CURRICULUM VITAE

PHILLIP REID SLOAN
Revised 8/6/2019.

PROFESSOR TENURED AT NOTRE DAME SINCE 1974

BORN: January 28, 1938 AT: Salt Lake City Utah

EDUCATION

Ph.D.	Philosophy, University of California, San Diego, Calif., 1970
M.A.	Philosophy, University of California, San Diego, Calif., 1967
M.S.	Marine Biology, Scripps Institution of Oceanography, La Jolla, California, 1964
B.S.	Zoology /Chemistry, University of Utah, Salt Lake City, Utah, 1960
(Diploma)	Olympus High School, Holladay, Utah, 1956

ACADEMIC CAREER

1960–64	Graduate Research Assistant (Deep Sea Biology), Scripps Institution of Oceanography
1963	Expedition Biologist, *Lusiad* Expedition (International Indian Ocean Expedition).
1964–65	Advanced Research Technician (Plant Physiology), Institute of Marine Resources, Scripps Institution of Oceanography, La Jolla, California
1966–67	Teaching Assistant, Revelle College Humanities Sequence, University of California, San Diego (Great Books Sequence)
1966–68	Advanced Research Technician (Deep Sea Biology) U.S. Naval Undersea Laboratory San Diego, California, (part–time).
1968–69	Teaching Assistant, Muir College History and Philosophy of Science Course,
1969–72	Instructor, Department of Biomedical History, School of Medicine, University of Washington
1972–74	Assistant Professor, Department of Biomedical History, School of Medicine, University of Washington, Seattle, Washington
1974–79	Assistant Professor, Program of Liberal Studies/Program in History and Philosophy of Science, University of Notre Dame
1979–91	Associate Professor, Program of Liberal Studies/Program in History and Philosophy of Science, University of Notre Dame
1985–92	Chair, Program of Liberal Studies, University of Notre Dame
1991–	Professor, Program of Liberal Studies/ Program in History and Philosophy of Science University of Notre Dame
1994–97	Director, Notre Dame Program in History and Philosophy of Science
1997–99	Director, Reilly Center for Science, Technology and Values, University of Notre Dame and Acting Director, Science, Technology and Values Program
1999–2002	Director, Program in Science, Technology and Values
2002–2004	Chair, Program of Liberal Studies
2009–	Emeritus Professor, University of Notre Dame
2011	Co-Organizer and seminar leader of Notre Dame Conference on Adult Stem Cell Research

PROFESSIONAL ORGANIZATIONS AND SOCIETIES

American Association for the Advancement of Science
History of Science Society
International Society for the History, Philosophy and Social Studies of Biology
Association for Core Texts and Courses

EDITORIAL BOARDS

Editorial board, *Nineteenth Century Contexts*
Editorial board, *Omega: Indian Journal for the Association for Science and Religion*

Editorial Board, *Journal of the History of Biology* 2009-15
Editorial Board *Isis* (2010-2013)

PROFESSIONAL ACTIVITIES:
2009— Grant Reviewer, National Science Foundation
2009— Proposal Reviewer, National Endowment for the Humanities

PROFESSIONAL DISTINCTIONS:

1980	National Program Chair, History of Science Society Annual meeting, Toronto, Canada.
198l–83	Chair, Standing Committee on Annual Meetings and Programs, History of Science Society.
1981–84	Executive Council, History of Science Society (Elected member)
l985	Program Chair and Co–organizer, Society for the History, Philosophy and Social Studies of Biology, St. Mary's College, June 1985.
1986–88	History of Science Society National Committee on Apartheid
1988	Associate Program Chair, Midwest History of Science Society Meeting
1989–90	President, Midwest History of Science Society
l987	Program Committee, International Society for the History, Philosophy and Social Studies of Biology
1991–92	Bern Dibner Visiting Lecturer, History of Science Society (a total of five lectures at different colleges)
1992–6	Panel Reviewer, National Science Foundation Fellowship Program, Washington D.C. (History of Science/Economics)
1995–2002	Notre Dame Campus Representative, Lilly Fellows Program.
1996	Elected Fellow, Section L, American Association for the Advancement of Science
1996–2009	Elected to National Steering Committee of Association for Core Text and Courses (ACTC)
1996	Program Committee, and organizer of the History of Science Component, International Meeting of Eighteenth Century Society, Notre Dame, March 1996
1997–2000	Elected Board Member, Lilly Fellows Program
1998	Local Arrangements Chair, History and Philosophy of Science Working Group (HOPOS) Biennial Meeting, Notre Dame, March 1998
1998	Local Arrangements and Program Chair, Lilly Fellows National Meeting, Notre Dame, October 1998
1998–2006	Lay Advisor, United States Bishop's Conference Committee on Science and Human Values
1998–01	Elected to National Council, History of Science Society
1998–01	History of Science Society Representative to American Association for Advancement of Science, Section L
2001	Local Organizer for Dialogue–Workshop of Committee on Science and Human Values for National Conference of Catholic Bishops, February 2001
2001	Local Organizer for National Conference of Association for Core Texts and Curricula, Notre Dame, April, 2001
2000–2002	Steering Committee for National Conference on Ecology, Theology, and Judeo–Christian Environmental Ethics (February 2002)
2002–08	President, Association for Core Texts and Courses
2002–03	Program Committee, International Society for the History, Philosophy and Social Studies of Biology Biennial Meeting (through summer 2003)
2002–05:	Member collaborative project "Altering Nature": Religious Traditions and Modern Biotechnology." Rice University and Baylor Medical School.
2003–05	Chair, Section L, American Association for the Advancement of Science
2003–06	Elected to Council, International Society for the History, Philosophy and Social Studies of Biology (term 2003–06). Chair, standing publications committee.
2007	Elected to Nominating Committee of the American Association for the Advancement of Science
2008	Appointed International Network Coordinator, Science, Theology and the Ontological Quest Project (Collaborative Vatican Council on Culture and Notre Dame Reilly Center)
2009	Appointed to Editorial Board, *Journal of the History of Biology*

2009 Appointed to the Editorial Board, *Isis* (3 year term)

SPECIAL AWARDS:

1994 Awarded Medal of Merit of the *Muséum national d'Histoire naturelle*, Paris for work in the history of biology
2004 Presidential Award of the University of Notre Dame for Service
2009 Endowed Scholarship, Phillip R. Sloan Award, given annually to the graduate student in the Program in the History and Philosophy of Science "who is thought to embody the values of scholarship and service exemplified by one of the founders of our Program."
2019 Lifetime Achievement Award, Marquis *Who's Who*, with extensive biographical entry.

RESEARCH AREAS

History and Philosophy of Life Science, 1600–1990; Specialties: early modern life and physical science; Buffon studies; evolution; Darwinism; science and religion; contemporary bioethics and philosophy

CURRENT RESEARCH PROJECTS

Major book project tentatively entitled " Mastering Life: The Search for Rational Control." 2 Volumes. Volume One (Early Modern-Kant).

GRANTS (Since 1990)

1990 Wellcome Trust Foundation Travel Grant
1995 Awarded Department of Energy Human Genome Division Conference Grant, $15,000
2002–03 Collaborative NSF Grant "America's *Vestiges of Creation*" Proposal for improvement of Doctoral Dissertation, awarded to Co–PI Ryan MacPherson, with myself as Principal Investigator. $8,000.
2003–05: Co–Director, NEH Collaborative Educational Project Grant, "Bridging the Gap Between the Humanities and Sciences: An Exemplary Model of Core Text, Humanistic Education" (With St. Johns College. Annapolis and the Institute for the Liberal Arts, St. Mary's College, Moraga) (3–year project), Awarded: $226, 000.
2007 NSF grant for 2007–2009: "Conceptions of Life in Modern Bioscience, " Awarded: $118,000.
2009 Co-Recipient of University of Notre Dame Special Initiative Grant for Development of Adult Stem Cell Research Center (with O. Carter Snead, Law) $50,000

PUBLISHED BOOKS

1981 John Lyon and P. R. Sloan (eds.), *From Natural History to the History of Nature: Readings from Buffon and his Critics* (Collection of texts, commentary, and translations) (Notre Dame: Notre Dame University Press) Pp. 404. My contribution consisted of the main introductory essay (32 pp.), the basic determination of content, and translation, with introductions, to approximately one–third of the material from French and German sources.
1992 *Richard Owen's Hunterian Lectures at the Royal College of Physicians, May–June 1837*. Critical Edition with Introduction and Commentary. Jointly published Chicago: University of Chicago Press and British Museum of Natural History, London. Pp. 340. This work includes a 75 page introductory essay which for the first time locates Owen in his early historical and intellectual context, a critical transcription, with variant readings, of the handwritten manuscripts, with notes and commentary on each of the lectures.
2000 P. R. Sloan (ed.) *Controlling Our Destinies: Historical, Philosophical, Ethical, and Theological Perspectives on the Human Genome Project* (Proceedings of the Notre Dame Conference, October 5–8 1995.) (Notre Dame, University of Notre Dame Press). Pp. 535. My contribution is the introductory chapter, introductions to different sections, and preparation of the full manuscript as camera–ready copy.

2012 P.R. Sloan and Brandon Fogel (eds.) *Creating a Physical Biology: the Three-Man Paper and the Origins of Molecular Biology*. Pp. 319, index, illust. Chicago: University of Chicago Press, 2012.

2015 P. R. Sloan, Gerald McKenny, and Kathleen Eggleson (eds.) *Darwin in the Twenty-First Century: Nature, Humanity, and God* (Notre Dame: University of Notre Dame Press). I have been the primary editor of this book and the author of both the Introduction and a chapter in this book.

CHAPTERS IN EDITED BOOKS

1985a "Darwin's Invertebrate Program, 1826–36: Preconditions for Transformism," in: D. Kohn (ed.), *The Darwinian Heritage* (Princeton University Press), pp. 71–120. (the main Centennial collection of Darwin's death with contributions by Darwin scholars).

1985b "The Question of Natural Purpose," in: E. McMullin (ed.), *Evolution and Creation* (Notre Dame University Press), pp. 121–44.

1987 "From Logical Universals to Historical Individuals: Buffon's Conception of Biological Species," in: J. Roger and J. L. Fischer (eds.), *Histoire du Concept d'espèce dans les sciences de la vie* (Paris, l987), pp. 97–136.

1992a "Organic Molecules Revisited," in: J. Gayon et al. (eds.) *Buffon 88: Proceedings of the International Buffon Conference* (Paris: Vrin, 1992), pp. 415–437.

1992b "Le Hypothetisme de Buffon," in: J. Gayon et al. (eds.) *Buffon 88: Proceedings of the International Buffon Conference* (Paris: Vrin, 1992), pp. 207–222.

1995 "The Gaze of Natural History," in: C. Fox, R. Porter, and R. Wokler (eds.), *Inventing Human Science* (Berkeley: U. California Press, 1995), pp. 112–151.

1995 "L'Histoire naturelle allemande au Collège de chirurgie, histoire intellectuelle ou reconstruction sociale?" in: *Nature, Histoire, Société* ed. C. Blanckaert, J–L Fischer, R. Rey (Paris: Klincksieck, 1995), 179–96.

1998 "Lamarck in History: a View from and English–Speaking Perspective" in: G. Laurent (ed.), *Jean Baptiste Lamarck, 1744–1829* (Paris: CTHS Publications), pp. 31–42

1998 "The Transformism of Lamarck's Transformism" in: G. Laurent (ed.) *Jean Baptiste Lamarck, 1744–1829* (Paris: CTHS Publications), pp. 666–687.

1998 "Le Muséum de Paris vient à Londres," in: R. Chartier and C. Blanckaert (eds.) *Le Muséum au Premier Siècle de son Histoire* (commemorative volume of the *Archives du Muséum national d'Histoire naturelle Paris.*), pp. 607–634.

1999 "From Natural Law to Evolutionary Ethics in Enlightenment French Natural History," in: J. Maienschein and M. Ruse (eds.), *Biology and the Foundations of Ethics* (Cambridge: CUP), pp. 52–83.

2000 Introduction: Eugenics and the Social Uses of Science: Non–Religious Factors in the Genesis of the Holocaust," in Michael Signer (ed.), *Humanity at the Limit: The Impact of the Holocaust Experience on Jews and Christians*. (Bloomington: University of Indiana Press), pp. 175–79. (I was primary organizer for this section of the book and this session of the conference)

2000 "Completing the Tree of Descartes," in: P. R. Sloan (ed.), *Controlling Our Destinies* (Notre Dame: Unversity of Notre Dame Press), pp. 1–25.

2002 "New Human Genetics and Religious Vision: Some Options for the Twenty–First Century," in: J. Kozhamthadam (ed.) *Contemporary Science and Religion in Dialogue: Challenges and Opportunities* (Pune, India: ASSR Publications), pp. 114–39.

2002 "Reflections on the Species Problem: What Marjorie Grene Can Teach Us About a Perennial Issue." In: *The Philosophy of Marjorie Grene* ed. R. Auxier and L. Hahn (Chicago: Open Court), pp. 225–55.

2002 "What the Classics of Science Can Teach Us: Claude Bernard's *Introduction to the Study of Experimental Medicine* and Erwin Schrödinger's *What is Life?* in: *Uniting the Liberal Arts: Core and Context,* ed. B. Cowan and S. Lee (Lanham: University Press of America), pp. 131–37.

2003 "The Making of a Philosophical Naturalist," in: Jonathan Hodge and G. M. Radick (eds), *The Cambridge Companion to Darwin*. (Cambridge: Cambridge U. Press), pp. 17–39.

2005 "It Might be Called Reverence," in: V. Hösle and C. Illies (eds), *Darwinism and Philosophy* (Notre Dame: University of Notre Dame Press), pp. 143–65.

2007 "Kant and British Bioscience," in: P. Hunemann, ed., *Understanding Purpose: Kant and the Philosophy of Biology*. Vol. 8, *North American Kant Studies* Rochester: University of Rochester Press, pp. 149–171.

2007 "Télélogie et forme: un réexamen," in J. Gayon and R. Burian, eds., *Conceptions de la science: hier, aujourd'hui, demain: Hommage à Marjorie Grene*. (Brussels: Ousia), pp. 343–67.

2008 "Philosophical Approaches to Nature," collaborative chapter by John Zammito, Philip Ivanhoe, Helen Longino, and Phillip Sloan, pp. 63–136 in: *Altering Nature: Volume I: Concepts of 'Nature' and 'the Natural' in Biotechnology Debates*, ed. B. A. Lustig, B. A. Brody, and G. P. McKenny, Philosophy and Medicine, Vol. 97 (Springer: 2008). My contribution is primarily pp. 78-89 and a substantial portion of the conclusion.

2008 "Originating Species: Darwin on the Species Question," pp. 67-86 in: *The Cambridge Companion to the Origin of Species*, ed. M. Ruse and R. Richards. Cambridge: Cambridge University Press, 2009 (appeared December 2008).

2012 "Biophysics in Berlin: The Delbrück Club," pp. 61-98 in P.R. Sloan and Brandon Fogel (eds.) *Creating a Physical Biology: the Three-Man Paper and the Origins of Molecular Biology*.Chicago: University of Chicago Press, 2011.

2018 "Locating the Human in the Biological World: A Way Into the Species Problem," Pp. 219-241, in: *Philosophie, Histoire, et Biologie: Mélanges Offerts à Jean Gayon.* Paris: Editions Matériologique.

2019 "Metaphysics and Vital Materialism: Émilie Du Châtelet and the Origins of French Vitalism." Pp, 48-65 In C. Wolfe and C. Bognon (eds). *The Philosophy of Biology Before Biology* (London: Routledge)

2019 "Life Science and *Naturphilosophie: Rethinking the Relationship*." (Essay Review). *Studies in History and Philosophy of Science (in Press).*

REFEREED RESEARCH ARTICLES

1965 Eppley, R.W. and P.R. Sloan, "Carbon Balance Experiments with Marine Phytoplankton," *Journal of the Fisheries Research Board of Canada* **22**, 1083–97.

1966a Eppley, R.W. and P.R. Sloan, "Growth Rates of Marine Phytoplankton: Correlation with Light Absorption by Cell Chlorophyll *a*," *Physiologia plantarum* **19**, 47–59.

1966b Sloan, P.R. and J.D.H. Strickland, "Heterotrophy of Four Marine Phytoplankters at Low Substrate Concentration: *Journal of Phycology* **2**, 29–32.

1968 Pickwell, G.V., R.L. Capen, and P.R. Sloan, "Characterization of Nonmigratory Deep Scattering Layers off Southern California and Guadalupe Island, Mexico," *5th U.S. Navy Symposium on Military Oceanography Proceedings* **1**, 138–159.

1972 "John Locke, John Ray, and the Problem of the Natural System," *Journal of the History of Biology* **5**, 1–53.

1973 "The Idea of Racial Degeneracy in Buffon's *Histoire naturelle*," *Proceedings of the American Society for Eighteenth Century Studies* **3**, 293–321.

1976 "The Buffon–Linnaeus Controversy," *Isis* **67**, 356–75.

1977 "Descartes, the Sceptics, and the Rejection of Vitalism in Seventeenth Century Physiology," *Studies in History and Philosophy of Science* **8**, 1–28.

1978 "The Impact of Buffon's Taxonomic Philosophy in German Biology," in: E. G. Forbes (ed.), *Human Implications of Scientific Advance* (Proceedings of the 15th International Congress of the History of Science, Edinburgh), 531–38.

1979 "Buffon, German Biology, and the Historical Interpretation of Biological Species," *British Journal for the History of Science* **12**, 109–153.

1986 "Darwin, Vital Matter and the Transformism of Species," *Journal of the History of Biology* **19**, 369–445.

2000 "Mach's Phenomenalism and the British Reception of Mendelism," *Comptes Rendus de l'académie des sciences: Sciences de la vie* **243**, 1069–1079.

2001 "The Sense of Sublimity: Darwin on Nature and Divinity," *Osiris* 16, 251–69.

2001 "A Plea for Caution: A Response to Frederick Burkhardt," *Documentary Editing* **23**, 82–84.

2002 "Preforming the Categories: Eighteenth–Century Generation Theory and the Biological Roots of Kant's A–Priori," *Journal of the History of Philosophy* **40** (2002), 229–53.

2003 "Whewell's Philosophy of Discovery and The Archetype of the Vertebrate Skeleton: The Role of German Philosophy of Science in Richard Owen's Biology," *Annals of Science* **60** (2003), 39–61

2006 "Kant on the History of Nature: The Ambiguous Heritage of the Critical Philosophy for Natural History" *Cambridge Studies in the History of the Biological and Medical Sciences* 37: 627–48.

2012 "How Was Teleology Eliminated in Early Molecular Biology?," *Studies in History and Philosophy of Biological and Biomedical Sciences* 43 (2012): 140-51. Published online July 2011.

2012 "Being Human and Christian in a Darwinian World," *Logos* 15 (2012): 147-74.

2014 "Molecularizing Chicago, 1945-1965: The Rise, Fall and Rebirth of the University of Chicago Biophysics Program." *Historical Studies in the Natural Sciences* 44: 364-412.

ARTICLES IN REFERENCE WORKS

1981 "Classification," "Natural Order," "Natural System," "Chain of Being," and "Subordination of Characters," *Dictionary of the History of Science*, edited by Roy Porter and W. F. Bynum (London: Macmillan).

1990 "Natural History," in *Companion to the History of Modern Science*, ed. R. C. Olby, G. N. Cantor, J. R. R. Christie, M. J. S. Hodge, (London: Routledge), 295–313.

1993 "Nature," "Natural History," and "Buffon" for *Dictionary of Eighteenth Century Science* ed. R. Porter (London)

1996 "Richard Owen," for *Macmillan Encyclopedia of the Earth Sciences* (New York: Simon and Schuster) vol. 2, pp. 772–74.

2003 "Buffon" *Encyclopedia of the Enlightenment*, ed. A. C. Kors (Oxford: OUP, 2003) (2000 words).

2004 "Alla Scoperta del 'Sistema della Natura' *Enciclopedia Italiana: Storia della Scienza* (10,000 words).

"Le Specie, Il Tempo, La Storia," *Enciclopedia Italiana: Storia della Scienza* (10,000 words).

"Joseph Henry Green," *Oxford New Dictionary of National Biography*

*"*William Clift," *Oxford New Dictionary of National Biography*

2005, (07) "Evolution." *Stanford Electronic Encyclopedia of Philosophy* (http://plato.stanford.edu/entries/evolution/) (18,700words). Extensively revised, 2007. Split into two separate entries 2019 (below)

2006 "Natural History," *The Cambridge History of Eighteenth Century Philosophy*, ed. Knud Haakensson (Cambridge: Cambridge U Press), vol. 2, pp. 903–938

2007 "Supplement" to Article "Buffon," *New Dictionary of Scientific Biography* (3,100 words)

2019 "Evolutionary Thought Before Darwin" *Stanford Electronic Encyclopedia of Philosophy* (https://plato.stanford.edu/entries/evolution-before-darwin/

2019 "Dawin: From Origin of Species to Descent of Man" *Stanford Electronic Encyclopedia of Philosophy* (https://plato.stanford.edu/entries/origin-descent/

ESSAY REVIEWS (Since 1990)

1990 "Deconstructing Evolution," Essay Review of *The Politics of Evolution*, by Adrian Desmond *History of Science* **28**, 419–28.

1991 "Darwin: The Theory Years," Essay Review of *The Correspondence of Charles Darwin*, 2–3, *Biology and Philosophy* **6**, 107–114.

1994 "The Long Delay," Essay Review of Correspondence of Charles Darwin, vols. 4, 5, 6, *Biology and Philosophy* **9**, 8 pp.

1994 "Buffon Studies Today," Essay Review of J. Roger, *Buffon,* and J. Gayon (ed.) *Buffon 88*, *History of Science* **32**, 469–77.

1995 Essay Review of *Richard Owen: Victorian Naturalist* by Nicolaas Rupke (New Haven: Yale UP, 1994 in *Metascience* **7**, 62–67.

1997 Essay Review of N. Jardine, J. Secord and E. Spary, *The Cultures of Natural History* in: *History of Science*

1997 Essay Review of *Richard Owen: Victorian Naturalist* by Nicolaas Rupke (New Haven: Yale UP, 1994) in: *Nineteenth–Century Contexts*

2006 "Transforming the Cuvier–Geoffroy Debate," Essay Review of Hervé Guyader, *Geoffroy St. Hilaire: Visionary Naturalist* (Chicago: U Chicago Press, 2004) in: *Metascience* 15 (2006): 127–31.

2007 "Essay Review, J. Smith (ed.), *Animal Generation and Early Modern Philosophy* (Cambridge: CUP, 2006) for *Notre Dame Philosophical Reviews* (on–line http://ndpr.nd.edu/).

2007 "Two New Volumes of Darwin's Work: Essay Review," *Journal of the History of Biology* 40: 363–67.

2008 "Essay Review of P. Ramellini, *Organisms and Life*" (Rome: STOQ Press, 2006), *National Catholic Bioethics Quarterly* 8 (2008): 593–99.

2013 "Essay Review: The Species Problem and History." *Studies in History and Philosophy of Biological and Biomedical Sciences* 44 (2013): 237-41.

2014 "Essay Review: The Essence of Race: Kant and Late Enlightenment Reflections." *Studies in History and Philosophy of Biological and Biomedical Sciences* 47 (2014): 191-95.

2016 "Essay Review: Stephen Gaukroger. *The Natural and the Human: Science and the Shaping of Modernity, 1739-1841*. Oxford University Press, 2016, *Notre Dame Online Philosophical Reviews. https://ndpr.nd.edu/news/the-natural-and-the-human-science-and-the-shaping-of-modernity-1739-1841/*

2019 "Essay Review: Life Science and *Naturphilosophie*: Review of John Zammito, *The Gestation of German Biology*," *Studies in History and Philosophy of Biological and Biomedical Sciences* 52 (2019):DOI 10.1016/j.shpsa.2019.01.005.

Recent Short Reviews:

2008 Bruno J. Strasser. La Fabrique d'une Nouvelle Science. La Biologie Moléculaire à l'âge atomique (1945–1964). (Bibliothèque d'Histoire des Sciences, vol. 8.) xxxiii+ 450 pp., bibl., index. Firenze: Leo S. Olschki, 2006. *Isis* 99: 660–61.

2008 Michael Friedman and Alfred Nordman, (eds, *The Kantian Legacy in Nineteenth-Century Science*. Cambridge, MA: The MIT Press, 2006. VI+370, *Nuncius* 23, pp 175-76.

OTHER PUBLICATIONS:

2007 Essay "Intelligent Design and Evolution: Some Clarifications," *The Reilly Center Reports* (http://reillyreports–prod.nd.edu)

INVITED WORKSHOPS AND SEMINARS (Since 1999)

1999 Leader, Faculty Summer Workshop on "The New Biology and Catholic Vision" for Combined faculty group, St. Thomas University, Minneapolis, June 1999 (one–week).

2002 Invited Workshop Seminar Presentations: "Life and Vitality Around 1800," *Obermann Institute Summer Research Seminars*, University of Iowa, July 2002 (one of three invited outside speakers).

2003 Co–Leader NEH Workshop for College Teachers of Science and Humanities, "Bridging the Gap Between the Sciences and Humanities." Year I. (10 workshop sessions, 6 hours/day), June 1–19, 2003, St. John's College, Annapolis.

2004 Co–Leader NEH Workshop for College Teachers of Science and Humanities, "Bridging the Gap Between the Sciences and Humanities." Year II. (10 workshop sessions, 6 hours/day), May 31–June 16, University of Notre Dame.

2004 Invited Workshop paper, "From Natural History to the History of Nature: Re–examining the Interplay of Historicism and Natural History, 1740–1800," *Centre de récherche en Histoire des sciences et des techniques,* Paris, December 2004. (one of three main invited workshop papers).

2005 NEH Workshop for College Teachers, "Bridging the Gap," Year III. (10 workshop sessions, 6 hours/day), June 6–18, St. Mary's College, Moraga, California.

2005 Workshop on the Ethics of Stem Cell Research, Committee on Science and Human Values, American Council of Catholic Bishops, Washington D.C. September.

2006 Invited Participant in the dialogue group organized by the Westchester Forum (Catholic Scholars) on stem cell research, Washington D.C.

2007 Invited Participant in the dialogue group organized by the Westchester Forum (Catholic Scholars) on stem cell research, Washington D.C.
2007 Invited Participant. Lumen Christi Workshop on Science and Catholic Theology, May 2007
2008 Invited Notre Dame representative, Vatican-STOQ Evolution Workshop, September 12-16. This included participation in the press conference at the Vatican.
2009 Invited Participant, Workshop on Nature of Experience, John Paul II Institute, Catholic University of America.
2011 Invited Participant and speaker, Conference on Adult Stem Cell Research, Vatican

2013 Invited Participant and speaker, Conference on Adult Stem Cell Research, Vatican

LECTURES AND INVITED ADDRESSES (Since 1995)

1995 Convening Address, Notre Dame Human Genome Conference, October, 1995
1995 Session Commentator, "Varieties of Experiment" Session, Annual meeting of the History of Science Society, October 27, 1995.
1996 Invited Paper, "Preforming the Categories: Kant and Eighteenth–century Generation Theory," Annual Meeting, American Society for Eighteenth–Century Studies, March 30, 1996.
1996 Invited Plenary Address, Association for Core Texts National Meeting, "The Very Idea of a Core Text Program: Problems and Challenges for the Future," April 25, 1996.
1996 Summer Graduation Commencement Address, University of Notre Dame, August 2, 1996.
1996 Invited Paper, "Completing the Cartesian Program" University of Utah Genetics and Society Program, October 1996
1996 Invited Paper, "From Natural Law to Evolutionary Ethics in French Natural History" History of Science Society Annual Meeting, Atlanta, October 1996.
1997 Invited Commentary, Forum on Evolution, American Catholic Bishops Annual Convention, Washington, D.C. November 1997
1998 "Kant in England Revisited: German Life Science in Britain 1790–1830" Second Meeting, History and Philosophy of Science Working Group, Notre Dame, March, 1998
1998 Chair, Organizer and Introducer, "Eugenics and the Holocaust Session" Notre Dame Conference on Christians and Jews on the Holocaust, April, 1998
1998 "Nature, History and Darwinism: Secularized Theology and Natural Selection Theory," Invited main workshop paper, Pascal Centre Conference on Science and Religion, Ancaster, Ontario, July 1998
1998 Invited Paper, "Why Does History Matter? History and Natural History in the Eighteenth Century," Dibner Center Workshop, Boston MA August 1998.
1999 "Claude Bernard's *Introduction* and Schrödinger's *What is Life?* as Core Scientific Texts," Annual Meeting of Association for Core Text Studies and Curricula, New Orleans, April 1999.
2000 "Mach's Phenomenalism and the British Reception of Mendelism," Invited paper at the Centenary *Colloque Internationale* commemorating the rediscovery of Mendel, Paris, March 25, 2000.
2000 "German Biology Comes to England: The Role of the Royal College of Surgeons," Annual Meeting of the History of Science Society, Vancouver, November 5, 2000.
2000 "Putting the History of Philosophy Back Into History," Marjorie Grene Festschrift, VPI, Blacksburg, December 2000
2001 Invited Paper "It Might Be Called Reverence" *Metaphysical Implications of Darwinism* Conference, Notre Dame, March, 2001.
2001 Invited Paper "Kant and Epigenetic Embryology: The Implications for his Post–1790 Philosophy," National Meeting of the Eighteenth Century Society, New Orleans
2001 Invited Paper "Historical Analysis and the Species Controversies" XXI International Congress of the International Union for History and Philosophy of Science, Mexico City
2001 Invited Paper, "Getting the Questions Right: Darwinism and Catholic Thought," Lumen Christi Workshop, Chicago Ill.
2001 "The Biomolecular Revolution: The Challenge of Western Bioscience.' *International Conference on Science and Religion,* Pune, India December 2001

2001: Invited Paper "It Might Be Called Reverence" *Metaphysical Implications of Darwinism* Conference, Notre Dame, March, 2001.

2002: "Introducing the World of Genetics: A Great Texts Approach," Annual meeting of the Association for Core Texts and Courses, Montreal, Canada, April 2002.

2002: Invited Seminar Presentation, "Darwin on Nature and Natural Selection," Regional Seminar Program, University of Chicago, October, 2002.

2003: Presidential Address, "Core Programs and the Research University: Revisiting an Old Tension," Association for Core Texts and Curricula Annual Meeting, Atlanta, April 4. Available on ACTC website at www.coretexts.org.

2003: Invited paper: "What Marjorie Grene Can Teach Us About the Species Problem," Midwest Meeting of the American Philosophical Association, Cleveland, April.

2003: "Romantic Biology and British Life Science: Does Darwin Belong in this World?' Biennial meeting, Society for the History, Philosophy and Social Studies of Biology, Vienna, Austria, July 2003 (also session organizer).

2004: "The Museum and the Construction of a Scientific Concept: The Case of Richard Owen's Archetype" Invited paper, Paris Muséum national d'histoire naturelle," March, 2004.

2004: Presidential Address:"Humanizing the Technological Vision: Core Learning and the Relation of the Sciences and Humanities." Dallas, Tx. April 17, 2004. Available on ACTC website at www.coretexts.org

2004: "The Museum as a Classificatory Landscape: Constructing Richard Owen's Archetypal Vertebrate," Invited paper, Conference on Classification in the Sciences, Oregon State University, October 2004.

2004 Chair and Commentator, "Varieties of Darwinism Session," Annual Meeting, History of Science Society, Austin Texas, November 2004.

2005 "ACTC Bridging the Gap Between the Humanities and Sciences: An Exemplary Model of Core Text Humanistic Education," Association of American Colleges and Universities Annual Meeting, January, 2005.

2005 Organizer and Session Chair, "Examining Gould's NOMA Theory," Annual Meeting, American Association for the Advancement of Science, Washington February, 2005

2005 "Expanding Core Texts Across Borders: A *Paideia* for a World Encounter" Presidential Address, Annual Meeting, Association for Core Texts and Courses, Vancouver, B.C. April. Available on ACTC website at www.coretexts.org

2005 "What is Life? Schrödinger's Question Revisited," Evening Lecture, St. John's College Annapolis, April 22. Also given at Middlebury College, April 26.

2005 "Why Should We Maintain the Centrality of Liberal Education?" James Madison Institute for Liberal Education," May 20.

2005 "Commentary on the Darwinian Revolution" (special plenary session, International Society for History, Philosophy and Social Studies of Biology, July, Guelph, Ontario

2005 "Kant on the History of Nature," International Society for History, Philosophy and Social Studies of Biology, July, Guelph, Ontario.

2005 "Battling With Windmills: Great Text Education in a Technological Society" Plenary address, Technologia Universidad de Cartagena (Colombia) Liberal Arts Conference, 20 October.

2005 Organizer and Chair, "Biophysics, Gene Theory and the Laws of Life," Annual Meeting, History of Science Society, Minneapolis, November.

2005 "The Construction of a Scientific Concept: John Hunter's Museum and Owen's Archetype of the Vertebrate Skeleton," Intellectual History Seminar, Notre Dame, December 3

2006 "History, Vitalism, and the Critical Philosophy: Kant's Critique of Herder's Vital Historicism," UCLA Clark Library Conference "Vital Matters," February 2006.

2006 Co–Organizer and Chair, "Stem Cells and Society: Assessing a Grand Challenge," American Association for the Advancement of Science Annual Meeting, February, 2006, St. Louis.

2006 Presidential Address, "Core Learning: Chicago Style," Annual Meeting of the Association for Core Texts and Courses, Chicago, April 2006. Available on ACTC website at www.coretexts.org

2006 Opening Address, "A Bridge Across a Growing Chasm: Relating the Sciences and Humanities Through Core Texts," ACTC Special Conference, Oakland, CA September 2006.

2006 Invited Address, "Integrating Science and Humanities Through Core–Text Seminars," *Association for Integrated Studies Annual Meeting* Atlanta, October 2006

2006 Invited Address, "The Challenge of Biophysics," Notre Dame Law School Public Policy Forum, November 2006.
2007 Presidential Address, "Reflections on Thomas Jefferson's Library: Why Core Learning Matters," Annual Meeting of the Association for Core Texts and Courses, Williamsburg, VA, April 2007.
2008 Presidential Address, " *Paideia* in a Post-Darwinian World: Reconnecting Education and Biology," Annual Meeting of the Association for Core Texts and Courses, Plymouth, MA, April 2008.
2008 Invited Address, "The Challenge of Biophysics," Lumen Christi-Vatican Observatory Symposium on Current issues in the science-religion dialogue, Adler Planetarium, October, 2008.
2016. Invited Address, "Human Uniqueness and the Issue of Homologies." Stanford Workshop on Boundaries of Humanity, April 2016.
2018. Invited Address, "The Manuscript of Émilie Du Châtelet's *Institutions de Physique.*" Notre Dame Conference on the *Institutions de Physique*. April 2018.
2018 Invited Lecture, "The Bohr-Debates, Schrödinger's *What is Life?*, and the Timoféeff-Zimmer-Delbrück Paper on the Nature of the Gene." Institute for Theoretical Physics, Copenhagen, June 2018.

Other Lectures:
2008 Saturday Scholars Lecture: "Catholics and Evolution," Nov. 1, 2008.
2009 Teachers as Scholars Workshop for secondary teachers, Evolution. March-April 2009 (2 sessions)
2009 Invited Lecture, Chicago Area Speaker Series on the Darwin Year, Benedictine University, Chicago.
2018 Teaching Science in a Prison Context, Notre Dame Conference on College in Prison.

DOCTORAL DISSERTATIONS DIRECTED:
1996 Christopher Blum, Program in History and Philosophy of Science, "St. George Jackson Mivart, Catholic Scientist."
1999 Michael Letteney, Program in History and Philosophy of Science, "Georges Cuvier, Transcendental Anatomist: A Study of Teleological Explanation in Biology."
2003 Ryan MacPherson, Program in History and Philosophy of Science,"The *Vestiges of the Natural History of Creation* and the pre–Darwinian Evolutionary Debates in America in Three Intellectual Communities."
2003 Roberta Berry, Program in History and Philosophy of Science , "Recreating Adam: A Philosophical Investigation of the Genetic Engineering of Human Beings."
2003 Christopher Mirus, Program in History and Philosophy of Science, "Aristotle on the Unity of Living Substances," co–directed with Michael Loux, Notre Dame Philosophy.
2007 Nayhan Fancy, Program in History and Philosophy of Science, "Pulmonary Transit and Bodily Resurrection: The Interaction of Medicine, Philosophy and Religion in the Works of Ibn Al–Nafis (D. 1288)." Co–Directed with Ahmad Dallal, Georgetown U. This dissertation won the prize of the Malmuk Association for the best dissertation in Middle–Eastern history.
2010 Erik L. Peterson, Program in History and Philosophy of Science, "Finding Mind, Form, Organism, and Person in a Reductionist Age: The Challenge of Gregory Bateson." This dissertation formed the basis of Peterson's book *The Life Organic: The Theoretical Biology Club and the Roots of Epigenesis*. Pittsburgh: Pittsburgh University Press, 2016.
2011 James L. Barham, Program in History and Philosophy of Science, "Teleological Realism in Biology."
2019 Xiaoxing Jin, Program in History and Philosophy of Science, "Darwin in China: 1870-1935." Co-Directed with Thomas Stapleford, University of Notre Dame.