, Metaphors and Scientific Realism," presented at the Eastern Division Meetings of the American Philosophical Association, Washington, December 1977.

"Technology and Human Values," read to the Ohio University Conference on Technology and Human Values (May 1975).

"Technology and Human Values," read to the International Society for the Comparative Study of Civilizations Regional Conference (March 1974).

"Is Scientific Realism a Contingent Thesis?", (revised version of above), read to Philosophy of Science Association meeting (November 1972).

"Is Scientific Realism a Contingent Thesis?", read to the Ohio Philosophical Association meeting (March 1972).

V. Work in Progress

A projected book length study of the role of models, metaphors and analogies in science.

In the long term, I see myself working on 4 inter-related projects in the philosophy of biology. (1) A study of the relation between "ultimate" and "proximate" accounts in biology; (2) Reductionism and the withering away of evolutionary theory; (3) The causal structure of hierarchical systems in nature; and (4) The connection between biological, psychological and sociological accounts of animal (including human) behavior.

VI. Research Projects and Grants

Bowling Green Faculty Research Committee, Summer Grant, 1991, "The Metaphorical Structure of Scientific Reasoning."

Bowling Green Faculty Research Committee, Summer Grant, 1987, "Evolutionary Epistemology as Naturalized Epistemology."

Bowling Green Faculty Research Committee, Summer Grant, 1985, "Metaphors in Science."

National Science Foundation SES-8308720, August 1983. "Models and Metaphors in Evolutionary Biology."

Summer Institute in the Philosophy of Biology, Summer 1982 (Council for Philosophical Studies).

Bowling Green Faculty Research Committee, Summer Grant, 1982. "The Evolution of the Concepts of Space and Time."

Bowling Green Faculty Research Committee, Summer Grant, 1980. "Events."

Bowling Green Faculty Research Committee, Summer Grant, 1978. "The Structure of Events."

NEH Summer Seminar, Summer 1976, Notre Dame: "Models and Metaphors."

Bowling Green Faculty Development Grant, 1975-1976.

Bowling Green Faculty Research Committee, Summer Grant, 1974. "The Concept of Structure in Bertrand Russell's Philosophy of Scientific Realism."

Summer Institute in Theory of Knowledge, Summer, 1972, Council for Philosophic Studies.

NSF History of Physics Institute, Summer, 1972 (declined in favor of above).

Bowling Green Faculty Research Committee, Summer Grant, 1972 (declined in favor of above).

VII. Teaching Experience

Philosophy of Biology (both graduate and undergraduate), Philosophy of Evolution (interdisciplinary course, taught with a colleague in the Biology department), Philosophy of the Physical Sciences, Philosophy of Behavioral Sciences, Philosophy of Space and Time (interdisciplinary course, taught with a colleague in the Physics department), Logic of Science, Inductive Logic, Symbolic Logic, Epistemology, Russell, Wittgenstein, 20th Century Philosophy, Modal Logic, Man and Society, Chinese Philosophy, and Introduction to Philosophy and Introduction to Logic.

In addition, I helped design and teach (for two years) an innovative Science Cluster College which emphasized an interdisciplinary approach to the physical sciences (biology, physics, chemistry, geology, computer science, mathematics and the philosophy of science) for freshmen. My role was to conduct a seminar in the philosophy of science which served as an integrating element in the program.

In 1995, I redesigned the Graduate Professional Development course offered by the Department of Philosophy to include a "hands-on" approach to curricular design and teaching practice.

VIII. Professional Service

Professional Organizations: AAAS, PSA (Philosophy of Science Association), BPS (British Society for the Philosophy of Science), Sigma Xi, Society for the Study of Social Biology, ISHPSSB (International Society for History, Philosophy and Social Studies of Biology), APA, New York Academy of Sciences, Human Behavior and Evolution Society.

IX. Service

Professional

Editorial Board: *Philosophy of Science*

Editorial Board: *Evolution and Cognition*

Editorial Board: *Biological Theory: Integrating Development, Evolution, and Cognition*

Associate: *Brain and the Behavioral Sciences*