

Curriculum Vitae:

Robert E. McGinn

CURRENT POSITION

Professor (Teaching), Management Science and Engineering (MS&E), and Science, Technology, and Society, Stanford University.

AREAS OF SPECIALIZATION

engineering ethics; ethics, science, and technology; ethics and public policy; technology in society; work, technology, and society.

EDUCATION

Stanford University Major: philosophy; minor: history of ideas.	Ph.D., 1969
Stanford University Major: mathematics	M.S., 1965
Stevens Institute of Technology Unified Science and Engineering Curriculum	B.S., 1963

EXPERIENCE

Science, Technology, and Society Faculty Fellow	2014-2017
Professor (Teaching), Department of Management Science and Engineering, and Professor, Science, Technology, and Society	2011-present
Professor (Teaching), Department of Management Science and Engineering, and Director, STS Program	2004-2011
Professor (Teaching), Department of Management Science and Engineering, and, by courtesy, Department of Civil and Environmental Engineering, and in the STS Program	2000-2004
Professor (Teaching), Department of Industrial Engineering and Engineering Management and, by courtesy, Department of Civil and Environmental Engineering, and in the STS Program	1994-2000
Professor (Teaching), Department of Industrial Engineering and Engineering Management, and in the STS Program	1981-94
Adjunct Professor, Departments of Engineering-Economic Systems and Industrial Engineering and Engineering Management, and in the Program in Values, Technology, Science, and Society	1979-81
Director, Program on Science and Society,	1978-79

Bell Telephone Laboratories, Murray Hill, NJ

Assistant Professor of Values, Technology, and Society, Stanford	1975-78
Assistant Professor of Humanities and, by courtesy, Philosophy, Stanford	1973-75
Visiting Assistant Professor of Humanities; Values, Technology, and Society; and, by courtesy, Philosophy, Stanford	1971-73
Visiting Assistant Professor of Philosophy, Stanford	Summer, 1971
Visiting Assistant Professor of Humanities, Stanford	Summer, 1970
Assistant Professor of Philosophy, Barnard College, Columbia University	1969-71
Visiting Assistant Professor of Philosophy, Tufts University	Summer, 1969
Instructor of Philosophy, Barnard College, Columbia University	1968-69
Instructor of Mathematics, Stevens Institute of Technology	Summers, 1966, 1967

HONORS AND AWARDS

Tau Beta Pi

Sigma Xi (Associate Member)

National Endowment for the Humanities Summer Stipend

Andrew J. Mellon Foundation Faculty Research Grant

Norwegian Marshall Fund Grant for Visiting Faculty

Phi Beta Kappa Undergraduate Teaching Prize, California Beta Chapter, Stanford University (1996)

Tau Beta Pi Award for Excellence in Undergraduate Teaching, California Gamma Chapter,
Stanford University (1996)

Perin Award for Undergraduate Engineering Education (1997)

Dinkelspiel Award For Exceptional Contributions to Undergraduate Education (1997)

SELECTED PUBLICATIONS

1. "About Face," *Social Theory and Practice*, Vol. 1, No. 3, 1971, 87-96.
2. "Prestige and the Logic of Political Argument," *The Monist*, Vol. 56, No. 1, 1972, 100-115.
3. "Nietzsche's *Birth of Tragedy* as Culture Criticism," *Nietzsche Studien*, Vol. 4, 1975, 75-138.
4. "What Is Technology?," *Research in Philosophy and Technology*, Vol. I, 1978, 179-197 (reprinted in L. A. Hickman, ed., *Technology as a Human Affair* [New York: McGraw-Hill, 1990], 10-25).
5. "The Problem of Scale in Human Life: A Framework for Analysis," *Research in Philosophy and Technology*, Vol. I, 1978, 39-52.
6. "In Defense of Intangibles: the Feasibility-Responsibility Dilemma in Modern Technological Innovation," *Science, Technology, and Human Values*, No. 29, 1979, 4-10.
7. "The Anatomy of Modern Technology," with N. Bruce Hannay, *Daedalus*, Vol. 109, Winter, 1980, 25-54.
8. "Nietzsche on Technology," *Journal of the History of Ideas*, Vol. 41, No. 3, 1980, 80-92.
9. "Verwandlungen von Nietzsches Übermensch in der Literatur des Mittelmeerraumes: D'Annunzio, Marinetti, und Kazantzakis," *Nietzsche Studien*, Vols. 10/11, 1981-82, 597-614.
10. "Stokowski and Bell Telephone Laboratories: Collaboration in the Development of High Fidelity Sound Reproduction," *Technology and Culture*, Vol. 24, No. 1, 1983, 38-75.
11. *Science, Technology, and Society* (Englewood Cliffs, N.J.: Prentice Hall, 1991).

12. "The Built Environment: Recent Developments, Issues, and Policy Initiatives," in *Ecology, Industrial Relations and Business* (Bilbao, Spain: Fundacion BBV, 1993), 155-186.
13. "Technology, Demography, and the Anachronism of Traditional Rights," *Journal of Applied Philosophy*, Vol. 11, No. 1, Spring, 1994, 57-70 (reprinted in K.Schrader-Frechette and L. Westra, eds., *Ethics and Technology* (Rowen and Littlefield, 1997).
14. "The Engineer's Moral Right to Reputational Fairness," *Science and Engineering Ethics*, Vol. 1, No. 3, 1995, 217-230.
15. "Optimization, Option Disclosure, and Problem Redefinition: Derivative Moral Obligations of Engineers and the Case of the Composite-Material Bicycle," *Professional Ethics*, Vol. 6, No. 1, 1997, pp. 5-25. Reprinted in J. R. Rowen and S. Zinaich, eds., *Ethics for the Professions* (Harcourt, 2001).
16. "Expectations and Experiences of Ethical Issues in Engineering: A Survey of Stanford Engineering Students and Practicing Engineers," *Online Ethics Center For Engineering and Science*, March 1999, <http://onlineethics.org/essays/mcginn.html>.
17. *Navigating Rough Waters: Ethical Issues in the Water Industry* (American Water Works Association: Denver, 2001), Cheryl K. Davis and Robert E. McGinn, editors.
18. "Ethical Issues Faced By Water Professionals: Some Tools for Analysis," in *ibid.*, 17-37.
19. "Foundational Issues and Future Directions," with Cheryl Davis, in *ibid.*, 381-394.
20. "Mind the Gaps?: An Empirical Approach to Engineering Ethics, 1997-2001," *Science and Engineering Ethics*, Vol. 9, No. 3, October 2003, 1-26.
21. "Ethical Issues in Nanoscience and Nanotechnology: Reflections and Suggestions," in *Nanotechnology: Social Implications II – Individual Perspectives* (Springer, 2006), Mihail C. Roco and William S. Bainbridge, eds., 169-172.
22. "Ethics and Nanotechnology: Views of Nanotechnology Researchers," *Nanoethics*, Vol. 2, No. 2, July 2008, 101-131.
23. Sandip Tiwari and Robert McGinn, "The Art of the Invisible: Achievements, Social Benefits, and Challenges of Nanotechnology," *Frontiers of Knowledge* (Fundación BBVA: Madrid, 2008), 93-101.
24. "Ethical Responsibilities of Nanotechnology Researchers: A Short Guide," *Nanoethics*, Vol. 4, No. 1, April 2010, 1-12.
25. "What Is Different, Ethically, About Nanotechnology? Foundational Questions and Answers," *Nanoethics*, Vol. 4, No. 2, August 2010, 115-128.
26. "What Makes Safety In the Nanotech Lab an 'Ethical Issue?'," April 2011, http://sei.nmin.org/sei_featured_question.html.
27. "Discernment and Denial: Nanotechnology Researchers' Recognition of Ethical Responsibilities Related to Their Work," *Nanoethics*, Vol. 7, No. 2, August, 2013, 93-105.

UNPUBLISHED WORKS AND/OR WORK IN PROGRESS

1. "Ethical Issues of the Built Environment"
2. "Moral Responsibilites of Engineering Professionals: Empirical and Theoretical Approaches"
3. *The Ethically Responsible Engineer: Concepts and Cases for Engineering Students* (book, in progress)

SELECTED INVITED ADDRESSES

- "Man-Machine Symbiosis: the Human Costs of Technological Mastery," NASA-California Institute of Technology National Conference on Remotely Manned Systems, Pasadena, September, 1972.
- "Energy and Ethics," Dept. of Philosophy, University of California at Santa Cruz, October, 1973.
- "Energy, Human Values, and Socio-Technical Systems," Wayne State University Conference on Systems and Energy, Detroit, Michigan, November, 1974.
- "Technology, Human Values, and Transformations of Scale," Society for the History of Technology, Annual Meetings, Chicago, December, 1974.

- "What Is Technology?", University of Delaware, National Conference on Philosophy and Technology, Newark, Delaware, July, 1975.
- "The Problem of Scale in Human Life," American Association for the Advancement of Science, Annual Meetings, Boston, Massachusetts, February, 1976.
- "Technology and Intangibles," American Philosophical Association, Pacific Division Annual Meeting, San Francisco, March, 1978.
- "Stokowski, Bell Laboratories, and the Development of High Fidelity, 1930-1940," History of Science Society, Annual Meetings, New York, December, 1979.
- "Emerging Telecommunications Technologies and Social Responsibility," California Public Utilities Commission Symposium on Technological Frontiers and the Public Utilities: the Regulatory Challenge, Stanford, California, March, 1984.
- "Automation and Society," Hewlett-Packard Corporation Seminar on Computer-Integrated Manufacturing, Carmel, California, July, 1985.
- "Ethics and High Technology," Stanford-St. Moritz Conference on High Technology, St. Moritz, Switzerland, January, 1988.
- "The Social Management of Technology," University of Dayton Seminar on Technology and Human Values, Dayton, Ohio, March, 1988.
- "Ethics and Technology," University of Trondheim/Norwegian Institute of Technology, Trondheim, Norway, September, 1989.
- "Philosophy of Technology in a Nietzschean Vein," University of Oslo Seminar on the Philosophy of Science, Oslo, Norway, September, 1989.
- "Non-Technical Education for Engineers: the VTSS Model," Norwegian Academy of Technical Sciences, Trondheim, Norway, September, 1989.
- "Technology and Human Values: A Program for Research," Center for Technology and Culture, Oslo, Norway, September, 1989.
- "The Anachronism of Traditional Rights in Contemporary Technological Society," National Conference on Ethics and the Professions," University of Florida, Gainesville, February 1, 1992.
- "Ethical Issues of the Built Environment," National Association of Science, Technology, and Society Annual Meetings, Alexandria, Va., February 8, 1992.
- "The Built Environment: Recent Developments, Issues, and Policy Initiatives," Conference on Ecology, Industrial Relations, and Business," Madrid, Spain, November 26, 1992.
- "A.C. Keller, The Bell System, and the Vigrén Patent Case: An Historical Study of an Ethical Issue in Engineering," Society for the History of Technology, Annual Meetings, Washington, D.C., October 16, 1993.
- "Case Studies in STS: Ethical Issues in Engineering," National Association for Science, Technology, and Society Annual Meetings, January 1994.
- "Bridging the 'Two Cultures' Gap: STS Programs and 'Engineering Studies'," Seminar on "The Two Cultures," Madrid, Spain, April 28, 1994.
- "Ethics, Engineering, and the National Information Infrastructure," Institute for Electrical and Electronics Engineers (IEEE), Society on Social Implications of Technology Conference on "The Information Superhighway," Santa Clara, California, May 21, 1994.
- "Technology and Ethics: Recent Controversies and Future Directions," Arts and Sciences Symposium, James Madison University, Harrisonburg, Va., September 21, 1994.
- "Establishing an Extraterrestrial Planetary Settlement: Would Such A Venture Pass Ethical Muster?" University of Houston-Clear Lake Conference on The Challenges of Space Technologies to Values, Houston, Texas, October 29, 1994.
- "STS As Public Philosophy," National Association for Science, Technology, and Society, Annual Meetings, Washington, D.C., March 1995.
- "Technology, Demography, and Rights: Theoretical Reflections With Applications to Issues in Contemporary Bioethics," Biomedical Ethics Seminar, Center for Biomedical Ethics, School of Medicine, Stanford University, May 4, 1995.

- "Ethics and the Engineering Consultant: the Case of the Composite Material Bicycle," National Association for STS Annual Meetings, Washington, D.C., February 10, 1996.
- "Foundational Concepts and Integrative Frameworks in STS Teaching and Research," Science and Society Conference, University of California at Davis, Davis, California, May 10, 1996.
- "Optimization, Option Disclosure, and Problem Redefinition: Derivative Moral Obligations of Engineers and the Case of the Composite-Material Bicycle," Mini Conference on Practicing and Teaching Ethics in Engineering and Computing, Association for Practical and Professional Ethics Annual Meetings, Washington, D.C., March 8-9, 1997.
- "Technology Paradigms and Next-Generation Handheld Solutions," Keynote Address, PalmSource 2000 Conference, Santa Clara, CA, December 12, 2000.
- "Moral Responsibilities of Professional Engineers: Empirical and Theoretical Approaches," Nagoya Engineering Ethics Forum, School of Information and Sciences, Nagoya University, Japan, December 8, 2002.
- "Nanotechnology in Society: Ethical Issues," at "Nanosafe": A Workshop on Environmental Health and Safety in Nanotechnology Research, NNIN, Georgia Institute of Technology, Atlanta, December 2, 2004.
- "A Safety Culture: Ethical and Cultural Issues," Stanford Nanofabrication Facility, December 14 2004.
- "Moral Leadership and Technology Transfer: the Case of Bhopal," Conference on Moral Leadership, Center on Ethics, Stanford University, Stanford, CA, February 25, 2005.
- "Nanotechnology in Society: Ethical Issues," at "Nanosafe: A Workshop on environmental Health and Safety in Nanotechnology," Georgia Institute of Technology, December 2, 2004.
- "Ethical Issues in Everyday Engineering Practice: The Case of the Composite-Material Bicycle," Carnegie Foundation for Advancement of Teaching Event on "Educating Engineers: Theory, Practice, and Imagination," Carnegie Foundation, Stanford, CA, January 10, 2006.
- "The Emergence of Nanotechnology: Ethical and Social Concerns," Forum on Nanotechnology, Exploratorium Museum, San Francisco, CA, August 2, 2006.
- "Ethics and Nanotechnology," NNIN Semi-Annual Meeting, National Science Foundation, Washington, D.C., October 27, 2006.
- "Ethics and Nanotechnology: Views of Nanotech Researchers," France-Stanford Center Conference on NBIC Convergence, Avignon, France, December 17, 2006.
- "Ethics and Nanotechnology: Mapping the Views of the NNIN Community," Center for Nanotechnology and Society, U. C. Santa Barbara, January 11, 2007.
- "Ethics and Nanotechnology: Views of Researchers," Center for Work, Technology, and Organization, Stanford University, Stanford University, Stanford, CA, February 12, 2007.
- "Ethics and Nanotechnology: Views of Nanotech Researchers," Nanotechnology Forum, City of Berkeley Nano Club, Berkeley, CA, April 15, 2007.
- "Ethics and Nanotechnology: Encouraging and Concerning Findings," NNIN Annual Meeting, University of Michigan, Ann Arbor, May 10, 2007.
- "Ethics and Nanotechnology: Organic Electronics and Optoelectronics Winter Course, Indian Institute of Technology, Kanpur, India, December 13, 2008.
- "Ethics and Nanotechnology: Survey Results, Ethical Responsibilities, and a Case Study," Center for Nanotechnology, University of Washington, Seattle, WA, January 27, 2009.
- "Nanotechnology in Society," NNIN REU Seminar, Stanford University, July 13, 2009.
- "Ethics and Nanotechnology: From Views of Researchers to a Guide for Researchers," Workshop on Social and Ethical Implications of Nanotechnology, National Nanotechnology Infrastructure Network, Cornell University, Ithaca, NY, January 29, 2010.
- "Ethical Responsibilities of Engineers: Foundations, Cases, Lessons," Department of Chemical Engineering, University of California, Berkeley, March 17, 2010.
- "Ethics and Nanotechnology," Ethics Workshop, Center for Probing the Nanoscale, Stanford University, February 25, 2011.
- "MisMatch.com: Ethics Education and Engineering Practice," Oringer Lecture Series, Information Science and Technology Program, School of Engineering and Applied Science, California Institute of Technology, Pasadena, CA, February 26, 2013.

“MisMatch.com: Ethics Education and Engineering Practice,” Spectra-Physics Seminar Series, Santa Clara, CA, January 10, 2014.

“A Life-Cycle Framework for Assessing Ethical and Social Issues Associated With Emerging Technologies, and the Case of Neurotechnology-Enabled Brain Research,” Presidential Commission for the Study of Bioethical Issues,” Atlanta, CA, June 10, 2014.

OTHER SCHOLARLY AND ACADEMIC ACTIVITIES

Member, Ad Hoc Committee on Philosophy and Medicine, American Philosophical Association (APA), 1973-74.
Consultant and participant, AAAS Workshop on Ethical and Values Aspects of Science and Technology, Washington, D.C., April, 1974.

Organizer and chair of session entitled "Thinking About Technology: the Need for an Interdisciplinary Approach," Annual Meeting of the Society for the History of Technology, Chicago, Illinois, December, 1974.

Consultant, Franklin Institute, Philadelphia, Penn., Bicentennial Exhibit on Future Values, 1975-76.

Member, University of Michigan Committee on Higher Education Programs in Science and Technology, and Ethics and Values, 1975-76.

Editorial Board, *Research in Philosophy and Technology*, 1975-1989.

Instructor, Lilly Foundation Faculty Renewal Program, Stanford University, 1976.

Organizer and chair of session entitled "Recent Contributions to the Philosophical Study of Technology," APA, Pacific Division Annual Meeting, San Francisco, March, 1978.

Consultant, the Franklin Institute, Philadelphia, Pennsylvania, Exhibit on Energy and Values, and NEH Project on Future Museum Policy, 1978.

Instructor, Mellon Foundation Faculty Renewal Program, Stanford University, 1979-81.

Consulting Editor, *Science, Technology, and Human Values*, 1979-87.

Instructor, NSF Chautauqua Course for College Faculty, "Science, Technology, and Society," California State University at San Francisco, June, 1989.

Visiting Scholar, Center for Technology and Culture, University of Oslo, Oslo, Norway, September, 1989.

Organizer and chair, Mellon Foundation Faculty Seminar on "Theory and Social Construction of Science and Technology," Stanford University, 1989-90.

Organizer and chair of symposium on "Ethics in Undergraduate Science Education," Pew Foundation Science Program, Pomona and Harvey Mudd Colleges, January, 1991.

Panelist, "Collegiate-Level STS Textbooks," S. Cutcliffe, organizer, National Association for Science, Technology, and Society Annual Meeting, Washington, D.C., February, 1992.

Instructor, NSF Chautauqua Course for College Faculty, "Ethics, Science, and Technology," California State University at San Francisco, March, 1992.

Chair and panelist, Workshop on "The Influence of Microtechnology on Society," Engelberg Forum on Microtechnology and Society, Engelberg, Switzerland, March, 1992.

Instructor, NEH Course for College Faculty, "Humanities, Science, and Technology," Kalamazoo College, Kalamazoo, Mich., June, 1992.

Co-organizer (with W. G. Vincenti), Sloan Foundation Faculty Workshop on "The History of Engineering," Stanford University, Stanford, California, July, 1992.

Board of Directors, National Association for Science, Technology, and Society, 1993-1996.

Organizer and chair, "Engineering Education and Engineering Practice: Improving the Fit," National Association for Science, Technology and Society, Annual Meetings, Wash., D.C., March 1995

Editorial Board, *Research in Philosophy and Technology*, 1995-2001

Member, Undergraduate Council, School of Engineering, Stanford University, 1995-

Member, Committee on Undergraduate Studies, Stanford University, 1994-97

Director, Science, Technology, and Society Program, Stanford University, 1992-1998

Co-Director, Science, Technology, and Society (STS) Program, Stanford University, 1998-2003

Member, Advisory Board, Online Ethics Center for Engineering and Science, 1997-

Stanford Faculty Representative, Truman Scholarship Foundation, 1995-2000
 Chair, Subcommittee on Individually Designed Majors, Undergraduate Council, School of Engineering, Stanford University, 1997-2001
 Co-organizer, Fundacion Banco Bilbao Vizcaya (FBBV) Executive Seminar on "Trends in Information Technology and Organization," Bilbao and Madrid, Spain, December 1998-June 1999
 Board of Overseers, Assessment of Colby College STS Program, Waterville, Maine, October 2002.
 Participant, Carnegie Foundation for the Advancement of Teaching, Seminar: "The Life of the Mind in Practice," 2002-2003.
 Associate Director, France-Stanford Center for Interdisciplinary Studies, 2001-
 Organizer, convener, and participant, international conference on "Issues of Risk and Responsibility in Contemporary Engineering and Science: French and U.S Perspectives," France-Stanford Center for Interdisciplinary Studies, Stanford, California, April 7-8, 2003.
 Director, Science, Technology, and Society Program, Stanford University, 2003-2011
 Co-Director, Center for Interdisciplinary Study of Science and Technology, 2003-04
 Directorate, Center for Interdisciplinary Study of Science and Technology, 2004-2008
 Judge, Carnegie Foundation for the Advancement of Teaching, U.S. Professors of the Year Program, August, 2003
 Member and School of Engineering Representative, Center for Ethics Steering Committee, Stanford University, 2002-2007
 Workshop Leader, "Ethical Issues in Engineering," Stanford Center on Ethics, November 22, 2004
 Ethics Investigator, National Nanotechnology Infrastructure Network (NNIN), 2004-present.
 Faculty Lecturer, "Ethical and Social Implications of Nanotechnology," NSF/NNIN Short Course on Nanotechnology, Indian Institute of Technology, Kanpur, India, December 8-19, 2008
 Author, "SEI Question of the Month," <http://sei.nnin.org>, April 2011-
 Founder and Editor, <http://www.carlos-kleiber.com>, 2010-
 Member, Undergraduate Major Committee, Dept. of Management Science and Engineering, 2011-
 Member, M.S. Admissions Committee, Dept. of Management Science and Engineering, 2011-12, 2013-14.
 Member, Undergraduate Committee, Dept. of Management Science and Engineering, 2013-14.

LEGAL RESEARCH AND ANALYSIS

Sedgwick, Detert, Moran, and Arnold, San Francisco, CA

1. *Brown and Williamson Tobacco Corp. v. Regents of the University of California and Does 1-10* (1995)
2. *City and County of San Francisco and the People of the State of California v. Philip Morris, Inc., R. J. Reynolds Tobacco Co., Brown and Williamson Tobacco Corp., B. A. T. Industries P. L. C., Lorillard Tobacco Co., Liggett Group, Inc., the Council for Tobacco Research – U.S.A., Inc., and the Tobacco Institute, Inc.* (1996)
3. *California Department of Motor Vehicles v. Chrysler Corporation* (1996)

Morrison and Foerster, Los Angeles, CA

1. *El Sereno Neighborhood Action Committee, et al. v. California Transportation Commission, et al.* (1997)

Defense Lawyers Research Institute, Annual Meetings, San Francisco, CA, Panelist, Session on "Risk, Ethics, and Biomedical Innovation," (1998)

SELECTED COURSES (number of times taught as of June 2014)

Science, Technology, and Contemporary Society (43)
 Ethics and Public Policy (34)
 Ethics, Science, and Technology (14)
 Ethical Issues in Engineering (17)
 Technology in Contemporary Society (15)
 Environmental Ethics (9)

Human Values and Technological Society (7)
Work, Technology, and Society (15)
Western Culture and Technology: the Modern Period (6)
Senior Colloquium on Science, Technology, and Society (4)
Ethical Issues in Civil Engineering (3)
Ethics, Technology, and International Relations (2)
Research Ethics for Engineers and Scientists (3)
Ethical Issues in Mechanical Engineering (1)

Last revised: 6/3/14.