Jane Maienschein

August 2026

Title:	University Professor, Regents Professor, President's Professor, and Parents Association Professor
Address:	Center for Biology and Society School of Life Sciences Arizona State University Tempe, Arizona 85287-4501
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Education:

Massachusetts Institute of Technology 1968-1969
Yale University, B.A. 1972, History, the Arts, and Letters (with honors)
Indiana University, M.A. 1975; Ph.D. 1978, History and Philosophy of Science, Zoology Minor

Professional Positions:

American Association for the Advancement of Science, Historian and Advisor, 2026-present
Marine Biological Laboratory: Fellow, 2016-present; Adjunct Senior Scientist, 2009-2016; Director, HPS Program, 2011-2013 and History Project 2013-present
Arizona State University: Director, Center/Program for Biology and Society, 2003-present; School for the Future of Innovation in Society, Fellow, 2016-present; Distinguished Global Futures Scientist 2021-present formerly Distinguished Sustainability Scientist 2016-2021); Lincoln Center for Ethics Affiliated Faculty, 2016-2025; Honors Advisor and Faculty 1996-present; Chair of Philosophy Department 1991-1996; Professor, Philosophy and Zoology/Biology 1990-2003; Associate Professor, Philosophy and Zoology, 1988-1990; Associate/Assistant Professor, Philosophy, 1981-1988; Visiting Assistant Professor, Philosophy and Humanities, Spring 1981
University of Arizona College of Medicine-Phoenix, in partnership with Arizona State University, Professor, Biomedical Sciences Core Faculty. 2007-2010
Senior Fellow, Dibner Institute for the History of Science and Technology, Spring 2002
Congressional Fellow/Senior Science Advisor to Congressman Matt Salmon and Special Assistant to ASU's President, January 1997-December 1998
Stanford University, Visiting Associate Professor, History of Science, Winter and Spring, 1987
Harvard University, Visiting Scholar, History of Science, 1983-1984
Dickinson College, Assistant Professor, History of Science, 1978-Fall 1980

Awards and Honors:

Inter/National:
American Academy of Arts and Sciences, Elected Member, 2026
Sarton Medal, History of Science Society, 2024
Joseph H. Hazen Education Award for Embryo Project, History of Science Society, 2018
David L. Hull Prize, International Society for History, Philosophy, and Social Studies of Biology, 2015
AAAS, Featured Member: http://membercentral.aaas.org/blogs/member-spotlight/jane-maienschein-shows-how-science-works-examining-its-history, 2014
Arizona Professor of the Year, CASE and Carnegie Foundation for the Advancement of Teaching, 2010
Independent Publisher's Book Award, one of 2 finalists for Science Books, 2004
Association for Women in Science Fellow, 2004
Plymouth State University, Honorary D. Sci, 2003
Joseph H. Hazen Education Prize, History of Science Society, 2000
American Association for the Advancement of Science Fellow, 1996
Invited Named Lectures:
Burian-McNabb Lecture, "Thinking about regeneration: why do we think we want it?," Virginia Tech

University, 2023
Joseph H. Hazen Lecture, New York Academy of Sciences, 2018
Martin Benjamin Distinguished Lecture, Michigan State University, 2017
John Templeton Visiting Lecturer, "Regenerative Medicine in Historical Context," UCSB, 2007
Fulton Lecturer, History of Medicine Society, Yale University 2004
Sheila Counce Lecture, Duke University Medical School, 1996
Thomas S. Hall Lecture, Washington University, 1996
Sarton Lecturer, AAAS/History of Science Society, 1996
Dibner Visiting Historian of Science Lecturer, History of Science Society, 1994-1995

ASU:

Professor of Impact Award, 2023
Faculty Women's Association, Outstanding Faculty Mentor Award, 2019
University Professor, 2015
Last Lecture: "Will Stem Cells Make us Smarter, or Live Longer, or What?," 2009
President's Professor, 2007
Gary S. Krahenbuhl Difference-Maker Award, 2006
Distinguished Teaching Academy, Founding Fellow, 2005
ASU "Featured Faculty," January 2005
Regents Professor, 2002
Honors College Outstanding Mentor Award, 2002 (first recipient)
Alumni Association Faculty Achievement Award, 2001
Parents Association Outstanding Professor 2000 (named chair)
Alumni Association Outstanding Teaching Award, College of Liberal Arts and Sciences, 1999
Distinguished Faculty Award, College of Liberal Arts and Sciences, 1998
Certificate of Appreciation, Disability Resources for Students, various
Golden Key Outstanding Professor Award, 1992
Zebulon Pearce Quality Teaching Award, 1983

Grants and Fellowships:

Webster Foundation, PI with Karl Matlin, "History of Biology at the MBL," multiple 2015- present
NSF, with Mary Elting, Saad Bhamla, Fred Chang, Scot Coyle, Aaron Dinner, and Jerry Honts, "Collaborative Research: Understanding and Controlling Force Generation by a Centrin-based Contractile System," 2023-2027 (PI for MBL grant)
NSF, co-PI with Fred Chang, UCSF, "Collaborative Research: Regulation of Nuclear Size," 2022-2025
James S. McDonnell Foundation, co-PI with Kate MacCord, "Understanding Regeneration across Scales," 2019-2025
NSF, PI with Karl Matlin and Manfred Laubichler, "Synthetic Cells and Rules of Life in Historical, Philosophical, and Social Contexts," 2020-2023
NSF, with Mary Elting, Saad Bhamla, and Fred Chang, "Collaborative Research: CYBORG cells: Modular integration of synthetic organelles into living cells," 2019-2023 (PI for ASU/MBL grant)
NSF, PI with Abraham Gibson and Manfred Laubichler, "Understanding Biological and Social Intersections around Ideas of Cooperation, 1919-1939," 2017-2020
James S. McDonnell Foundation, PI Planning Grant for "Putting History and Philosophy of Science to Work with the Life Sciences," 2016; followed by Pilot Grant, 2016-2019
NSF Ideas Lab Participant on Synthetic Cells, 2019
NSF, co-PI with Manfred Laubichler as PI, Research Coordinated Network "Mapping Authorities and Ontologies," 2017-2023
Institute for Humanities Research, ASU, "Reproductive Heath Arizona," 2016
NSF, PI with Manfred Laubichler and Jonathan Gitlin (through the MBL), "New Approaches to Interpreting the Development of Science at the Marine Biological Laboratory," 2014-2017 (plus supplement for science communication; plus supplement for adding course modules)
NSF, PI "Data Management and Data Sharing Workshop for Science and Technology Studies," 2014-2016

NSF, co-PI with Ben Minteer (PI) and James Collins, "Enclosing Nature: The Historical, Ethical, and Scientific Evolution of Zoo and Aquarium Conservation," 2013-2018
Carnegie Humanities Initiative Fund, PI "MBL History Project," 2015
Carnegie Humanities Initiative Fund, PI with Ben Minteer, "Zoo and Aquarium Ethics," 2015.
NSF, co-PI with Manfred Laubichler, Dissertation Improvement Grant for Erick Peirson, 2013-2015
NSF, PI "INSPIRE: A Digital HPS Infrastructure for Understanding Biodiversity," 2012-2015
NSF, PI "SGTR: The Embryo Project Training and Research," 2010-2015
NSF, PI with Manfred Laubichler, Dissertation Improvement Grant for Lijing Jiang, 2013-2014
Mercator Foundation, co-PI Manfred Laubichler and Robert Page as PIs, "Global Classroom: Sustainable Cities – a Contradiction in Terms?," faculty participant and research leader, 2012-2015
NSF, PI "Establishing an STS Informatics Infrastructure and Training Program," 2011-2014
NSF, PI "Understanding Agents of Scientific Change," plus 2 supplements 2009-2011
NSF, co-PI "History and Philosophy of Ecology," (2009-2011; co-PI with Andrew Hamilton PI and David Steffes co-PI)
NSF, PI "Understanding Agents of Scientific Change: the case of Embryo Research" (2007-2011; PI with Manfred Laubichler, Gary Marchant, and Daniel Sarewitz as co-PIs)
Howard Hughes Medical Institute co-PI (with Ronald Rutowski, PI) for Undergraduate Biology Education and Research (2006-2010)
ASU grants PI with Manfred Laubichler from Vice President for Research, School of Life Sciences, College of Liberal Arts and Sciences, and Institute for Humanities to support the Embryo Project
National Science Foundation PI (with Kristin Johnson), Postdoctoral Fellow 2004-2006
Greenwall Foundation, PI "Gordon Conference in Science and Technology Policy," 2004
NSF, PI "Gordon Conference in Science and Technology Policy," 2004
NSF PI with Joan McGregor, "History, Philosophy, and Social Studies of Science in the Public Realm," Workshop, 2003-2004
Dibner Institute for the History of Science and Technology, PI with John Beatty and James Collins, History of Biology Seminar at the Marine Biological Laboratory, Woods Hole, MA, 1987-2006
Howard Hughes Medical Institute co-PI with James Collins, PI, for Undergraduate Biology Education and Research (1998-2002)
NSF, PI "History and Philosophy of 20th Century Developmental Biology" (1995-2000)
NSF PI with Garland Allen and John Beatty, "History of Biology Laboratory" for Dibner History of Biology Seminar (1996-1998)
History of Science Society, PI Dibner Postdoctoral position for ASU (1996-1998)
NSF, PI "Workshop on Biology and Law" (1994-1995); Supplement (1995-1997)
ASU, PI ASH Grant, 1990-1991
NSF, PI "The Coming of Age of American Biology," 1988
ASU, CLAS Summer Grant, 1985, 1986, 1989
ASU, Travel Mini-Grant, 1985, 1986, 1989, 1990
NSF, PI "Editing the *Biological Lectures*," 1985
NSF, PI "Developmental Biology in America, Circa 1900" 1983-1984
ASU, Faculty Grant-in-Aid 1982, 1983
NSF, PI "The Development of an American Program in Embryology"1981-1983
NSF, PI "Emergence and Acceptance of American Experimental Embryology" 1979-1980
Dickinson College Faculty Research Grants 1978, 1979, 1980
NSF Pre-doctoral Fellowship 1976
Josiah Macy Jr. Foundation Fellowship 1974-1978
Smithsonian Institution Predoctoral Internship 1974
Indiana University Departmental Assistantship 1973-1974
Indiana University Fellowship 1972-1973
Yale University Fellowship for study of history of art and German, Germany 1971

Publications:
Websites:

embryo.asu.edu The Embryo Project Encyclopedia
history.archives.mbl.edu The Marine Biological Laboratory History Project
hpsrepository.asu.edu A digital HPS repository
https://cbs.asu.edu/people/maienschein

Exhibits:

"Seeing Cells in Life," Exhibit at the Marine Biological Laboratory Library and online, 2023: https://www.mbl.edu/research/research-centers/eugene-bell-center/featured-projects/seeing-cells-exhibit/seeing-cells-life

"Seeing Life," Marine Biological Laboratory Library and online, 2024: https://www.mbl.edu/about/history-archives/seeing-life-exhibit

Both with video accompaniment added 2025 comics added 2026

Book Series Editor:

University of Chicago Press MBL Series Editor, 2017-present

Books:

With Kate MacCord, *What is Regeneration?* (University of Chicago Press, March 2022)

Embryos Under the Microscope: Diverging Meanings of Life (Harvard University Press, 2014)

Whose View of Life? Embryos, Cloning, and Stem Cells (Harvard University Press, 2003; paperback 2005. Finalist for Independent Publishers Award). Arabic Translation, 2014

Transforming Traditions in American Developmental Biology (Johns Hopkins University Press, 1991)

100 Years Exploring Life. An Autobiography of the Marine Biological Laboratory (Jones and Bartlett Press, 1989)

Edited Volumes:

Why Study Biology by the Sea?, with Karl Matlin and Rachel Ankeny (University of Chicago Press, 2020)

The Ark and Beyond: The Evolution of Zoo and Aquarium Conservation, with Ben Minteer and James Collins (University of Chicago Press, 2018)

Visions of Cell Biology: Reflections on Cowdry's General Cytology, with Karl Matlin and Manfred Laubichler (University of Chicago Press, 2018)

Form and Function in Evo-Devo, with Manfred Laubichler (Cambridge University Press, 2009)

From Embryology to Evo-Devo: a History of Evolutionary Development, with Manfred Laubichler, (MIT Press, Dibner Institute series, 2007)

The Department of Embryology. Volume V of Centennial History of the Carnegie Institution of Washington, with Marie Glitz and Garland Allen (Cambridge University Press, 2004)

Biology and Epistemology, with Richard Creath (Cambridge University Press, 2000)

Biology and the Foundations of Ethics, with Michael Ruse, (Cambridge University Press, 1999)

Crossing the Borderlands: Biology at Chicago, special issue of Perspectives on Science, with Gregg Mitman and Adele E. Clarke (Chicago: University of Chicago Press, 1993)

The Expansion of American Biology, with Keith Benson and Ronald Rainger, (Rutgers University Press, 1991)

The American Development of Biology, with Ronald Rainger and Keith Benson, (University of Pennsylvania Press, 1988); republished in paperback (Rutgers University Press, 1991)

Defining Biology. Lectures From the 1890s, (Harvard University Press, 1986)

"Reflections on Ecology and Evolutionary Biology," with James Collins and John Beatty, *Journal of the History of Biology*, special issue,(1986) v.19 #2

"Introduction" and editing for L. J. Blyakher's *History of Embryology in Russia* (Smithsonian Institution, 1982)

Articles:

With Melinda Fagan, "Theories of Biological Development," *Stanford Encyclopedia of Philosophy*, Fall 2022. Substantive Revision published 29 August 2026.

With Kate MacCord, "Regeneration," in Sven-Ove Hansson, editor, *Comprehensive Philosophy of Science.* (Elsevier, 2026). doi:10.1016/B978-0-443-40622-5.00034-7

With S. Terrell Jinson and Manfred Laubichler. "Navigating the Boundaries of Molecular Cell Biology: A Computational Study on Günter Blobel's Idea of Protein Topogenesis" *History and Philosophy of the Life Sciences.* 10 June 2026. https://doi.org/10.1007/s40656-026-00732-7

"Biostasis: Historical Context," *Proceedings of the American Philosophical Society* (2025) 166: 90-101.

With Kate MacCord, "What is Regeneration? Reply by the Authors," *Studies in the History and Philosophy of Science* (2024) 104: 12-13.

With Kate MacCord, "Studying Regeneration Through History as a Way of Moving Forward," *Journal of the History of Biology* (2024) 57: 5-15.

"The Camouflaged Metaphysics of Embryos," *Issues in Science and Technology* April 27, 2023: https://issues.org/metaphysics-embryos-dobbs-abortion-maienschein/

"Garland Allen's Last Book Project," *Journal of the History of Biology* (https://doi.org/10.1007/s10739-023-09726-8-2023)

"Everett Mendelsohn at the MBL," *Journal of the History of Biology* (2023) 56: 629-634.

With Melinda Fagan, "Theories of Biological Development," *Stanford Encyclopedia of Philosophy*, Fall 2022

With Steve Elliott and Kate MacCord, "Help with Data Management for the Novice and Experienced Alike, in Grant Ramsey and Andrea De Block, editors, *The Dynamics of Science: Computational Frontiers in History and Philosophy of Science.* University of Pittsburgh Press, 2022

With Kate MacCord, "Explaining Regeneration: Cells and Limbs as Complex Living Systems, Learning from History," *Frontiers in Cell and Developmental Biology*, 2021: https://doi.org/10.3389/fcell.2021.734315

With Kate MacCord, "The Historiography of Embryology and Developmental Biology," in Michael Dietrich, Mark Borello, and Oren Harman, editors, *Handbook for the History of Biology* (Springer, 2021). Online first: https://doi.org/10.1007/978-3-319-74456-8_7-1.

"Why Have Biologists Studied at the Seashore? The Woods Hole Marine Biological Laboratory," in Karl Matlin, et al., editors, *Why Study Biology by the Sea?*, (University of Chicago Press, 2020).

With Abraham Gibson and Manfred Laubichler, "Computational History and Philosophy of Science," *ISIS* (2019) 110: 497-501.

With Manfred Laubichler and Jürgen Renn, "Computational History of Knowledge: Challenges and Opportunities," *ISIS* (2019) 110: 502-512.

With Kate MacCord, "Philosophy of Biology: Understanding Life at Different Scales, *eLife* 8 (March 13, 2019): https://elifesciences.org/articles/46569.

With Kate MacCord, "The Marine Biological Laboratory," *eLS* (John Wiley and Sons, 2018). Online publication. doi 10.1002/9780470015902.a0027989

"History and Philosophy of Science Engaging the Public," in Françoise Baylis and Alice Dreger, editors, *Bioethics in Action* (Cambridge University Press, 2018).

"Changing Ideas about Cells as Complex Systems," in Karl Matlin, Jane Maienschein, and Manfred Laubichler, editors. *Visions of Cell Biology: Reflections on Cowdry's* General Cytology (University of Chicago Press, 2018), pp. 15-45.

"Cell Lineages in Ontogeny and Phylogeny," in Brian K. Hall and Sally A. Moody, editors, *Cells in Evolutionary Biology: Translating Phenotypes into Genotypes -- Past, Present, Future.* CRC Press, 2018, pp. 51-70.

With Kate MacCord, "Teeth at the intersection of Cells, Development, and Evolution," in Richard Delisle, editor, *The Darwinian Tradition in Context: Research Programs in Twentieth-Century Evolutionary Biology* (Springer, 2017), pp. 289-308.

With Kate MacCord, "Changing Conceptions of Human Nature," in David H. Guston, Ed Finn, and Jason Scott Robert, editors, *Frankenstein Annotated for Scientists, Engineers, and Creators of All Kinds* (MIT Press, 2017), pp. 215-221.

"The First Century of Cell Theory: from Structural Units to Complex Living Systems," *Vienna Circle*

Institute Yearbook, 2017: 43-54.

"Garland Allen, Thomas Hunt Morgan, and Development." *Journal of the History of Biology* (2016) 49: 587-601. (online first October 2015)

"Embryos, Microscopes, and Society," *Studies in History and Philosophy of the Biological and Biomedical Sciences* (2016) 57: 129-136

"Expertise and the Roles of the Academy" in Steve Olson, editor, "The National Academy of Sciences at 150: Biology and Public Policy, http://www.pnas.org/content/111/Supplement_2/9327.full. 2015

"Is There Anything New About Astrobiology and Society?," in Stephen J. Dick, *Astrobiology and Society* (Cambridge University Press, 2015), pp. 249-262

"Understanding Embryos in a Changing World: the Case of Philosophers and Historians Engaging Science," *Erkenntnis* Online 16 October 2013; (2014) 79: 999-1017

With Manfred Laubichler, "Exploring Development and Evolution on the Tangled Bank," in Paul Thompson and Denis Walsh, editors, *Evolutionary Biology: Conceptual, Ethical, and Religious Issues* (Cambridge University Press, 2014), pp. 151-171

"Stem cell research utilizing embryonic tissue SHOULD be conducted," with response, in Arthur Caplan and Robert Arp, editors, *Contemporary Debates in Bioethics* (Wiley-Blackwell, 2014), pp. 237-247 and "Reply" 259-260

"Finding Goodness Among Ought and Is Debates in Stem Cell Research," in Victorio Hösle, editor, *Dimensions of Goodness* (Cambridge Scholar Publishers, 2013), pp. 225-242

With Manfred Laubichler and Juergen Renn, "Computational Perspectives in the History of Science: To the Memory of Peter Damerow," *Isis* (2013) 104:119-130

With Manfred Laubichler, "Developmental Evolution," in Michael Ruse, editor, *Darwin Encyclopedia* (Cambridge University Press, 2013), pp. 375-382

With Manfred Laubichler, "Charles Gillispie in the Digital Age," in Jed Buchwald, editor, *Charles Gillispie: A Master of Science History* (Springer, 2012), pp. 37-45

"History and Philosophy of Science at Work: Making Regenerative Medicine Research Better," in Seymour Mauskopf and Tad Schmaltz, editors, *Integrating History and Philosophy of Science: Problems and Prospects* (Springer, 2012), 201-220

"Human Dimensions of Biology," in William Sims Bainbridge, editor, Leadership in Science and Technology (Sage Publications, 2012), pp. 504-511

"'Organization' as Setting Boundaries of Individual Development," *Biological Theory* (2011) 6: 73-79

"Why Do Stem Cells Create Such Public Controversy?," *Spontaneous Generations* (2011) 5: 27-35

"Regenerative Medicine's Historical Roots in Regeneration, Transplantation, and Translation," *Developmental Biology* (2011) 358: 278-284

With Karen Wellner, "Competing Views of Embryos for the Twenty-First Century: Textbooks and Society," *Science and Education* (2011): 1-13

"Ross Granville Harrison (1870–1959) and Perspectives on Regeneration," *Journal of Experimental Zoology B* (2010) 314: 607-615

"The Embryo Project: An Integrated Approach to History, Practices, and Social Contexts of Embryo Research," with Manfred Laubichler, *Journal of the History of Biology* (2010) 43: 1-16

"Politics and Biology," with Manfred Laubichler, *Encyclopedia of Life Sciences* (2010)

"What is a Healthy Embryo and How Do We know?," with Jason Robert, in Jeffrey Nisker, editor, *The 'Healthy' Embryo: Social, Biomedical, Legal and Philosophical Perspectives* (Cambridge University Press, 2010), 1-15

"The Embryo Project and the Emergence of a Digital Infrastructure for History and Philosophy of Science," with Manfred Laubichler and Grant Yamashita. *Annals of History and Philosophy of Science* (2009 published; 2007 issue) 12: 79-96

"Evolution and Society," in Michael Ruse and Joseph Travis, editors, *Evolution: The First Four Billion Years* (Harvard University Press, 2009), pp. 330-347

"Cloning and Stem Cell Debates in the Context of Genetic Determinism," *Yale Journal of Health Policy, Law, and Ethics* (2009) 9 Supplement: 565-584

"Controlling Life: from Jacques Loeb to Regenerative Medicine," *Journal of the History of Biology* (2009) 42: 215-230

"Regenerative Medicine in Historical Context," *Medicine Studies: International Journal for the History, Philosophy and Ethics of Medicine & Allied Sciences* (2009) 1:33-40

"The Ethos and Ethics of Translation," with Mary Sunderland, Rachel Ankeny, and Jason Robert, *American Journal of Bioethics* (2008, with response to commentaries) 8: 43-51

"Evolution and Society," with Manfred Laubichler, in Michael Ruse and John Travis, editors, *Companion to Evolution* (Harvard University Press, 2008)

"Untangling Debates about Science and Religion," in Nathaniel Comfort, editor, *The Panda's Black Box: Opening up the Intelligent Design Controversy* (Johns Hopkins University Press, 2007), pp. 83-108

"Embryos, Cells, Genes, and Organisms. Reflections on the History of Evolutionary Developmental Biology," with Manfred Laubichler, in Roger Sansom and Robert N. Brandon, editors, *Integrating Evolution and Development, From Theory to Practice* (MIT Press, 2007), pp. 1-24

"What is an Embryo, and How do we Know?," in Michael Ruse and David Hull, editors, *Cambridge Companion to Philosophy of Biology* (Cambridge: Cambridge University Press, 2007), pp. 324-341

"The Endothelium in History," with Manfred Laubichler and William C. Aird, in William C. Aird, *The Endothelium: A Comprehensive Reference* (Cambridge University Press, 2007), pp. 5-21. And "Conclusion," pp. 1815-1816

"To Evo-Devo through Cells, Embryos, and Morphogenesis," in Laubichler and Maienschein, editors, *From Embryology to Evo-Devo: a History of Evolutionary Development* (MIT Press, 2007). And "Introduction" pp.1-12

"Systems Bioethics and Stem Cell Biology," with Jason Robert and Manfred Laubichler, *Journal of Bioethical Inquiry* (2006): 19-31

"Introduction," in Jane Maienschein, Marie Glitz, and Garland Allen, editors, *Embryology at The Carnegie Institution of Washington Department of Embryology, A History of Development, Reproduction, and Genetics* (Cambridge University Press, 2005): 1-20

"Epigenesis and Preformation," *Stanford Encyclopedia of Philosophy* (refereed online encyclopedia, http://plato.stanford.edu/entries/epigenesis, 2005)

"The Path to Experimental Embryology" as "Dall'embiologia sperimentale alla biologia della sviluppo," *storia della scienza (Istituto Della Enciclopedia Italiana, 2*004), VIII: 733-743

"Laboratories in Science Education: Understanding the History and Nature of Science," report prepared for the National Research Council Committee on High School Science Labs posted to: http://www7.nationalacademies.org/bose/HS_Labs_Resources.html (2004)

"Embryology, Evolution, and Ernst [Mayr]," *Ludus Vitalis* (2004) 12: 237-245

"Confidence Building: In What, for Whom, and Why?," *Jurimetrics* (2003) 44: 153-160

"Ontogeny, Anatomy, and the Problem of Homology: Carl Gegenbaur and the American Tradition of Cell Lineage Studies," with Manfred Laubichler, *Theory in Biosciences* (2003) 122: 194-203 (translated into Russian by I. Y. Popov, for U. Hossfeld, et al., editors, *Evolutionary Morphology: From Carl Gegenbaur to Present* (Elsevier, 2004)

"Biology and Society: Educating for the Future," with Allison Whitmer and Ronald Rutowski, *Journal for the Art of Teaching* (2002) 9: 22-36

"Innocent Reflections on Science and Technology Policy" *Technology in Society* (2002) 24: 133-143

"Advocating the History of Science," in Garland Allen and Roy MacLeod, editors, *Science, History,and Social Activism* (Kluwer Academic Publishers, 2002), pp. 23-36

"What's in a Name: Embryos, Clones, and Stem Cells," *American Journal of Bioethics* (2002) 2:11-18; "target" article (2001), with responses

"On Cloning: Advocating History of Biology in the Public Interest," *Journal of the History of Biology* (2001) 34: 423-432

"Darwinismus und Entwicklung," in Uwe Hossfeld and Rainer Bromer, editors, *Darwinismus und/als Ideologie* (Verlag fur Wissenschaft und Bildung, 2001): 93-107. Translated from English

"Why Study History for Science?," *Biology and Philosophy* (2000) 15: 339-348

"Competing Epistemologies and Developmental Biology," in *Biology and Epistemology*,

Richard Creath and Jane Maienschein, editors, (Cambridge University Press, 2000), pp. 122-137
"Diversity in American Biology," *History and Philosophy of the Life Sciences* (1999) 21: 35-52
"Libbie Hyman at the University of Chicago," American Museum *Novitate* (1999): 25-32
"Biology and Law: Challenges of Adjudicating Competing Claims in a Democracy," with James Collins and Daniel Strouse, report for National Science Foundation, 1997. Revised version in *Jurimetrics* (1998): 151-181
"The One and the Many: Epistemological Reflections on the Modern Human Origins Debate" in G. A.Clark and C. W. Willermet, eds, *Conceptual Issues in Modern Human Origins* Research, (Aldine de Gruyter Publishers, 1997), pp. 413-422
"Changing Conceptions of Organization and Induction," *American Zoologist* (1997) 37:220-228
"Pattern and Process in Early Studies of Arizona's San Francisco Peaks," *Bioscience* (1994): 479-485
"It's a Long Way from *Amphioxus*" Anton Dohrn and Late Nineteenth Century Debates about Vertebrate Origins" *History & Philosophy of the Life Sciences* (1994) 16: 465-478
"Cutting Edges Cut Both Ways," *Biology and Philosophy* (1994) 9: 1-24
"Why Collaborate?" *Journal of the History of Biology* (1993) 26: 167-183
"The Gene," in Evelyn Fox Keller and Elisabeth A. Lloyd, editors, *Keywords in Evolutionary Biology* (Harvard University Press, 1992), pp. 122-127
"Epistemic Styles in German and American Embryology," *Science and Context* (1991) 4:407-427
"The Origins of Entwicklungsmechanik," in Scott Gilbert, editor, *A Conceptual History of Modern Developmental Biology* (Plenum Press, 1991), pp. 43-61
"T. H. Morgan's Regeneration, Epigenesis, and (W)holism," in Charles Dinsmore, editor, *History of Regeneration Research* (Cambridge University Press, 1991), pp. 133-149
"From Presentation to Representation in E. B. Wilson's *The Cell" Biology and Philosophy* (1991) 6: 227-254
"Cytology in 1924: Expansion and Collaboration," in Keith Benson, et al., editors, *The American Expansion of Biology* (Rutgers University Press, 1991), pp. 23-51
"Cell Theory and Development," in G. N. Cantor, et al., eds., *Companion to the History of Modern Science* (Routledge, 1990), pp. 357-373
"T. H. Morgan as Invertebrate Embryologist," *International Journal of Invertebrate Reproduction and Development* (1989) 15: 1-6
"Whitman at Chicago: Establishing a Chicago Style of Biology?," in Rainger, Benson, and Maienschein, editors, *The American Development of Biology* (1988), pp. 151-182
"Why Do Research at the Seashore?," *American Zoologist* (1988) 28: 15-25
"Arguments for Experimentation in Biology," *PSA 86* (1987): 180-195
"H. N. Martin and W. K. Brooks: Exemplars for American Biology*?" American Zoologist* (1987) 27: 773-783
"Heredity/Development in the United States, Circa 1900," *History and Philosophy of the Life Sciences* (January 1987) 9: 77-91
"Physiology, Biology, and the Advent of Physiological Morphology," in *Physiology in the American Context, 1850-1940*, ed. Gerald L. Geison (Bethesda, Maryland: American Physiological Society, 1987), pp. 177-207
"Preformation or New Formation -- or Neither or Both?" in *A History of Embryology*, T. J. Horder, et al., editors, (Cambridge University Press, 1985), pp. 73-108
"History of Biology," *Osiris,* special volume on "Historical Writing on American Science" (2nd Series, 1985) 1: 147-162
"Agassiz, Hyatt, Whitman and the Birth of the M.B.L.," *Biological Bulletin*, (June 1985) 168 Suppl: 26-34
"First Impressions: American Students At Naples," *Biological Bulletin*, (June 1985) 168 Suppl: 187-191
"Early Struggles at the Marine Biological Laboratory over Mission and Money," *Biological Bulletin* (June 1985) 168 Suppl: 192-196
"What Determines Sex?: A Study of Converging Approaches," *Isis* (1984) 75: 457-480 (translated and republished in several forms).
"Experimental Biology in Transition: Harrison's Embryology, 1895-1910," *Studies in History of Biology*

(1983) 6: 107-127
"Don't Stop in Carlisle: Reactions to Philadelphia's 1793 Yellow Fever Epidemic," *John and Mary's Journal* (1982): 3-16
"Shifting Assumptions in American Biology: Embryology, 1890-1910," *Journal of the History of Biology* (Spring 1981) 14: 89-113
"Morphology and Modern Biology: Were the Americans in Revolt?" with Ronald Rainger and Keith Benson, *Journal of History of Biology* (Spring 1981) 14: 83-87
"Cell Lineage, Ancestral Reminiscence, and the Biogenetic Law," *Journal of the History of Biology* (1978) 11: 129-158

Essays, Editorials, and Reference Articles:

With Betty Smocovitis, "History of Science at the AAAS," *History of Science Society Newsletter* (2026)
With Susan Fitzpatrick, "Saving Science by the Sea," *Science* (2025): 390: 425
With Betty Smocovitis, "Remembering Michael Ruse," *Journal of Interdisciplinary Ethical Research* (2025) 1: 1 https://doi.org/10.4102/jier.v1i1.14
With Kate MacCord, "Forwards, Not Back," *Aeon* (10 October 2024) https://aeon.co/essays/regeneration-is-a-better-ideal-for-health-than-restoration
Essay Review "The Struggle of Parts Continues," *Current Biology* (2024): 34: R1-R2.
"Retrospective: Garland E. Allen III (1936-2023) *Science* 379: 1304.
With David Magnus, "In Memoriam: Garland Allen," *Bioethics Today*. February 20, 2023.
"Did You Know: That Blood has led the way to Regenerative Medicine?," *The Blood Project*, January 2022: https://www.thebloodproject.com/copy-did-you-know-14/
"The Page 99 Test: What is Regeneration?," https://page99test.blogspot.com/2022/10/jane-maienschein-and-kate-maccords-what.html
"Dead Fetuses are not Remains," *Slate/Future Tense*. May 31, 2019. https://slate.com/technology/2019/05/dead-fetus-burial-laws-personhood-indiana-texas.html
With Robert Cook-Deegan, "The Public Needs to Weigh in on Genetic Engineering," *Slate/Future Tense,* August 16, 2017. https://urldefense.proofpoint.com/v2/url?u=http-3A__www.slate.com_articles_technology_future-5Ftense_2017_08_the-5Fpublic-5Fneeds-5Fto-5Fweigh-5Fin-5Fon-5Fthe-5Fethics-5Fof-5Fgenetically-5Fengineering-5Fhumans.html&d=DwMFaQ&c=l45AxH-kUV29SRQusp9vYR0n1GycN4_2jInuKy6zbqQ&r=wuGPbCEXtHrCdagPdBK_s1vTtTA01ifCWN7sT12OfCo&m=_r5as8cdxfoTiAvjnOo7oOXJ8fNhzRhGGgL2YoDW-_E&s=TLmPMfn0rfPNGRN5oX98MSvDchMzXZoWzJk0S1JBtqU&e=
"Time, Impact, and the Need for Digital History and Philosophy of Science," *ISIS* (2016) 107: 344-345
"Regenerative Medicine" (pp. 936-939), "Embryonic Stem Cells" (pp. 1065-1068) and "History of Marine Stations" (pp. 647-650) in James Trefil, editor, *Discoveries in Modern Science* (Farmington Hills: Macmillan, 2014)
"How the realities of biology complicate the "personhood movement," *Slate/Future Tense* (June 10, 2014), with almost 1000 comments and 2,400 Facebook likes: http://www.slate.com/articles/technology/future_tense/2014/06/personhood_movement_chimeras_how_biology_complicates_politics.single.html
"Marine Biological Laboratory," "MBL Embryology Course," "*Biological Bulletin*," "MBL-WHOI Library," "Biological Lectures Delivered at the MBL," "Edmund Beecher Wilson," Embryo Project Encyclopedia: http://embryo.asu.edu, 2013
"David Hull as Ishkabibble President: Setting the Values," *ISHPSSB Newsletter*, 2011
"Reflections," Special Alumni Panel for 50th Anniversary, Indiana University HPS Department *Newsletter*, 2011
"Rethinking Sarton's Institute for History of Science and Civilization – Virtually," *Isis* (2009) 100: 94-102
"Eloge. Philip Pauly," *Isis* (2009) 100: 369-371
"Stem Cell Research," with Jason Scott Robert, *Dictionary of American History, Dynamic Reference* (2008)

"What Difference does History of Science Make Anyway?," with George Smith, *Isis* (2008) 99: 318-21
"How Can History of Science Matter to Scientists?" with Manfred Laubichler and Andrea Loettgers, *Isis* (2008) 99: 341-349
"Thomas Hunt Morgan," *New Dictionary of Scientific Biography* (2008)
"BODYWORLDS as Education and Humanism," with Richard Creath, *American Journal of Bioethics* (2007) 7: 26-27
"Development," with Manfred Laubichler, *New Dictionary of the History of Ideas* (Charles Scribners Sons, 2005), pp. 570-574.
"Human Embryos and the Language of Scientific Research," *American Journal of Bioethics* (2003) 4: 6-7
"Understanding Science and its Implications," *Kansas Law Review* (2003) 51: 303-306
"Thomas Hunt Morgan," *Encyclopedia of Evolution* (2002)
"Staffing Science Policy-Making," *Science* (2000) 290:1501 (read into Congressional Record, Senate of the 106th Congress, December 15, 2000)
"Old Wine in New Bottles," *Nature* (2000) 407:21
"Marine Biological Laboratory" and "Edmund Beecher Wilson" in *The History of Science in the United States: An Encyclopedia* (2000): pp. 1241-1245 and 2146-2151
"Who's in Charge of the Gene Genie?," *The World and I* (2000): 180-187
"Toward Neuroetho-evo-devo-ecology: one View of the Mountain," International Society for Neuro-ethology Newsletter (November 1999)
"Commentary: To the Future -- Arguments for Scientific Literacy," with Undergraduate Students, *Science Communication* (1999) 21: 75-87
"The Value of Practicing Practical History," *Endeavour* (1999) 23: 3-4
"Science, Political Literacy and the 105th Congress," *AWIS Newsletter* (1999): 26-27
"Edwin Grant Conklin," (3:330-332); "Ross Granville Harrison," (10: 219-221); "Clarence Edwin McClung," (14:883-884); "Henry von Peters Wilson" (23:582-583); and "Charles Otis Whitman" (23:273-275), *American National Biography* (1999)
"Scientific Literacy," with Undergraduate Students, *Science* (1998): 917
"History and Philosophy of Science in Action," History of Science Society Newsletter #4 (1998): 3
"Program Essay/AAAS 150th Anniversary Meeting, (1998)
"Introduction to the MBL's Second Century: Jacques Loeb," in Robert Barlow, et al., editors, *Centennial* Lectures (Harvard University Press, 1993), pp. 1-4
"Oscar Riddle," and "Nettie Stevens," *Dictionary of Scientific Biography* Supplement II (1990): 736-738 and 867-869
"Neurobiology a Century Ago at the Marine Biological Laboratory, Woods Hole," *Trends in Neurosciences* (1990) 13: 399-401
"Evaluating Science Through History," *Columbia History of Science Newsletter* (1988): 2-4
"Alfred Huettner," *Collecting Net* (August 1987): 4
"Pigeons, Visions, and An Ideal Station," *M.B.L. Science* (Summer 1985): 11-12
"Resources at the Marine Biological Laboratory," *Mendel Newsletter* (1984) 24: 4
"Crucial Experiment," "Development," "Developmental Mechanics," "Encapsulation," "Entelechy," "Epigenesis/Preformation," "Germ Layer Theory," "Induction," "Mosaic Theory of Development," "Metamorphosis," "Organizer," "Ovism/Animaculism," "Recombination," Oxford *Dictionary of the History of Science* (1981)
"C.O. Whitman at the M.B.L.," *Mendel Newsletter* (1976) 13:1-3

175+ Book Reviews in:

Annals of Science, Bioethics, Bioscience, British Journal for the History of Science, Choice, Current Biology, FASEB Journal, History and Philosophy of the Life Sciences, Isis, Journal of the History of Biology, Journal of the History of Medicine and Allied Sciences, Jurimetrics, Kennedy Institute of Ethics Journal, Nature, Nature Cell Biology, Notre Dame Philosophical Review, Perspectives in Biology and Medicine Philosophy of Publishing Research Quarterly, Quarterly Review of Biology, Science, SHARP,

Studies in History and Philosophy of the Biological and Biomedical Sciences, Trends in Ecology and Evolutionary Biology, Victorian Studies

Professional Activities:

Unpublished Professional Presentations

"Imaging and Imagining Cells through exhibits, videos, and comics," NSF collaboration, MBL meeting, 2026

"Helping Others See Cells," with Anna Guerrero, Center for Cellular Construction Symposium, 2026

Panelist, SEA Change Inclusion Summit, ASU, 2025

"Discussiong Organicism," and "Remembering Michael Ruse," ISHPSSB, 2025

"Rethinking Regeneration," ASU Regenerative Medicine Opening Speaker, with Kate MacCord, 2024

"Biostasis in Historical Context (and some Ethical Questions), American Philosophical Society annual meeting symposium, 2024

"Thinking about Regeneration Across Scales," Bell Center Symposium at the MBL, 2023

"Remembering Garland Allen," ISHPSSB meeting, 2023

"Examples of Computational Approaches to HPS," ISHPSSB meeting, 2023

"Regeneration: What Works, and How Do We know?," Mirabella ASU presentation, 2023

"Organoids Science and Ethics," Bioethics Breakfast Club with Karl Matlin, 2023

"Regeneration and Stem Cells: What's Real? What do we Know?," Mirabella, 2023

"Perspectives on Regeneration," History of Science Society panel discussion, 2022

With Kate MacCord, "What is Regeneration?," Midwestern University Medical School, keynote address for annual research conference, 2022

"Jacques Loeb and MBL Scientific Discovery," University of Chicago Graham School Course on "Scientific Discovery," 2022

"Seeing Cells Exhibit," Marine Biological Laboratory Trustees, 2022

"Talking about Abortion: Defining Terms of Debate," SciCom, University of Nebraska, 2022

"Finding History and Philosophy in Science: So What?," Workshop on Finding Philosophy in Science, ASU, 2022

Discussion of Regeneration Across Scales, Philosophy of Science Association virtual meeting, 2021

Discussion of Regeneration and Systems Thinking, History of Science Society virtual meeting, 2021

"Thinking about Regeneration," ISHPSSB, Cold Spring Harbor Laboratory online meeting, 2021

Panelist on "Publishing" and "Biology," Conference on "Science & Technology in the Long 20th Century," Purdue University, 2019

"Embryos and the Context of Life and Death," Rutgers University History Seminar, 2019

"Regeneration Across Scales," ISHPSSB, Oslo, 2019

"130 Years of Biology at the MBL," Northeastern Society for Developmental Biology meeting, 2019

"Embryos in History: Diverging Meanings of Life," University of California at Irvine, 2019

"History and Philosophy of Science Really Do Matter for Policy and Law," American Philosophical Association, Central Division meeting, 2019.

"History, Philosophy, and Regeneration Research," Philosophy in Biology and Medicine international workshop, Bordeaux, France, 2018.

"Embryos in the Public Eye: What do Historians, Philosophers, and Science Studies Scholars have to Add?," University of Oslo Science Studies Program, 2018

"In So Many Words: The MBL Convening Science Book Series," MBL Library, 2018

Panelist on "On Writing: Craft and Profession," History of Science Society meeting, 2017

"CRISPR in the Context of Developmental Biology: A Century+ of Engineering Life, Michigan State University, 2017

With Kate MacCord and Steve Elliott, "Research, Outreach, and Education Systems: The HPS Repository, Embryo Project, and MBL History Project, Philosophy of Science Association, 2016

Presentation to National Academy of Sciences Planning Committee on Gene Editing, Washington DC, 2015 (presented in absentia by Robin Lovell-Badge), Washington, DC, 2015

Contributor to "Historians of Science in the Public Sphere," History of Science Society meeting, 2015

Panelist for Joint Caucus for Socially Engaged Philosophy and History of Science evening panel, History of Science Society meeting, 2015

"A Century of Cells," ISHPSSB meeting, 2015

"What do Wound Repair, Chimeras, and Embryonic Stem Cells Have in Common?," Logic, Methology, and Philosophy of Science meeting, 2015

"Revisiting Cowdry's *General Cytology*. Looking Back to See Ahead," Cell Symposium, Marine Biological Laboratory, 2014 and follow up 2015

"Biology and Society at Arizona State," Michigan State University Vice President for Research Office, 2014

"How T.H. Morgan Misled Gar Allen about Development," Garland Allen Retirement Fest, Washington University, 2014

"Is there Anything New about Astrobiology and Society?," Library of Congress Astrobiology Conference, 2014

"Looking at Cells, Seeing Complex Systems," University of Vienna Philosophy Symposium for the Institute Vienna Circle, and &HPS meeting, 2014

"Thinking about Cells and Development," Harvard University Center for Vascular Biology Visiting Professor Series, 2014

"Evolutionary Developmental Biology and Michael Ruse," University of Toronto, 2014

"A History of Rich Collaboration: The University of Chicago and Marine Biological Laboratory," keynote address, MBL-University of Chicago retreat, keynote address 2014

"Looking at Cells Around 1900, Seeing Complex Systems," University of Chicago, 2014

"Biology in Public Policy," National Academy of Sciences 150th, 2013

"Embryos Under the Microscope, A History of Science in Society," York University, 2013

"What's Surprising about Stem Cell Research?," ISHPSSB, Montpellier, France, 2013

"Discussions of Digital HPS," Digital HPS meeting, Bloomington, Indiana, 2013

"Embryos Under the Microscope. Negotiating between Science and Society," Friends of Oak Ridge National Laboratory, 2013

"Understanding Embryos from Wilhelm Roux to Synthetic Biology Today," Workshop on the History of Biology, Indiana University, 2012

"Understanding Embryos in a Changing and Complex World," University of Cincinnati Conference on Socially Engaged Philosophy of Science," 2012

"Embryos in History and Society," University of Paris History and Philosophy of Science Institute, 2012

"Hans Driesch and Developing Organisms," Institute Vienna Circle 20th Anniversary Conference, 2011

"Reflections on David Hull: setting the values and vision," ISHPSSB meeting, 2011.

"Bringing Science to the Public: What can the Science Studies Scholar do?," Roundtable discussion, History of Science Society meeting, 2011

"Are Embryos what we thought they were? And How do we know?," Logic, Methodology, and Philosophy of Science Conference, Nancy, France, 2011

"Finding Goodness Among Ought and Is Debates in Stem Cell Research," Notre Dame Conference on Goodness, 2011

"From Epigenesis to Epigenetics and Back," University of Toronto, 2011

"Understanding Embryos, Changing Assumptions," &HPS Conference, 2010

"Competing Embryological Epistemologies: How do we study development?," History of Philosophy of Science Conference, Budapest, 2010

"History of the Endothelium," Gordon Research Conference on Vascular Biology and Endothelium, 2010

"Thomas Hunt Morgan's Vision for Science," Marine Biological Laboratory, 2010

"Stem Cell Science Challenging Society: Has it always been this way?," Texas Tech Symposium for Ronald Rainger, 2010

"What is an Embryo and How do we Know – or do We?," University of Western Ontario, Rotman Institute, 2010

"What is an Embryo and How do we Know?," University of California San Diego Science Studies Colloquium, 2010

"Embryos and Evolution: A History of Courting and Separation," University of Chicago Darwin Conference, 2009

"Developmental Biology and Stem Cells in the Context of Evolution," Boston University Darwin Symposium, 2009

"From Epigenesis to Epigenetics and Back," University of Toronto Darwin Conference, 2009

"Regenerative Medicine and Society: Translation, Transplantation, and Stem Cells in Historical Context," University of Wisconsin-Madison, 2009

"Regenerative Medicine in History: Ross Harrison at Yale," Yale University, 2009

"What's all the Fuss about Stem Cells?," Quinnipiac University, 2009

"Embryos in Evolution and History," University of Pennsylvania, Darwin Celebration, 2008

"On the Embryo Project," and "From Transplantation to Translation: Why History Matters in Stem Cell Research," Washington University Center for Humanities Lectures, 2008

"From Transplantation to Translational Stem Cell Research: Why History Matters for Knowing What Works," Duke University Philosophy Department Colloquium, 2008

Charles W. Bodemer Lecture in Medical Humanities and Ethics and "Embryology in History," University of Washington Medical Humanities and Ethics Series, 2008

"Embryos in Context," Washington University, 2008

"What is an Embryo and How do we Know?," Conference on the Healthy Embryo, University of Western Ontario, 2007

"What are Embryos: Why History Matters," University of Oklahoma, 2007

"Embryology in History," University of Vienna and the Konrad Lorenz Institute, 2007

"In the Beginning: Cloning as Transplantation," Max Planck Institute for the History of Science, Conference in the "Times of Cloning," 2007

"Where Biology Meets Society," all-day presentation with Jason Robert to Louisiana State University Law School and state judges, 2007

"From Transplantation to Translation: Stem Cells in History," Berkeley History of Science and Technology Colloquium Series, 2006

"The Development of the Model-Animal Paradigm in Experimental Biology," Sackler Symposium on "Neurosciences and the new Comparative Study of Human Nature," National Academy of Sciences, Irvine, 2006

"Why Galen didn't discover the Endothelium, but History Matters Anyway," Harvard University Medical School, Vascular Biology Seminar Series, 2006

"From Transplantation to Translation: Stem Cells in History," Friday Evening Lecture, Marine Biological Laboratory, 2006

"The Embryo Project: A Virtual Laboratory for Understanding Developmental Science and its Context," Distinguished Women Scientists Lecture, University of Minnesota, 2006

"From Transplantation to Translation: Stem Cells in History," University of Minnesota, 2006

"Embryos, Stem Cells, and Epistemology: how do we know what we know?," Cal State Northridge Philosophy of Biology Conference Invited Lecture, 2006

"Stem Cells in History," AAAS Annual Meeting, 2006

"Stem Cells, Values, and Society," University of Denver, Bridges to the Future Distinguished Lecture Series, 2006

"Embryos, Cloning, and Stem Cells in Context," University of Wyoming Distinguished Lecture Series, 2005

"Whose View of Life? Embryos, Cloning, and Stem Cells," University Lecture Series, Carnegie Mellon University, 2005

"Form and Function Start in the Egg," Werkmeister Conference on Form and Function, Florida State University, 2005

"Whose View of Life?," The Social and Cultural Implications of New Biomedical Technologies Conference, University of Missouri-Columbia, 2005

"Embryos, Stem Cells, and History: Oh My!," University of Chicago Conceptual Foundations of Science Lecture Series, 2005

"Publishing" and "Future Directions of Bioethics" panels at Future Directions in the History, Philosophy and Social Studies of Biology, San Francisco, 2004
"Do the History of Science and Medicine Really Matter?" Beaumont Medical History Club, Yale University Medical School
"Stem Cells at Yale before they were 'stem cells': Ross Harrison and the Embryological Tradition," Yale University Fulton Lecture, 2004
"The Social Life of Embryos," University of British Columbia, 2004
"Embryos at the United Nations: Competing Science, Competing Values," International Science Workshop, Georgetown University, 2004
"Embryos Through Times: Historical and Philosophical Reflections," University of Helsinki, 2004
"Embryos, Cloning, and Stem Cells in Perspective," Georgia Tech Science and Technology Seminar, 2004
"History of the Human Genome Project: How Many Helices do we need?," Genome Canada Ethics, Law, and Society Conference, 2004
"The Perils and Promise of Progress: DNA and the Human Genome," Flathead Valley Community College Distinguished Lecturer Series, 2004
"Understanding Life; Regulating Life," Georgetown University, 2004
"Embryos and Cloning in Perspective: The History of the Controversy," Fred Hutchinson Cancer Research Center and University of Washington Forum on Science, Ethic, and Policy, 2004
"Embryos Now and Then: Does the History Matter?," UCSD Science and Technology Studies Colloquium Series, 2004
"Jewish Biologists' Views on Evolution," response to session, Jewish Tradition and the Challenge of Evolution Conference, ASU, 2004
"History of Biology Today," Dibner Institute for the History of Science and Technology at MIT, 10th Anniversary Reunion, invited speaker, 2004
"Redefining Life: Reflections on Cloning, Stem Cells, and Genomics," New York Academy of Sciences, 2003
"Benchside Consultation: Developing a New Paradigm for Integrative Ethics and Biomedical Research?," American Society for Bioethics and Humanities, 2003
"Stem Cell History," Plurally Potent – Conference on Stem Cell Terminology, Stanford Center for Bioethics, 2003
"History of Biology Today and for Tomorrow," International Society for History, Philosophy, and Social Studies of Biology," 2003
"A Century of Stem Cells, Cloning, and Embryos," North Carolina State University, 2003
"Stem Cells and Cloning: What's the Fuss?," Washington University, 2003
"Form and Function Starts in the Egg," Conference on Form and Function, Barcelona, 2003
"Stem Cells, Cloning, and Embryos in the Public Eye," Georgetown University, 2003
"Ethics, Policy, and Biosciences," Susan T. and Charles E. Harris Visiting Lectureship, Cold Spring Harbor Laboratory, 2002
"Defending Cells in Developmental Biology," Dibner Institute Workshop, 2002
"Redefining Life: Historical and Philosophical Reflections on Cloning, Stem Cells, and Genomics," New York Academy of Sciences, 2002
"Defining Life," Dibner Institute for the History of Science and Technology, 2002
"Cells, Genes, Organisms, and Epistemology: Competing Strategies for Studying Life," Reichenbach Conference, Washington University, 2001
"How Should we Tell the Stories of Science?: Who Knows, Who Says, and Who Cares?," Friends of Oak Ridge National Laboratory, 2001
"From Embryology to Evo-Devo: Whatever Happened to Organisms?," Philosophy and Biology: Yesterday, Today, and Tomorrow Conference, Florida State University, 2001
"Promoting Interdisciplinary Thinking through Biology and Society," Society for Integrative and Comparative Biology, 2001
"On the Organism in Development and Heredity," History of Science Society meeting, 2000
"Embryology, Evolution, and Who Cares?: History of Science in the Public Interest," University of

Minnesota, 2000
"History of Biology in the Public Interest: Embryology, Epistemology, and Every (Wo)man," Notre Dame, Indiana University, Cornell, 2000
"Working With Congress: Why Bother?," AAAS Meeting, 2000
"Reflecting on the University of the Future," Society for Integrative and Comparative Biology, 2000
"Background to Neuroethology: Who, What, When, Where, Why, and So What?," Gordon Conference on Neuroethology, Oxford, 1999
"Why Study History?," Philosophical Problems in the Historiography of Science, Pittsburgh, 1998
"Practical History: Beyond Social Context," History of Science Society, 1998
"Who's Doing Good Science? -- Who Knows and Who Cares?," George Washington University, and ASU Geology Department, 1998
"Science in Congress, A Case of Competing Values," National Research Council, 1998
"Confessions of a Congressional Science Advisor: A Case of Competing Values," ASU AWIS, 1998
"Competing Epistemologies in Developmental Biology: HPS Visits Congress," University of Maryland, 1998
"To the Future: Arguments for Scientific Literacy," with 15 undergraduate students, AAAS, 1998
"In Defense of Organisms," International Society for the History, Philosophy, and Social Studies of Biology, 1997
"Why Molecules Aren't Everything: Competing Views of Good Science," keynote lecture for Molecular Biology Week, University of Missouri, Columbia, 1997
"A Century of Embryological Debates: Who's Doing Good Science?," UCSD Science Studies, Colloquium Series, 1997
"A Century of Debates About Development: Who's Doing Good Science?," Johns Hopkins University Philosophy Department Colloquium, 1997
"A Century of Debates about Development: Who's Doing Good Science?," Harvard University, 1997
"Making Choices in Embryology: Who's Doing Good Science?" UCLA, 1997
"A Century of Embryological Debates: What Should We Believe?," Hall Lecture, Washington University, 1996
"Diversity in American Biology, 1900-1940," Russian Academy of Sciences and University of St. Petersburg, 1996
"Changing Concepts of Development: A History of Competing Epistemologies," Cold Spring Harbor, 1996
Sheila Counce Lecture in History of Cell and Developmental Biology, Duke University, 1996
"Life on the Cutting Edge: Experimental Biology's Century of Progress?," Sarton Lecture, AAAS meeting, 1996
"From Field to Lab: Who's Doing Good Science?," keynote address, Columbia History of Science Group, 1996
"Competing Styles in Science: What Counts and Why in Developmental Biology," and "Out of the Field and Into the Lab," Texas Tech University, 1996
"Revisiting American Biology Revisited," comment on session, History of Science Society meeting, 1995
"Changing Notions of Good Science (or what do History and Philosophy have to do with `real' science?)," Botany Department Colloquium, Arizona State University, 1994
"Embryology and Epistemology," University of Chicago, Conceptual Foundations of Science Program, 1994
"Reflections on the Development of Developmental Biology," MIT-Mellon Conference, 1994
"Cutting Edges Cut Both Ways: Why Biology Embraced Cutting Edges and at What Cost?" New York Academy of Sciences, 1994
"Out of the Woods and Into the Laboratory," University of Florida, Frontiers of Science Series, 1994
"Styles of Biology," International Society for History, Philosophy, and Social Studies of Biology, Brandeis, 1993
"Beyond Theory and Experiment: Why Epistemology has Driven Development Biology," Philosophy

Colloquium on Evolutionary Patterns, University of Cincinnati, 1993
"What Really Happened When T.H. Morgan Changed His Mind About Mendelism?," workshop on "Biology in Action," Radford University, 1993
"The Marine Biological Laboratory: A Century of Challenges," American Association for the Advancement of Science meeting, 1993
"Which Came First: The Microscope or the Egg?," Grinnell College, 1992
"Libbie Hyman at Chicago," American Society of Zoologists meeting, Atlanta, Georgia, 1991
"Was There a Chicago Style of Biology?," University of Chicago Centennial Conference, 1991
"Cutting Edges Cut Both Ways: A Look at Biology at the Turn of the Century," Minnesota Seminar in the History of Science and Technology, University of Minnesota, 1991
"Cell and Developmental Biology at the Cutting Edge, circa 1900," Mellon Workshop, MIT, 1991
"Constructing Biological Knowledge through Collaboration," introductory paper and comment, History of Science Society, 1991
"On Constructing Biological Knowledge," comment on session at University of Oklahoma Centennial Conference, "Representing and Understanding the Natural World," 1991
"The Professionalization of Botany and the Emergence of Modern Biology," comments on History of Science Society session, 1988
"Experimentation in Biology: A Revolutionary Advance?" and "Heredity/Development circa 1900: The Roots of Specialization," University of California, Davis, History and Philosophy of Science Colloquium Series, 1987
"The Coming of Age of Biology in America," Stanford University History of Science Colloquium Series, 1987
"Testing Theories of Scientific Change: Developmental Biology," Conference on Testing Theories of Scientific Change, Blacksburg, Virginia, 1986
"Heredity, Development, and the Emergence of American Biology," Washington University Biology Seminar Series, 1986
Columbia History of Science Group, comment on Frederick Churchill, "Transformation of Heredity," 1986
"Methods in History of Modern Biology," Tremont Research Institute, San Francisco, 1985
"From Francis Bacon to Francis Crick: The Rise of Experimental Science," and "Heredity and Development: Unnatural American Divorce?" University of Colorado, Boulder, History and Philosophy of Science Colloquium Series, 1985
"Experimentation in American Biology," Columbia History of Science Group, Seattle, 1985
"Was Experimentation the Obvious Choice for American Biology?" AAAS Southwest Division meeting, 1985
"20th Century Embryology and Genetics," History of Science Society meeting, session chair, 1984
"Archives for the Science Historian," Marine Science Librarians' annual meeting, 1984
"A Marine Laboratory for America: Early History of the M.B.L.," Marine Biological Laboratory, 1984
"The Search for a Science of Biology," Harvard University, 1984; Virginia Polytechnic Institute and State University, 1984
"The Changing Focus of Biology in America," History of Science Society meeting, 1983
"Problems of Sexual Development: Conflicting Approaches, 1891-1910," AAAS national meeting, 1982
"Shifting Assumptions in American Biology," Princeton University History of Science Colloquium Series, 1981
"American Biology Comes of Age," Johns Hopkins University; Arizona State University Zoology Colloquium Series, 1981
"American Embryology at the Turn of the Century: Evolution or Revolution?" Woods Hole History of Science Series, 1980
"Problem-Solving and Theory Construction in Twentieth Century Science," Philosophy of Science Association meeting, commenter 1980
"Problems of Individual Development: Experimental Embryological Morphology," History of Science Society meeting, 1979

"Ross Harrison's Crucial Experiment," Joint Atlantic Seminar for the History for Biology, 1978
"Ross Harrison and the Origins of American Experimental Embryology," History of Science Society meeting, 1976

Seminars, Conferences, and Meetings Organized:

MBL-ASU History of Biology Seminar, (see Dibner below) co-organizer 1987-present
With Karl Matlin and Hunt Willard, "Putting History and Philosophy of Science to work with the Life Sciences, MBL, 2016
With Ben Minteer and James Collins, "Beyond the Ark: Conservation in Zoos and Aquariums," 2015 and 2016
With Karl Matlin and Manfred Laubichler, "Updating Cowdry at the MBL," 2014 and 2015
With Manfred Laubichler, Celebrating Michael Ruse's Contributions, University of Toronto, 2014
"Envisioning the Future for HPS," University of Toronto, 2013
"National Academy of Sciences at 150: Biological Sciences," NAS, 2013
"Is Science Revolutionary," MBL Friday Evening Lecture at the Marine Biological Laboratory, chair and commenter, 2012
MBL-ASU HPS Informatics Course, co-organizer 2011-2012
President's Community Enrichment Program Course, "Science Intersecting with Society," 2012
"Potentially Transformative Research," participant in NSF workshop, 2012
"How has the History of Biology Changed?," panel discussion at the Joint Atlantic Seminar for the History of Biology, 2012
"Why Stem Cells Matter So Much in Science, Clinics, and the Courts," Keynote speaker for 11th Circuit Courts annual meeting, 2011
"The Rightful Place of Science," CSPO Conference, commenter, 2010
"Controlling Life," commenter on session, History of Science Society Meeting, 2010
President's Community Enrichment Program Course with Jason Robert, on Embryo Research, 2009
ISHPSSB, "Digital Networking and Publishing," session, Brisbane, 2009
Integrated History and Philosophy of Science Conferences, Steering Committee, 2006-present
"The Embryo Project," ASU Library and IT Colloquium, 2008
"Can Scientists do History," Institute for Humanities Research Seminar, 2008
ISHPSSB session organizer/speaker on cyberinfrastrcuture for biology and society, Exeter, UK, 2007
Dibner Institute program of seminars and workshops at the Marine Biological Laboratory, 1989-2006, co-organizer
James S. McDonnell Foundation Annual Meeting, Opening Session Moderator and Commentator, 2006
Southwest Colloquium for the History and Philosophy of Science, Panelist, 2006
Gordon Conference on New Frontiers in Science and Technology Policy, session chair 2000, Vice Chair 2002, Chair 2004, Nominating Committee Chair 2006
"Forbidding Science?," ASU Conference Co-Organizer and Opening Session Moderator, 2006
"Darwinian Revolution Revisited: Whether, Whose, and So What?," ISHPSSB special sessions, 2005
"Biology and Society Program Development," ISHPSSB meeting panel, 2005
"Stem Cells, Embryos, and Cloning," for "Genome Justice: Implications of New Genetics," National Association of Women Judges, 2005
Panel assessing Union of Concerned Scientists Reports on "Scientific Integrity in Policymaking" Philosophy of Science Association Meeting, 2004
Federal Judicial Center In-Court Seminar for Federal Judges, "Where Biology Meets Society," New Orleans, 2001; St. Louis, 2003; Oklahoma City, 2003; Minneapolis, 2003; Detroit 2004; Los Angeles 2005; Sacramento 2005; Harrisburg 2005.
"Research Policy as an Agent of Change," NSF workshop defining the Human and Social Dynamics Initiative, 2004
"The Nature of Science," Workshop on Committee on Secondary Laboratory Science, 2004
Joint Atlantic Seminar in the History of Biology, roundtable discussion of the profession today, Yale, 2004.
"Hypes and Hopes of the Biomedical Revolution," 9th Circuit Courts Meeting, 2003

"Biology and Society Program," International Society for History, Philosophy, and Social Studies of Biology Education Workshop, 2003
"On Law and Science," 10th Circuit Courts Meeting, 2002
"Courage and Constraint in the Brave New World," panelist, Compleate Appellate Judge Workshop, 2002
"Who Should Write the Story of Science?," AAAS session co-organizer and chair, 2001
"Women in Bioscience V: Taking the Lead," Association for Women in Science Conference, panelist, San Diego, 2001
Session Chair, Gordon Conference on "New Frontiers in Science and Technology Policy," 2000
Commenter, Judaism and Science Dialogue, ASU, 1999; panelist, 2000
Panelist, "Ancient Remains and the Dispute over 'Cultural Affiliation': The Controversy over Kennewick Man," in Symposium on Land, Culture, and Community, ASU Law School, 1999
Presenter, "From Darwin to Dolly: Developments in the Biological Sciences in the 20th Century," Federal Judiciary Center seminar on "The Basic Issues of Science," 1998 and 1999
Participant, "Consultation on Science and Religion," National Cathedral College of Preachers, organized by AAAS and National Research Council, 1998
Organizer, "Advocating Scientific Literacy: A History of the Future," AAAS annual meeting, 1998
Organizer, "Biology and Law: What Should We Believe?," AAAS, 1997
Chair, Summary Session, Marshall Peace Conference, 1996
Keynote address at Columbia History of Science Society meeting, Friday Harbor Laboratory, 1996
Commenter at Popper Conference and co-coordinator of workshop on using history to teach biology, Oregon State University, 1995
Organizer with John Ladd, "Is Race a Legitimate Concept for Science?," AAAS 1995
"History of Biology," summer course at the Marine Biological Laboratory, 1987, 1989, co-director M.B.L. Lecture Series, funded by Massachusetts Foundation for the Humanities and Public Policy, co-director, 1986, 1987
"Evolution and Ecology," Arizona State University, conference co-organizer, 1985
History and Philosophy of Science Colloquium Series, Arizona State University, co-coordinator, 1981-1983, 1984-1986
History and Philosophy of Biology Conference, Denison, Ohio, co-organizer, workshop and plenary session leader, 1984-1986
Seminar on Jonathan Schell's Fate of the Earth, sponsored by Arizona Humanities Council; public presentation, Tucson Public Library, 1983
"Culture, Science, and Values," faculty seminar, freshman seminar, and summer intercollegiate workshop, sponsored by National Endowment for the Humanities, consultant, 1980
"Science, Society, and Self," freshman seminar sponsored by the American Association of Colleges, Dickinson College, co-organizer, 1979
"Growth of Science in Society": faculty workshop and freshman seminar sponsored by National Endowment for the Humanities, Dickinson College, co-organizer, 1979

Public Outreach:

"Jane and Brent," Matthew Welch's series on mentoring, 2025: https://mattwelchmentoring.substack.com/p/relateaccompany?r=1j8bpp&utm_campaign=post&utm_medium=web&triedRedirect=true
Keynote at Barrett Honors College "Celebrating Honors" event, 2025.
"Interview with Jane Maienschein, 2024 Sarton Medalist," by Sam Franz, *HSS Newsletter* 54: 3-6. Spring 2025.
Discussion after receiving the History of Science Society's Sarton Medal, HSS Meeting, 2024
"What is an Embryo'? Historical, psychological, and legal answers and implications," online symposium and discussion," American Society for Reproductive Medicine, 2024
Featured in *AWIS Magazine*: "Dr. Jane Maienschein Bridges the Gap Between History, Philosophy, and Science," 2023: https://awis.org/resource/dr-jane-maienschein-bridges-gap-history-philosophy-

science/
Service as Expert Witness for cases related to fetal "remains," Minnesota and Indiana, 2021-2022
Presentation of "Seeing Cells" exhibit to MBL Trustees, 2022
Interviewed and quoted in Beth Kowitt, "If You Can Move Them, Move Them," *Fortune* 24 June 2022.
Interviewed and quoted in Jonathan Lambert, "The Supreme Court's reversal on Roe could endanger IVF treatment," *Grid* 19 May 2022.
Interviewed and quoted in Ariana Cha, "Overturn of *Roe* could make IVF most complicated, costly," *Washington Post.* 11 May 2022.
"Life and Death: Jane Maienschein on Embryos," podcast 2019: https://soundcloud.com/user-299734623/life-and-death-jane-maienschein-on-embryos
"A History of Embryos and Gene Editing in the Public Eye," New York Academy of Sciences, 2018.
Service as Expert Witness for Texas case, "*Women's Whole Health v. Smith*," 2018
Taping with BuzzFeed for Netflicks on Embryos in Society, 2018
Podcast SCI PHI with Nick Zautra, 2017: http://www.sciphipod.com/
Future Tense Event on Reproductive Futures and what we can learn from the past, Washington, DC, featured panelist, 2014
Podcast with Carla Nappi, 2014: http://carlanappi.com/2014/07/06/embryos-under-the-microscope-an-interview/
On Embryos, "Futureproof," Irish radio, 2014
On History at the MBL, Marine Biological Overseers, 2014
"Why Do We Want Science to be Revolutionary, and Should We?," Public Symposium at the Marine Biological Laboratory, chair and organizer, 2012
"What's Up with Stem Cells?," ASU Origins Club, 2012
"Lying: The Making of the World," ASU Lying Conference opening session, Chair and commenter, 2012
"Through History's Lens: How history contributes to a better understanding of science," AAAS Webinar Panelist, 2011
"Have Stem Cells Changed the Culture of Science?," Keynote Lecture to ASU's Undergraduate Research Symposium, 2011
"Forward to Professorships," Panel discussion, Association for Women in Science of Central Arizona, 2011
"Project Humanities: Place in Fiction, Nonfiction and the Arts," Session Moderator, ASU, 2011
"On Stem Cells and Judges," Center for Law, Science, and Innovation, 2010
"Stem Cells, Regenerative Medicine, and Us," Tedx Phoenix, 2009
"On Embryos, Stem Cells, and Such," Humanist Society of Greater Phoenix, 2009
Discussion of Embryo Research, CLAS Hall, 2009
"What is Stem Cell Research and Why Do We Care?," CLAS Dean's Salon, 2009
"On Stem Cells and Regenerative Medicine," Achievement Rewards for College Students lunch meeting, 2008
"Stem Cells and the Promises of Regenerative Medicine," Jewish Federation of Phoenix, 2007
With Jason Robert, "Cloning, Stem Cells, and Society," Rio Verde Lecture Series, 2007
"Prelude to BODYWORLDS. A History of Anatomical Representation," Arizona Science Center, 2007
"Rachelle Hollander," Retirement Session, AAAS, 2006
"Stem Cells, Society, and Law," panel presentation at Arizona Science Center, 2005
"Embryos and Society," Sun City Engineers, 2005
ASU President's Community Enrichment Program, 4-6 week Courses, Seminars, Lectures, 1998-present
"Careers in Science Policy," Panel, AAAS meeting, 2003
"History of Science and Science Policy," Workshop, History of Science Society, 2002
"Genes, Cloning, and Stem Cells: Why Science is such Fun," ASU Parents Weekend Lecture, 2001
"Cloning, Stem Cells and Such: Who Knows What We're Talking About?," Law and Science Student Association, 2001; Phoenix Phi Beta Kappa Lecture, 2000
"Evidence For and Against," in "Teaching Evolution Effectively in a Creationist World," public forum Society for Integrative and Comparative Biology meeting, 2001

"Science and Scientists, Policy and Politics: Who Knows, Who Says, and Who Cares?," Arizona Department of Agriculture, 2001
Interview with US News and World Report about evolution and creation issues in education, 1999
"Building Bridges From the Desert to the Hill: An Interview with Dr. Jane Maienschein," Research!America Newsletter (January, 1999): 4, 6
"Science Friday" NPR discussion of "Unanswered Questions in Science," 1999
Discussion with Congressman Matt Salmon's High Tech Advisory Committee, 1998
With Ken Goldstein, Dean's Council, on Washington Program, 1998
With James Collins, Saturday Scholars Session, 1997
Southwest Center for Environmental Education, exhibit consultant, 1996-1997
History of Cold Spring Harbor Science project, Cold Spring Harbor Press, 1996
History of Cell Biology, with William Bechtel, 1995-1996
"Is Race a Legitimate Concept for Science?," AAAS annual meeting, co-organizer, 1995
Science and Context Curriculum Project, University of Puget Sound, 1995
"Exploring the Nuclear Age through the Arts and Humanities," chair for panel, Scottsdale Center for the Arts, 1995
"Visits with 2-3 lectures as Dibner Visiting Historian to: Mesa University, 1994; University of Western Florida, 1994; Maryville College, 1995; St. Michael's College, 1995
Biology in Action Workshop, Radford University, 1993
"Animal Rights, Human Experimentation, and Other Problems in the History of Biology," GTE Lecture, Dickinson College, 1987
"The Incorporation of American Medicine," A.E.D. (pre-medical honorary society) lecture, Arizona State University, 1985
"The Rise of Experimental Science," discussion for Arizona State University Library Associates, 1985
History of Genetics Project, Virginia Technological Institute and State University, 1984
"Technology and Society," Salt River Project Executive Board Colloquium, 1982
"Humanistic Perspectives on Biogenetic Engineering," Tucson Public Library, 1982

Editorial:

Series Editor, MBL Book Series, University of Chicago Press, 2017-present
American National Biography, Associate Editor, 1989-2000
Annals of the History and Philosophy of Biology, Editorial Board, 2006-2009
Biology and Philosophy, Associate Editor, 1993-2016; Editorial Board 2016-present
Cambridge University Press Studies in the Philosophy of Biology, Advisory Board, 1993-2009
History of Scientific Thought (Gale Publishers), Editorial Advisory Committee, 2005-2007
History and Philosophy of the Life Sciences, Editorial Board, 1989-2006
Isis, Editorial Board, 2009-2012
Journal of Experimental Zoology, Part B, Editorial Board, 2006-2012
Journal of Biomedical Discovery and Collaboration, Editorial Board, 2006-2011
Journal of the History of Biology, co-editor with Garland Allen, 1998-2006; Editorial Board 1991-1998; Book Review Board, 1985-1998
Mendel Newsletter, Editorial Board, 1990-2004
New Dictionary of Scientific Biography, Editorial Committee, 2004-2008
Philosophy of Science, Editorial Board, 2009-present
Science Communication, Editorial Board, 2007-2016

Referee:

Alaska Epscor, Austrian Science Foundation, Canada Research Chairs Committee, Consortium for the History of Science, Technology, and Medicine, European Science Foundation, Fulbright Committee, Hong Kong Research Foundation, Konrad Lorenz Institute, Research Foundation Flanders, National Endowment for the Humanities, National Science Foundation, National Institutes of Health, South Africa Research Council, University of Oslo Research Committee, Wellcome Foundation

American Journal of Bioethics, American Journal of Medical Genetics, American Scientist, Biological Bulletin, Biology and Philosophy, Bioscience, Book Research Quarterly, British Journal of the History of Science, Cell Stem Cell, Evolution and Development, FASEB Journal, Frontiers for Cell and Developmental Biology, Genetics, The Historian, History and Philosophy of the Life Sciences, History of Science, Isis, Journal of Experimental Zoology, Journal of the History of Biology, Journal of Social History, Jurimetrics, Kennedy Institute for Ethics Journal, Nature, Nature Genetics, Nature Reviews Molecular & Cell Biology, Philosophy, Ethics, and Humanities in Medicine, Philosophy of Science, Philosophy's Compass, Plant Science Bulletin, PLOS ONE, Quarterly Review of Biology, Science, Science Communication, Science and Education, Science & Engineering Ethics, Science Communication, Social Studies of Science, Sociology Lens,Studies in History and Philosophy of Biological and Biomedical Sciences, Synthese, Victorian Studies
Cambridge University Press, Harvard University Press, The Johns Hopkins University Press, Kluwer Publishing Company, Macmillan Publishing Company, North Carolina University Press, Oxford University Press, Princeton University Press, Rice University Press, Routledge Press, Stanford University Press, State University of New York Press, University of Alabama Press, University of California Press, University of Chicago Press, University of Montreal University Press, University of Toronto Press, University of Washington Press, Yale University Press

Professional Affiliations:

American Academy of Arts and Sciences (elected member, 2026)

American Association for the Advancement of Science (History Committee 1996-1998; Program Committee 1996-2001; Section L: Nominating Committee, 1986-1989, Chair 1988/89; Council 1991-1994 and 1995-1996; Committee on Council Affairs 1992-1994; Section Chair Elect, 1993-1994; Section L Chair 1994-1995; Section L Member at Large, 2002-2006; Section L Chair Elect 2010-2011; Section L Chair, 2011-2012; Council Member, 2012-2013); Section X Chair Elect, 2015-2016; Section X Chair, 2016-2017; Council Member 2018; Section X Member at Large 2019-2023; Board of Directors 2022-2025; Historian and Advisor, 2026-present)

American Institute for Biological Sciences (Awards Committee, 2005-2008)

Arizona Arts, Science, and Technology Academy, Founding Fellow (Treasurer, 2005-2006, Board 2006-2008. This group disbanded by 2010)

Association for Women in Science (Councilor, 1999-2000; 2006-2008)

History of Science Society (Finance Committee, 1985-1993, Budget Subcommittee Chair; Committee on the National Lecture Series, 1985-1987; Council, 1987-1989 and 1997-1999; Watson Davis Prize Committee, 1987-1988, Chair 1988; Committee on Research and the Professions, 1987-1989; and 1998-2000; Planning Committee, 1988-1989; Nominating Committee 1988; Vice President (2006-2007), President (2008-2009), Council (2010-2011); Joint Caucus for Socially Engaged History and Philosophy of Science, Chair (2013-2014)

History of Science in America (Steering Committee, 1985-1986)

Integrated HPS (&HPS) Steering Committee, 2007-present; Executive Committee 2023-present.

International Centre for Environmental and Bioethics (2007-2012

International Society for the History, Philosophy, and Social Studies of Biology (first President, 1989-1991, Nominating Committee (chair), 1991-1993; Council 2001-2003; Operations Committee 2003-2005)

Philosophy of Science Association (Governing Board 1995-1998)

Marine Biological Laboratory Corporation (Library Committee 2011-2018; Community Council 2023-2025, Society Council 2026-2027).

Sigma Xi

Society for Developmental Biology

Society of Integrative and Comparative Biology (Nominating Committee, History and Philosophy of Biology Division, 1986, 1989, Division Chair and Executive Council 1995-1998)

Service:

Inter/National:

American Philosophical Society Center for the History of Science, Advisory Committee, 2025--present
Enrico Fermi Fellowship Steering Committee, 2024-present
The Kellner Center for Neurogenomics, Behavior, and Society, Advisory Committee, Univeresity of Illinois, 2024-present
Marine Biological Laboratory Community Council, co-chair, 2023-2026
Center for Cellular Construction, University of California at San Francisco, External Advisor Committee, 2021-present
Integrated HPS (&HPS) Steering Committee, 2021-present
The Blood Project, Harvard, 2020-2025
University of Western Ontario Joseph Rotman Institute for Science and Values, International Advisory Committee, 2009-2023, Chair 2009-2021
Christopher S. Bond Life Sciences Center, External Advisor Committee, 2015-2017
National Institutes of Health, Ad Hoc Reviewer, 2009
National Science Foundation panel, Theory Program, 2007 (and further review panels, but advised not to list these anywhere in order to retain confidentiality)
National Research Council Committee, Conceptual Basis of Biological Sciences for the 21st Century, 2006-2007
National Science Foundation panel, Science and Society, 2005-2008
National Science Foundation, Workshop on Social Organization of Science and Technology Policy, 2006
National Science Foundation, Graduate Fellowships Panel, 2006
National Research Council Committee Contributor, "Laboratories in Science Education: Understanding the History and Nature of Science," 2004
Vice-chair, then chair, Gordon Conference, "New Frontiers in Science and Technology Policy," (2000-2004)
National Science Foundation Directorate Advisory Committee, Social, Behavioral, and Economic Sciences, (1994-1997; chair 1997-1999)
Fulbright Scholar Program (selection committee, 1993-1997)
National Science Foundation (postdoctoral fellowship panel; 1988, research training grant panel; 1990, fellowship panel; 1991-1994; IGERT panel; 1998; advisory panel for Science and Engineering Indicators program)
MIT-Mellon Project on the History and Social Study of the Life Sciences (1990-1995)
National Endowment for the Humanities (panel; 1989 and 1998)
National Academy of Sciences (member, study committee on History and Philosophy of Science, 1986)

State of Arizona:

Department of Education, Science Standards Review Committee (designated spokesman, 1997-1998) and subsequent review of Evolution Standards

University:

Coordinator for AAAS-ASU partnership, 2024-present
Honors Council, 1996-present; Chair 1999-2002; Chair 2011-2012 (and Faculty Honors Advisor)
Library Advisory Committee, 2015-2018; Open Access Committee, 2016-2017
Search Committee for University Librarian, 2013-2014
Ethics Review Committee, Chair, 2012-2013
Integrity Committee Case Review Committee, 2012
Distinguished Teaching Academy, 2006-2014 (when it evolved into something new)
Regents' Professor Nomination Committee, 2007-2009
Provost's Award Selection Committee, 2007, 2011, 2012
Parents Association Professor of the Year Selection Committee, 2001 (chair) – 2006
University Accreditation Team, 2001-2002
CLAS Dean Search Committee, 2001
Lincoln Center for Ethics, Chair Search Committee, 1999-2000

Intellectual Property Committee, 1996-1999
Science, Mathematics, Engineering, and Technology Education Planning Committee, 1996-1999
Strategic Planning Committee, 1997-1998
University Club Board, 1995-1998
Faculty Development Review Committee, 1995-1996
Research and Scholarship Task Force, President's University of the Next Century Project, 1995-1996
Southwest Center for Education and the Natural Environment (for Natural History and education).
(Board Member 1993-2000; Executive Committee 1994-1995; Consultant on grants, 1995-1997)
Regents' Professor Nominating Committee, 1993-1996 (chair 1993-94)
Self-Study Committee on Quality and Diversity, 1992-1993
Quality and Diversity Assessment Committee, 1993
German Transition Committee, 1991-1993
Search Committee for Liberal Arts and Sciences Dean, 1989/1990
Graduate Humanities Committee, 1982-1986, 1988-1991 (grant review panel 1989, 1990)
Animal Use and Care Committee, 1986/87
Faculty Grant-in-Aid Review Subcommittee, 1985

College:
Science and Society Curriculum Committee, 2008-2011
Reorganization of the Life Sciences Steering Committee, Chair, 2002-2003
Scholar-Citizen Small Grants Program, 1998-2004, chair, 1998-2002
CLAS Associate Dean Search Committee, 2001
Co-organizer, ASU-in-Washington Program, 1997-1999
Ethics Review Committee, Chair, 2013
Interdisciplinary Programs Committee, 1996-1997
Planning Committee, 1991, 1993-1995
College Research Awards Committee, 1989-1992
Quality of Instruction Committee, 1988-1991
Search Committee for Associate Dean of Research, 1985
Committee on Undergraduate Humanities, 1982/83
Arizona Center for Medieval and Renaissance Studies, Search Committee, 1983, 1985

School of Life Sciences:
Director, Center for Biology and Society, 2003-present
Reorganization Committees, 2024
Faculty Leader, Human Dimensions Faculty, 2003-2024
Executive Committee, 2003-2024
Search Committee, Bioethics, 2021
Search Committee, Biology Education, Member 2019-2020
Search Committee, Communication and Marketing Manager, Member 2020
Search Committee, Biology and Education, Co-Chair, 2012-2013
Search Committee, Philosophy of Biology, Chair, 2004-2005; 2005-2006
Planning Committee, 2003-2004
Search Committee, Bioethics, 2003-2004

Department -- Philosophy:
Search Committee, 1982 (chair), 1985/86, 1988/89 (chair), 1989/90 (chair), 1990/91, 2000-2001 (chair)
Advisory Committee 1996-1997, 1999-2000
Chair, 1991-1996 (sabbatical Fall 1994)
Undergraduate Advisor, 1988-1991
Decennial Review Committee, 1988/89
Merit Evaluation Committee, Chair, 1986, 1989
Undergraduate Review Committee, Chair, 1986

Computer Representative, 1985-1990
Teaching Evaluation Committee, 1985
Ph.D. Committee, 1985
Undergraduate Committee, 1982-1985; 1996/97; 2001
Graduate Committee, 1981/82

Department -- Biology:
Undergraduate Programs Committee, 2001, 2003
Biology and Society Program Director, 1995-1997 and 1999-2003
Howard Hughes Program Advisory Committee, 1992-2003
UBEP (Undergraduate Biology Education Program), Faculty Advisor, 1999
Biology & Society Search Committee, 1997-1998
Biology & Society Search Committee, chair, 1994-1995
Undergraduate Curriculum Committee, 1990-1994; 1996-1997
Search Committee, 1990-1991

Student Advising
104 Honors Projects and Theses Directed to Completion
Masters Theses Directed to Completion:
Tami Jackson, Esther Ellsworth, Matthew Shindell, Jessica Underwood (co-chair), Brenda Flores, Jennifer Minneci, Angela Strobel (co-chair), Nicole Newkirk, Cera Lawrence, Karen Wellner, Britta Martinez (co-chair), Chanapa Tantibanchachai (co-chair), Meghana Yamandra (co-chair), Nevada Wagoner (co-chair), Zane Bartlett , Rachel Gur-Arie, Ceclia Chou, Grace Kim, Claudia Nunez-Eddy, Rainey Horwitz, Jada Wang (co-chair), Brianna Ellis, Alexis Darby, Emily Santora, Whitney Tuoti (co-chair), Michael Mihuc, Nathaniel Ross, Megha Pillai
PhDs Directed to Completion:
David Magnus (Stanford, co-director), Kathy Cooke (University of Chicago, external committee member), Mary Sunderland, Lydia Pyne, Karen Wellner, Lijing Jiang (co-chair), Julia Damerow (co-chair), Erick Peirson (co-chair), Guido Caniglia (co-chair), Yawen Zou (co-chair), Erica O'Neil, Mary Drago, Kate MacCord, Alexis Abboud, Carolina Abboud, Paige Madison, Christian Ross (co-chair), Shelbi Peck (co-chair), Dina Ziganshina Leinhard, Anna Guerrero, Shane Jinson (co-chair)
Postdoctoral Fellows:
Supported by Dibner Foundation: James Strick; by NSF: Kristin Johnson, Erik Ellis, Grant Yamashita, Karen Wellner, David Steffes, Nathan Crowe, Abraham Gibson; by the Mercator Foundation: Guido Caniglia (co-advisor); by the James S. McDonnell Foundation: Kate MacCord; by ASU: Steve Elliott