# CURRICULUM VITAE

# Peter Barker

# May 2017

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#### 2015

#### **CURRICULUM VITAE**

#### **Peter Barker**

Department of the History of Science University of Oklahoma 601 Elm, Room 622 Norman, Oklahoma 73019 USA

### **EDUCATION**

Ph.D. in Philosophy, State University of New York at Buffalo, 1975. Dissertation: Albert Einstein's Philosophy of Science: A Preliminary Survey. Director, Edward H. Madden.

Diploma in the History and Philosophy of Science, University of Oxford, England, 1972.

B.A. (Honors) in Physics and Philosophy, University of Oxford, England, 1971.

Open Exhibition in Physics, Hertford College, University of Oxford, England, 1968.

### EMPLOYMENT

Professor, Department of the History of Science, University of Oklahoma, 1995present.

Chair, Department of the History of Science, University of Oklahoma, 1997-1998 Associate Professor, Center for the Study of Science in Society, Virginia

Polytechnic Institute and State University, 1984-1995.

Director, Graduate Program in Science & Technology Studies, Virginia Polytechnic Institute and State University, 1985-1987.

Associate Professor of Philosophy, Memphis State University, 1981-1984.

Assistant Professor of Philosophy, Memphis State University, 1975-81.

Part-Time Instructor in Philosophy, State University of New York at Buffalo, 1972-75.

### **PROFESSIONAL SOCIETIES**

*Active*: History of Science Society; Midwest Junto for the History of Science; *Inactive*: Philosophy of Science Association; History of Philosophy of Science Working Group; American Philosophical Association; Southern Society for Philosophy and Psychology

### HONORS AND AWARDS

Elected to Faculty Senate University of Oklahoma, 2015-2018

International Evaluator, Danish Research School in Philosophy, History of Ideas and History of Science, 2002 - 2010.

Editorial boards: *Centaurus*, 2005 - present; *Perspectives on Science*, 2003 - present.

Senior Research Fellow, Danish Institute for Advanced Studies in the Humanities, Copenhagen, Denmark, 2002.

President, Midwest Junto for the History of Science, 2000-01; 2010-11 Council, Midwest Junto for the History of Science, 1998-2001

National Endowment for the Humanities, Interpretive Research, Humanities, Science and Technology, Research Grant 1992-94.

National Science Foundation, Program in Science, Technology and Society, Research Grant 1992-94.

Visiting Fellow, Centrum Philosophie und Wissenschaftstheorie, University of Konstanz, Germany, 1992-93.

Visiting Scholar, Center for Applied Psychology, Memphis State University, May-July 1990.

National Endowment for the Humanities, Division of Research Conferences Grants 1984, 1989.

Elected to Faculty Senate, Virginia Polytechnic Institute and State University, 1989

Council, Southern Society for Philosophy and Psychology, 1989-92.

Consultant, National Endowment for the Humanities, Improvement of Instruction Program, University of North Carolina at Asheville, 1988.

National Endowment for the Humanities, Summer Seminars for College Teachers, 1984.

Visiting Fellow, Center for Philosophy of Science, University of Pittsburgh, 1981-82

### PUBLICATIONS

#### **Books and Edited Collections**

- *The Cognitive Structure of Scientific Revolutions*. Hanne Andersen, Peter Barker and Xiang Chen (co-authors). Cambridge: Cambridge University Press, 2006.
- New Work In Early Modern Science. P. Barker (ed.) Centaurus, 48 (1) 2006.
- Astronomy and Astrology from the Babylonians to Kepler: Essays presented to Bernard R. Goldstein on the occasion of his 65th Birthday. P. Barker et al. (eds.). Part I. Centaurus, 45 (1-4) 2003. Part II. Centaurus, 46 (1) 2004.
- New Foundations in the History of Astronomy: A Collection of Essays in Honor of Bernard R. Goldstein, P. Barker (ed.) Perspectives on Science, 10 (2003).
- *Pierre Duhem: Essays in the History and Philosophy of Science.* Roger Ariew and Peter Barker (trs.). Indianapolis: Hackett Publishing Co., 1996. Available as an ebook from 2008.
- Revolution and Continuity: Essays in the History and Philosophy of Early Modern Science, Peter Barker and Roger Ariew (eds.). Washington: Catholic University of America Press, 1991.
- Pierre Duhem: Historian and Philosopher of Science, Roger Ariew and Peter Barker (eds.), Synthese, 83 (2&3) 1990.
- After Einstein: Proceedings of the Memphis State Einstein Centenary Conference, March 14-16, 1979. Peter Barker and Cecil G. Shugart (eds.). Memphis: Memphis State Press, 1981.

# *Refereed publications* (\* = lead article)

- \*59. Barker, P. and Heidarzadeh, T. (2016) "Copernicus, the Tūsī couple and East-West Exchange in the Fifteenth Century" in M. A. Grenada and P. Boner (eds.) *Man and Cosmos* (Barcelona: University of Barcelona Press), 19-57.
- \*58. Crowther, K. and Barker, P. (2013) "Training the Intelligent Eye: Understanding Illustrations in Early Modern Astronomy Texts." *Isis*, 104, 429-70.
- \*57. Barker, P. (2013a) "Why was Copernicus a Copernican?" Metascience, 22, 1-6.
- \*56. Barker, P. (2013b) "Albert of Brudzewo's *Little Commentary* on Peurbach's *New Theorica*", *Journal for the History of Astronomy*, 44, 1-24.
- 55. Barker, P and Vesel, M. (2012) "Goddu's Copernicus." Aestimatio, 9, 304-36.
- 54. Barker, P. (2011a) "The Cognitive Structure of Scientific Revolutions" *Erkenntnis*, 75, 445-465. (doi: 10.1007/s10670-011-9333-8)
- Barker, P. (2011b) "The Reality of Peurbach's Orbs" in Patrick J. Boner (ed.) *Change and Continuity in Early Modern Cosmology* (New York: Springer, 2011) pp. 7-32.
- 52. Chen, X & Barker, P. (2009) "Process Concepts and Cognitive Obstacles to Change: Perspectives on the History of Science and Science Policy" *Centaurus*, 51, 314-20.
- 51. Barker, P. (2009) "The Hypotyposes orbium coelestium (Strasbourg, 1568)" in M.
  A. Granada & E. Mehl (eds.) Nouveau Ciel Nouvelle Terre La

*Révolution Copernicienne dans l'Allemagne de la Réforme (1530-1630).* Paris: Les Belles Lettres, 85-108.

- \*50. Barker, P. (2008a) "Stoic alternatives to Aristotelian natural philosophy: Pena, Rothmann and Brahe", *Revue d'histoire des sciences*, 61/2, 1-22.
- Barker, P. (2008b) "Kepler and Melanchthon on the Biblical arguments against Copernicanism" in S. Mandelbrote and J. H. van der Meer (eds.) *Nature* and Scripture in the Abrahamic Religions: To 1700. Leiden: Brill, 585-604.
- Barker, P. (2007) "Towards a cognitive history of the Copernican revolution" Organon, 35: 61-72; reprinted in M. Kokowski (ed.) The Global and the Local: The History of Science and the Cultural Integration of Europe. Proceedings of the 2nd ICESHS (Cracow, Poland, September 6-9, 2006), 302-309.
- Barker, P. (2005) "The Lutheran Contribution to the Astronomical Revolution", in J. Brooke & E. Ihsanoglu (eds.) *Religious Values and the Rise of Science in Europe*. Istanbul: Research Centre for Islamic Art History and Culture (IRCICA), 31-62.
- Tredwell, Katherine A., and Barker, P. (2004) "Copernicus' First Friends: Physical Copernicanism from 1543 to 1610", *Acta Philosophica/Filozofski* vestnik, 25, 143-666.
- 45. Barker, P. (2004a) "The Copernican Revolution: A Cognitive Historical Approach" in Li Ping (et al.) (eds.) *Science, Cognition and Consciousness*. Nanchung (China): People's Press, 75-95.
- 44. Barker, P. (2004b) "Astronomy, Providence and the Lutheran Contribution to Science" in A. J. L. Menuge (ed.) *Reading God's World: The Scientific Vocation*, St. Louis: Concordia Press,157-87.
- 43. Barker, P. (2004c) "How Rothmann Changed His Mind" in A. Bowen et al. (eds.) Astronomy and Astrology from the Babylonians to Kepler. Centaurus, 46, 41-57.
- \*42. Barker, P. and Goldstein, B. R. (2003) "Patronage and the production of *De revolutionibus*", *Journal for the History of Astronomy*, 34, 345-68.
- 41. Barker, P. (2002) "Constructing Copernicus" in *New Foundations in the History of Astronomy*, P. Barker (ed.) *Perspectives on Science*, 10, 208-27 (published 2003).
- 40. Barker, P., Chen, X, and Andersen, H. (2003) "Kuhn on concepts and categorization" in T. Nickles (ed.) *Thomas Kuhn*. Cambridge: Cambridge University Press, 212-45 (published 2002).
- 39. Barker, P. (2001a) "Kuhn, Incommensurability and Cognitive Science" *Perspectives on Science*, 9, 433-62 (published 2002).
- Barker, P. (2001b) "Incommensurability and conceptual change during the Copernican Revolution," in P. Hoyningen-Huene & H. Sankey (Eds.) *Incommensurability and Related Matters*. Boston Studies in the Philosophy of Science. Boston: Kluwer, 241-273.
- Barker, P. (2001c) "Brahe and Rothmann on Atmospheric Refraction" in G. Simon & S. Débarbat (Eds.) Optics and Astronomy: Proceedings of the XXth

36.	International Congress of History of Science, Liège 1997, Vol XII, 43-50. Barker, P. and Goldstein, B. R. (2001), "Theological foundations of Kepler's astronomy," in John Hedley Brooke, Margaret J. Osler, and Jitse van der
	Meer.(eds.), Science in Theistic Contexts: Cognitive Dimensions. Osiris, <b>16</b> , 88-113.
35.	Chen, X., and Barker, P. (2000) "Continuity through revolutions: a frame-based account of conceptual change." <i>Philosophy of Science (Proceedings)</i> , <b>67</b> , 208-223.
34.	<ul><li>Barker, P. (2000) "The role of religion in the Lutheran response to Copernicus" in M. J. Osler (ed.) <i>Rethinking the Scientific Revolution</i>. Cambridge University Press, 59-88.</li></ul>
*33.	Barker, P. (1999) "Copernicus and the critics of Ptolemy." <i>Journal for the History</i> of Astronomy, 30, 343-358.
32.	Barker, P and Goldstein, B. R. (1998) "Realism and Instrumentalism in Sixteenth Century Astronomy: A Reappraisal" <i>Perspectives on Science</i> , <b>6</b> : 232-258.
*31.	<ul> <li>Chen, X., Andersen, H., and Barker, P. (1998) "Kuhn's theory of scientific revolutions and cognitive psychology," <i>Philosophical Psychology</i>, 11: 5-28.</li> </ul>
30.	Barker, P. (1998) "Kuhn and the sociological revolution" <i>Configurations</i> , <b>6</b> : 21-32.
29.	Barker, P. (1997) "Kepler's Epistemology," in C. Methuen, D. Di Liscia & E. Kessler (eds.), <i>Method and Order in</i> <i>Renaissance Natural Philosophy</i> . New York: Kluwer, 355- 68.
28.	Andersen, H., Barker, P., and Chen, X. (1996) "Kuhn's mature philosophy of science and cognitive science," <i>Philosophical Psychology</i> , <b>9</b> , 347-363.
27.	<ul> <li>Barker, P. (1996) "Understanding Change and Continuity: Transmission and appropriation in sixteenth century natural philosophy," in F. J. Ragep &amp; S. Ragep (eds.), <i>Tradition, Transmission, Transformation</i>, Leiden: Brill, 527-550.</li> </ul>
26.	Goldstein, B. R. and Barker, P. (1995) "The role of Rothmann in the dissolution of the celestial spheres," <i>British Journal for the History of Science</i> , <b>28</b> , 385-403.
25.	Barker, P. and Goldstein, B. R. (1994) "Distance and velocity in Kepler's astronomy," <i>Annals of Science</i> , <b>51</b> , 59-73.
*24.	Barker, P. (1993) "The Optical Theory of Comets from Apian to Kepler," <i>Physis</i> , <b>30</b> , 1-25.
23.	Ariew, R. and Barker, P. (1992) "Duhem and continuity in the history of science," <i>Revue Internationale de Philosophie</i> , 46, 323-43.
22.	Chen, X. and Barker, P. (1992) "Cognitive appraisal and power: Brewster, Brougham and the tactics of the emission-undulatory controversy in the 1850s," <i>Studies in History and Philosophy of Science</i> , <b>23</b> , 75-101.
21.	Barker, P. (1991) "Stoic contributions to early modern science," in M. J. Osler (ed.), Atoms, pneuma and tranquillity: Epicurean and Stoic Themes in European Thought. Cambridge: Cambridge University Press, 135-154.

- Barker, P. & Ariew, R. (1991) "Introduction," in Peter Barker and Roger Ariew (eds.), *Revolution and Continuity: Essays in the History and Philosophy of Early Modern Science*. Washington: Catholic University of America Press, 1-19.
- Barker, P. (1990) <u>"Copernicus, the Orbs and the Equant,"</u> in R. Ariew and P. Barker (eds.), *Pierre Duhem: Historian and Philosopher of Science, Synthese*, 83, 317-323.
- Barker, P. (1989b) "The reflexivity problem in the psychology of science." In B. Gholson et. al. (eds.), *Psychology of Science: Contributions to Metascience*, pp. 92-114. Cambridge: Cambridge University Press, 1989.
- Barker, P. (1989a) "Wittgenstein and the historicist project in the philosophy of science." In P. Weingartner & G. Schurz (eds.), *Philosophy and Natural Science: Borderline Questions. Reports of the 13th International Wittgenstein Symposium.* Vienna: Verlag Holdner - Pichler - Tempsky, 243-46.
- 16. Barker, P. and Goldstein, B. R. (1988) "The role of comets in the Copernican revolution," *Studies in History and Philosophy of Science*, **19**, 299-319.
- Ariew, R., & Barker, P. (1986) "Duhem on Maxwell: A case study in the interrelations of History of Science and Philosophy of Science" in P. Machamer & A. Fine (eds.), *PSA 1986* Vol. 1, pp. 145-156.
- 14. Barker, P. & Gholson, B. (1986) "On Metaphor in Psychology and Physics: Reply to Farrell," *American Psychologist*, **41** (1986) 720-721.
- Laudan, L., Donovan, A., Laudan, R., Barker, P., Brown, H., Leplin, J., Thagard, P., & Wykstra, S. (1986) "Testing theories of scientific change," *Synthese*, 69, 141-223.
- Barker, P. (1986) "Wittgenstein and the authority of science." In W. Leinfellner & F.M. Wuketits (eds.), *The Tasks of Contemporary Philosophy. Proceedings of the Xth International Wittgenstein Symposium*. Vienna: Verlag Holdner -Pichler - Tempsky, 265-7.
- \*11. Gholson, B., & Barker, P. (1985) "Kuhn, Lakatos and Laudan: Application to the history of physics and psychology," *American Psychologist*, 40, 755-769.
- Barker, P. (1985) "Jean Pena (1528-58) and Stoic Physics in the Sixteenth Century," in R.H. Epp (ed.), *Recovering the Stoics: Spindel Conference* 1984. Southern Journal of Philosophy (Supplement), 13, 93-107.
- 9. Barker, P. and Goldstein, B. R. (1984) "Is seventeenth century physics indebted to the Stoics?" *Centaurus*, 27, 148-164.
- Barker, P., & Gholson, B. (1984a) "The history of the psychology of learning as a rational process: Lakatos versus Kuhn," in H. Reese (ed.), *Advances in Child Development and Behavior*, Vol. 18. New York: Academic Press, 227-244.
- Barker, P., & Gholson, B. (1984b) "From Kuhn, to Lakatos, to Laudan," in H. Reese (ed.), *Advances in Child Development and Behavior*, Vol. 18. New York: Academic Press, 277-284.

- Barker, P. (1982a) "Uncle Ludwig's Book About Science," *Proceedings of the* Southwestern Philosophical Society 1980. Philosophical Topics (Supplement), 12, 71-78.
- 5. Barker, P. (1982b) "Omnilinguals," in N. Smith (ed.), *Philosophers Look at Science Fiction*. Nelson-Hall, Chicago, 40-52.
- 4. Barker, P. (1981) "Einstein's Later Philosophy of Science," in P. Barker and C. G. Shugart (eds.), *After Einstein*, Memphis State Press, 133-145.
- 3. Barker, P. (1980a) "Hertz and Wittgenstein," *Studies in History and Philosophy of Science*, 11, 243-256.
- Barker, P. (1980b) "Can Scientific History Repeat?" in R. Giere and P. Asquith (eds.) *PSA 1980*, Vol. 1, 20-27. East Lansing, Michigan: Philosophy of Science Association.
- 1. Barker, P. (1979) "Untangling the Net Metaphor: *Tractatus* 6.341," *Philosophy Research Archives*, 5, 184-99.

### **Other publications**

- Peter Barker ed. & tr. (2015). *Galileo Galilei: The Starry Messenger*. Iowa City: Sally H. Chai, 2015.
- Content adviser for: Natalie M. Rosinsky, *The Story of the Atomic Bomb: How It Changed the World* (Mankato, MN: Compass Point Books, 2010).
- Barker, P. (2010) "Logic of Scientific Discovery, (Popper)", in *Encyclopedia of Research Design*, Neil J. Salkind (ed.). NY: SAGE, 2010, Vol.2, 728-730.
- Barker, P. (2009) "Copernicus, Nicholas (1473–1543)" in Heidi Campbell and Heather Looy (eds.) A Science and Religion Primer (Baker Academic, 2009) pp. 67-9.
- Barker, P. (2008) "Commentary 02" (The status of models in astronomy before Copernicus) *Centaurus*, 50: 189-94.
- Barker, P. (2006) "New work in early modern science" Centaurus 48, 1-2
- Barker, P. (2004) "Cosmology" II: 66-71, "Kepler, Johannes" IV: 398-401 and "Stoicism" V: 530-2, in *Europe 1450 to 1789: Encyclopedia of the Early Modern World*, 6 vols., J. Dewald (ed.). N.Y.: Scribners.
- Xiang Chen, Hanne Andersen & Peter Barker (2004). "Kuhn's Theory of Scientific Revolutions and Cognitive Psychology," in P. Li & X. Chen (eds.), *Cognitive Studies of Science and Reasoning*, pp. 263-293. Nanchung, China: JiangXi People's Press, 263-93. Chinese tr. of Chen, Andersen & Barker (1998).
- Barker, P. (2004) "Galileo and the *Sidereus Nuncius*", pp.11-34, and "Page by page translation of the *Sidereus Nuncius*, based on the version of E. S. Carlos, edited and corrected by P. Barker", pp. 38-98, in S. E. Richards and P. Barker, A Companion to the Byzantium Press Facsimile Edition of Galileo's Sidereus Nuncius, Oklahoma City, Byzantium Press.
- Barker, P. (2000) Articles for W. Applebaum (ed.) *Encyclopedia of the Scientific Revolution from Copernicus to Newton*. New York: Garland Publishing Co., : "Basso, Sebastian" (76b); "Comets" (154b-155b); "Ether " (215a-216b); "Maestlin, Michael" (378b-379a); "*pneuma*" (510a-511a);

"Reinhold, Erasmus" (560b-561b); "Rothmann, Christoph" (579b-580a); "Stoicism" (620b-622b).

- Barker, P. (2000) "Hertz, Heinrich Rudolf," in E. Craig (ed.) *The Routledge Concise Encyclopedia of Philosophy*. London: Routledge, 328.
- Barker, P. (1999) "Copernicus's knowledge of the Averroist attack on Ptolemy," in M. Malley (ed.), *Midwest Junto for the History of Science Papers*, Bartlesville, OK, 22-27.
- Barker, P. (1999) "Noted Scientists of the Past" *The World Almanac and Book of Facts*. Mahwah, N.J.: Primedia Reference Inc., 342-3. Reprinted annually 2000-present.
- Barker, P. (1998) "Hertz, Heinrich Rudolf," in E. Craig (ed.) *The Routledge Encyclopedia of Philosophy*. London: Routledge, 4: 400-402.
- Barker, P. (1992) "Rethinking the Scientific Revolution," *Cahiers du séminaire d'épistémologie et d'histoire des sciences*, Université de Nice, **22**, 67-88.
- Barker, P. and Ariew, R. (trs.) (1990). Pierre Duhem's "Logical Examination of Physical Theory," in R. Ariew and P. Barker (eds.), *Pierre Duhem: Historian and Philosopher of Science, Synthese*, 83, 183-188.
- Ariew, R. and Barker, P. (trs.) (1990). Pierre Duhem's "Research on the History of Physical Theories," in R. Ariew and P. Barker (eds.), *Pierre Duhem: Historian and Philosopher of Science, Synthese*, 83, 189-200.
- Barker, P. & Chen, X. (1989) "A Bibliography of Historical Orientation Philosophy of Science," *CSSS Working Papers*, 4, i. + 41pp.

### **BOOK REVIEWS** (selected)

- J. Z. Buchwald and M. Feingold, *Newton and the Origin of Civilization* (Princeton: Princeton University Press, 2013), *Renaissance Quarterly*, 68.2 (2015).
- J. Freely, Celestial Revolutionary: Copernicus the Man and his Universe (London: I. B. Tauris, 2014) in Times Higher Education Supplement, 21 Aug 14, p. 44.
- Jerzy Dobrzycki. *Selected papers on medieval and renaissance astronomy*. Edited by Joroslav Wlodarczyk and Richard L. Kremer (Warsaw, 2010) *Studia Copernicana* XLIII, to appear in *Journal for the History of Astronomy*, 44 (2013) 105-7.
- Ad Maas and Hans Hooijmaijers (eds.) Scientific Research in World War II: What scientists did in the war. London & New York: Routledge, Taylor and Francis Group, 2009. Centaurus 51 (2009), 324-6.
- Adam Mosley, *Bearing the Heavens: Tycho Brahe and the Astronomical Community of the Late Sixteenth Century* (Cambridge UP, 2007) *Isis*, 99, (2008), 398-399
- Michal Kokowski, *Copernicus's Originality*, in *Journal for the History of Astronomy* 36 (2005) 454-5.
- O. Gingerich, The Book Nobody Read, in Science, 30 April 2004 vol. 304 p. 686
- M. A. Grenada, Sfere solide e cielo fluido. Momenti del dibattito cosmologico nella seconda metà del Cinquecento. Milan: Angelo Guerini e Associati,

2002. in Renaissance Quarterly, 57 (2004) 301-3.

- John R. Christianson, On Tycho's Island. Cambridge: Cambridge University Press, 1999. American Historical Review, (2001) 1061-2.
- Sachiko Kusukawa, *The Transformation of Natural Philosophy: The Case of Philip Melanchthon*. Cambridge: Cambridge University Press, 1995. *Centaurus*, 41 (1999), 246-8.
- James J. Bono, *The Word of God and the Languages of Man: Interpreting Nature in Early Modern Science and Medicine. Volume 1: Ficino to Descartes.* Madison: University of Wisconsin Press, 1995. *Isis*, 90 (1999) 117.
- James M. Lattis, *Between Copernicus and Galileo: Christopher Clavius and the Collapse of Ptolemaic Cosmology*. Chicago: University of Chicago Press, 1994. *Centaurus*, 40 (1998) 351-2.
- Peter Dear, Discipline and Experience: The Mathematical Way in the Scientific Revolution. Chicago: University of Chicago Press, 1995. Isis, 88 (1997) 122-24.
- William Eamon, Science and the Secrets of Nature: Books of Secrets in Early Modern Culture. Princeton: Princeton University Press, 1994. Centaurus, 38 (1996) 368-70. With Gary Kroll.
- Paul Hoyningen-Huene. Reconstructing Scientific Revolutions: Thomas S. Kuhn's Philosophy of Science. Chicago: University of Chicago Press, 1993. Isis, 85 (1994) 193-195.

# WORK IN PROGRESS

**1) Book**: *Restoring the Celestial Orbs: The Structure of the Heavens and the Causes of Planetary Motion from Peurbach to Kepler.* In progress.

**2) Paper:** "The Social Structure of Islamicate Science", in review, *Journal of World Philosophies*.

**3) Presentation:** "Crombie and the Rest of the Word" invited paper for conference *The Forgotten Manuscript of A.C. Crombie and A. Carugo on the Natural Philosophy of Galileo and Mersenne*, June 09, 2017, Oxford, England.

**4) Presentation:** "John of Glogów and the Humanist Response to Peurbach" invited paper for conference *The Authors of the Early Modern Commentaries on De sphaera*, February 13–15, 2018, Max Planck Institute for the History of Science, Berlin.

### **GRANTS** (selected)

### External

Danish Institute for Advanced Studies in the Humanities (2002) Senior Research Fellowship. DKR 200,000. Rockefeller Foundation (7/99-6/03) "Scientific Communications and Exchanges", with F.J. Ragep, K. Taylor, \$49, 000. Deutscher Akademischer Austauschdienst (1997-98) - "Incommensurability", in collaboration with Dr. P. Hoyningen-Huene (Konstanz, Germany), *et al.* DM 20,210.

NEH - Humanities, Science, and Technology Program. "Kepler's Unification of Physics and Astronomy." Jan 1992 - June 1994. \$96,000. Co-director with B. R. Goldstein.

NSF - Program in Science, Technology and Society. "Kepler's Unification of Physics and Astronomy." Jan 1992 - June 1994. \$96,000. Co-director with B. R. Goldstein.

NEH - Division of Research Conferences. "Pierre Duhem: Historian and Philosopher of Science." March 16-18, 1989. \$9,000. Co-director with R. Ariew.

NEH - Division of Research Conferences. "Recovering the Stoics." Codirector with R. H. Epp. MSU, Memphis, Oct. 18-19, 1984. \$9,500. Participants: J. Rist (Toronto), A. A. Long (Berkeley), D. Sedley (Cambridge), D. Hahm (Ohio State), B. J. T. Dobbs (Northwestern), B. Inwood (Toronto).

NEH - Summer Seminars for College Teachers. 'The role of computers in contemporary culture.' \$3,000. U.C. Berkeley, June 18 - Aug. 17, 1984.

Internal

University of Oklahoma, Sabbatical Leave Program, Fall 2017, Spring 2009, Spring 2002.

University of Oklahoma Research Council (Summer 2000) -"Cosmological models in in early astronomical textbooks", \$1,000. University of Oklahoma Research Council (Summer 1996) - "Christoph Rothmann and the Causes of Planetary Motion", \$1,884.

VPI&SU - Supplemental Grant to attend conference on `The Scientific Revolution,' Oxford, England, July 1990. \$1200.

VPI&SU - Supplemental Grant to attend 13th International Wittgenstein Symposium and 18th World Congress of Philosophy. \$1100. Aug 1988. VPI&SU - Research conference on 'Continuity and Discontinuity in the Scientific Revolution.' \$3,300. Co-organizer with R. Ariew, et al., using funds provided by the Department of Philosophy, Department of History, Center for the Study of Science in Society, and Center for the Programs in the Humanities at Virginia Polytechnic Institute and State University. Oct. 28-29, 1987.

VPI&SU - Center for Programs in the Humanities Summer Research Award. 'Wittgenstein's critique of rules and the historicist project in the philosophy of science.' \$2,750. June - Aug. 1987.

VPI&SU - Research conference on 'Re-examining the scientific revolution.' \$2000. Organizer, using funds provided by Center for the Study of Science in Society, Center for Programs in the Humanities, Department of History, and Department of Philosophy at Virginia Polytechnic Institute and State University. May 9-10, 1986.

MSU - Spindel Philosophy Endowment. A competitively awarded grant of \$2,000 in additional support for the research conference 'Recovering the

Stoics.' Co-director with R.H. Epp.

MSU - Academic Enrichment Fund. A competitively awarded grant of \$4,500 for a series of four speakers on the history of science (B. Goldstein, Pittsburgh; R. Westman, UCLA; W. Diederich, Bielefeld, W. Germany; B. J. T. Dobbs, Northwestern).

# **TEACHING EXPERIENCE** (See also Appendix 2)

# **Courses Taught**

- *Undergraduate*: Science and Technology in Modern Society, Humanities and the Natural Sciences, Introduction to Philosophy, Elementary Logic, Honors Introduction to Logic, Intermediate Logic, Analysis of Persuasive Argument.
- Advanced undergraduate: History of Science from the Greeks to Newton, History of Science from Newton to the present, Philosophy of Science, Metaphysics, Philosophy of Language, Rise of Analytic Philosophy, British Empiricism, Maxwell, Wittgenstein, Honors History of Science, Junior Honors Seminar: Knowing How We Know - an introduction to modern cosmology, Senior Honors Seminar on Einstein.
- *Graduate*: History and Philosophy of Science, Wittgenstein, Topics in 16th Century Cosmology, Topics in 19th Century Physics, Science in the 20th century, Psychology of Science, Philosophy of Language, Analytic Philosophy, British Empiricism, Introduction to Logic for Graduate Students, Readings and Research, Thesis & Dissertation.

#### **UNIVERSITY SERVICE**

### The University of Oklahoma

Faculty Senate: Fall 2014-present
Graduate Council 2008-2009
Campus Departmental Review Panel 2008-2009
External member, Department of English search committees: Shakespeare (2007-8); Renaissance Studies (2 positions) 2000-01
Academic appeals and misconduct committee 1999-2000
English certification program 1997-2000
Department of the History of Science
Graduate Admission Coordinator 2000-2001; 2005-2007
Committee A (T&P, annual review), 1995-98; 2005-2006

Colloquium coordinator 1995-1997, 1999-2001, 2008-2009; 2010-2016 Graduate advisor, 1996-8 Mellon Program Committee, 1995-99

Center for Medieval and Renaissance Studies

Steering committee, 1995-present

### **International Program Center**

Affiliate 1997-present

### Virginia Polytechnic Institute and State University

Faculty Senate, 1989-92. Supplemental Grants Committee, 1989-92

### College of Arts & Sciences Committees

Ad Hoc Committee on CSSS 1986 CSSS Review Committee (Ch.) 1985-86 CSSS/STS Director Search Committee, Chair, 1991-2

### **Department Committees**

Philosophy Hiring Committee 1988-92 Philosophy Curriculum 1984-88, 93-94 Philosophy Tenure and Promotion 1984-87, 1994 CSSS Tenure and Promotion 1985-86, 88-89, 91-92, 93-94 History Promotion 1986-87 Center for Programs in the Humanities Summer Stipend Committee 1989-90 Program in Humanities, Science and Technology Curriculum Committee, Fall 88-94 Scheduler, HST program 1988-89 STS Committees: STS Steering Committee 1987-1989 Speaker Program Co-ordinator, 1988-9, 1992-3 Scheduler, STS program 1988-1989 Graduate Program in STS Committee (Ch.) 1986-87 Liaison Committee (Ch.) 1985-86

Admissions Committee (Ch.) 1985-86

Memphis State University (now University of Memphis)

Standing University Committee on Admissions, 1976-81.

Academic Senate, 1976-78, 1980-81.

Academic Senate Executive Committee, 1980-81.

Academic Senate, Research Committee, 1976-78.

Academic Senate, University Budget Committee, 1977-78.

**College of Arts & Sciences Committees** 

College Decennial Self Study, Steering Committee, 1982-83.

College Decennial Self Study, Research

Subcommittee (Ch.), 1982-83.

College T&P Committee, 1982-83.

*Department Committees* (1) University College Language and Mind Program, Steering Committee, 1977-81. (2) University College, Faculty Seminar in the Social Sciences, Steering Committee, 1979-present. (3) Department of Philosophy Committees: Graduate Review, Curriculum, Logic Program Development, Library, Visiting Speakers. (4) Honors Advisor in Philosophy, 1978-81. (5) Faculty Advisor, Mortar Board National Honor Society, 1979-81, 1982-84. (6) Faculty Advisor, Philosophy Club, 1976-81.

**PROFESSIONAL ACTIVITIES** (see Appendix 1 for complete Chronological List)

120+ Papers and Invited Addresses (1976-2017) at Universities and Conferences in U.S., Canada, U.K., Holland, France, Denmark, Germany, Italy, Turkey, Israel.

Directed major conferences or workshops: 2011, 2001, 1992, 1989, 1987(2), 1986, 1984, 1983, 1982(2), 1979.

- Referee: American Psychologist, Cambridge University Press, Dialogue, Early Science and Medicine, Hackett Publishing Co., Harvard University Press, Intellectual History Review, Isis, Notre Dame University Press, Perspectives on Science, Philosophical Psychology, Prentice-Hall, Renaissance Quarterly, Southern Journal of Philosophy, Studies in History and Philosophy of Science, Synthese, Technology and Culture, University of Pittsburgh Press.
- Peer Reviewer: National Endowment for the Humanities, National Science Foundation, ACLS, Canada Council, Social Sciences and Humanities Research Council of Canada, Danish Research Council, Czech Science Foundation.
- International Evaluator, Danish Research School in Philosophy, History of Ideas and History of Science, 2002-2010.
- External examiner, Institute for the History of the Exact Sciences, University of Aarhus, Denmark, 1993; University of Cambridge, 2006
- Adjunct faculty (dissertation committee), Union Institute Graduate School, Cincinnatti, 1994 - 99.

### Curriculum vitae 2017

#### **APPENDIX 1**

#### Chronological List of Professional Activities

- 2017 Paper: "The Social Structure of Islamicate Science" Midwest Junto for the History Science, University of Indiana, Bloomington IN, March 25, 2017.
- 2016 Paper: "European Sciences and Islamic Traditions: An Examination of the New Skeptics" *Scientiae 2015*, Oxford, UK, July 6, 2016.
- 2015 Paper: "The Rise of the New Theorica" Scientiae 2015, Toronto, CA, May 28, 2015. Academic Publishing, workshop leader, with R. Schleifer (English), OU Writing Center, May 6.
- 2014 "The Last Days of the Manhattan Paradigm", Midwest Junto for the History of Science, Kirksville, MO, April 4-6, 2014.
  Writing for Publication, 2 Day Intensive Workshop, with R. Schleifer. Oklahoma State University, April 15-16.
  "Educational Video Games, Student Learning and Student Engagement: A Study of the Parnassus LLC Galileo Game Prototype," with L.Watts (Psychology), Teaching Scholars Initiative, University of Oklahoma, Oct 31.

# 2013

- Workshop on Sacrobosco's *Sphere*, Newberry Library, Chicago IL, March 15 (with K. Crowther)
- "Copernicus and his teachers at Cracow", Midwest Junto for the History of Science, Notre Dame, IN, April 5-7
- Invited lecture: "The Lutheran Contribution to the Copernican Revolution", Concordia University, WI, Oct 22

# 2012

- "Copernicus, Goddu and the Arabs", Midwest Junto for the History of Science, Rolla, MO, March 23-25, 2012.
- "Copernicus and his Islamic predecessors: Cultural and intellectual exchanges between Islam and Europe during the fifteenth century", with co-author Tofigh Heidarzadeh (University of California, Riverside), *Scientiae: Disciplines of Knowing in the Early Modern World*, Vancouver, B.C., April 26-28, 2012.

### 2011

"Why Was Copernicus a Copernican?" History of Science Society, Cleveland OH, November 5.

- Co-organizer, "Robert S. Westman's, The Copernican Question", History of Science Society, Cleveland OH, November 5.
- "Is there a role for Wikipedia in undergraduate research?" Teaching Scholars Initiative, University of Oklahoma, Oct 20. (Co-organizer, with Lisa Foster, Communication Studies)

President, Midwest Junto for the History of Science, 2010-11.

Attended (1) College Art Association, NYC, Feb 11 (2) Workshop on Science and Religion, Huntington Library, CA, March 12.

### 2010

"Copenhagen in Norman: Niels Bohr at the University of Oklahoma" Weitzenhoffer
Theater, OU, following the last performance of Michael Frayn's
Copenhagen, directed by Susan Shaughnessy, Sept 12.
"Understanding Proliferation: The Last Days of the Manhattan Project", International
Society for the Study of European Ideas, Ankara, Turkey, August 2-6.
Local arrangements coordinator, Midwest Junto for the History of Science, Norman OK,
March 26-27.
Attended 16th Annual Arizona Center for Medieval and Renaissance Studies
Interdisciplinary Conference, February 11-13, 2010.
"On the Reality of Celestial Orbs. 1472-1609" History of Science Colloquium, University of
Oklahoma, Feb 19.

### 2009

Organizer: Workshop on Academic Writing, PHIS annual meeting, University of Odense,
Denmark, December 3-4 (with R. Schleifer).
Paper: "Were the Celestial Orbs 'Fictions' before Copernicus?", History of Science
Society, Phoenix AZ, Nov 21.
Invited paper: "The Reality of Peurbach' Orbs" Conference on 'Cosmological Continuity
and the Conception of Modern Science', Johns Hopkins University,
Baltimore, MD, May 15-16.
Paper: "What Peurbach's Followers Said About Celestial Orbs" Midwest Junto for the
History of Science, Kansas City, MO, March 28.
Attended Sixteenth Century Society meeting, Geneva, Switzerland, May 28-30.

# 2008

Organiz	zer: Elec	tronic W	orkshop o	on Aca	demic W	riting,	PHIS	anr	nual meet	ing,
	I	University	of Cope	nhage	n, Denma	ark, De	ecemb	er 4	-5 (with ]	R.
		Schleifer)		-						
Chair	"Early	madam	anioman	and	madiain	" II:	tom	of	Caiamaa	See

Chair: "Early modern science and medicine" History of Science Society, Pittsburgh, PA, November 9.

Invited paper: "The Cognitive Structure of Scientific Revolutions", International conference "What Good is Historical Epistemology?", Max Planck Institute for the History of Science, Berlin, Germany, July 25.

Paper: "The Averroist Critique of Ptolemaic Astronomy" Midwest Junto for the History of Science, Minneapolis, MN, April 6.

# Invited lecture: "From the Manhatten Project to North Korea" University of Aarhus, Denmark, March 18.

### 2007

- Commentator and Chair: "Astrology at the eve of modernity" History of Science Society, Alexandria, VA, November 2.
- Invited Paper: "Why History of Science is Hard: Evaluating Lavoisier's Contribution to the Chemical Revolution" Machette Foundation Conference, University of South Florida, November 16-17.
- Organizer and presenter: Workshop on Academic Writing, PHIS annual meeting, University of Aarhus Conference Center, Sandbjerg, Jutland, Denmark, December 6-7 (with R. Schleifer).
- Mellon/ACLS Dissertation Completion Fellowship Selection Committee, New York, March 16

# 2006

- Organizer and presenter: Workshop on Academic Writing, PHIS annual meeting, Odense, Denmark, December 2-3.
- Paper: "Historical themes in *The Cognitive Structure of Scientific Revolutions*", History of Science Society, Vancouver, B.C., Nov 5.
- Paper: "Towards a cognitive history of the Copernican revolution" 2nd International Conference of the European Society for the History of Science, Cracow, Poland, Sept 8. (Paper presented by Sylwester Ratowt)
- Paper: "The *Hypotyposes orbium coelstium* (Strassbourg 1568)". Colloque "Nouveau ciel, nouvelle Terre: La révolution copernicienne et le renouveau de la cosmologie dans l'Allemagne de la Réforme (1530-1630)". Université Strasbourg, France, June 18.

# 2005

- Organizer and presenter: Workshop on Academic Writing, PHIS annual meeting, University of Aarhus Conference Center, Sandbjerg, Jutland, Denmark, December 8-9 (with R. Schleifer).
- Organizer and Chair: "New work on early modern science", History of Science Society, Minneapolis, Nov 3-6.
- Invited paper: "The Copernican Reformation and the Reform of Copernicanism" Journées d'études en l'honneur de Gérard Simon, Ecole Normale Superieure, Paris, Oct 6-8.
- Invited paper: "Kepler and Melanchthon on Biblical arguments against Copernicanism", Third International Pascal Center Workshop "Interpreting Nature and Scripture", Redeemer College, Ontario, July 18-23.
- Paper: "How Rheticus became a Copernican", Seventh Biennial History of Astronomy Workshop, University of Notre Dame, July 7-10.
- Paper: "How Rheticus became a Copernican", Midwest Junto for the History of Science,

# April 1-3.

# 2004

Invited paper: "The Copernican Revolution: A cognitive historical approach",
International Conference of Philosophy and Cognitive Science,
Guangzhou, China, June 23-26.
Panellist: National Endowment for the Humanities
Chair, Session 4, Midwest Junto for the History of Science, Kansas City, MO, 4 April.

# 2003

Contributed paper: "Astronomy, Providence and the Lutheran Contribution to Science",
History of Science Society, Boston, MA, Nov 21-23.
Invited paper: "History of science and some disciplinary neighbors," PHIS Historiography
Conference, Copenhagen, Denmark, Oct 2-4.
Commentator: "The Early Modern Period - II" Conference on the Scientific Revolution in
Multicultural Perspective, University of Oklahoma, April 8.
Contributed paper: "How Rothmann Changed his Mind" Midwest Junto for the History of
Science, Minneapolis, MN, April 5.
Public lecture: "The Scientific Revolution", Oklahoma School of Science and
Mathematics, Oklahoma City, Feb19.

# 2002

Invited paper: "Incommensurability", Danish Institute for Advanced Studies in the
Humanities, Copenhagen, Denmark, June 11.
Invited paper: "From Orbs to Orbits", Roskilde University, Denmark, June 6.
Invited paper: "Astronomy, Providence and the Lutheran Contribution to Science",
Aarhus University, March 14.
Senior Research Fellow, Danish Institute for Advanced Studies in the Humanities,
Copenhagen, Denmark, Jan-Aug 2002

# 2001

Chair, "Breaking Traditions in the Heavens", History of Science Society, Denver, CO,
Nov 9
Invited paper: "Science and Religion in the Sixteenth Century, or How the Lutherans
Created Copernicanism." Conference on Science in its Cultural Contexts,
Istanbul, Turkey, Oct 6.
Invited paper: "The Lutheran Contribution to the Astronomical Revolution" Fifth Biennial
History of Astronomy Workshop, University of Notre Dame, July 7.
President and Program Chair, Midwest Junto for the History of Science, Norman,
Oklahoma, April 6-8.

# 2000

President, Midwest Junto for the History of Science Chair, "Theory-Ladenness and the Neurology of Perception", Philosophy of Science Association, Vancouver, B.C., Nov 3 Invited paper: "Kuhn and cognitive science", conference on "Kuhn Reconsidered",

Virginia Tech, Blacksburg, VA, March 2000

Contributed paper: "Theological Foundations of Kepler's Astronomy", Midwest Junto for

the History of Science, Kansas City, MO, April 14-16, 2000.

# 1999

President Elect, Midwest Junto for the History of Science

Contributed paper: "Constructing Copernicus" History of Science Society, Pittsburgh PA, Nov 5-7.

Organizer, "The New History of Astronomy," History of Science Society, Pittsburgh PA, Nov 5-7.

Society for Literature and Science, 1999 program committee; Chair, sessions B5 & D3, University of Oklahoma, Oct 7-9.

Invited address: "Early history of science books at OU" OU Classics and Letters Society & Eta Sigma Phi, OU History of Science Collections, Oct 27.

Keynote address: "Incommensurability and conceptaul change during the Copernican Revolution", Conference on "Incommensurability and related matters" University of Hannover, Gernany, June 13-16.

Contributed paper: "Copernicus and the critics of Ptolemy" Midwest Junto for the History of Science, Bartlesville OK, April 9-11.

# *1998*

Guest speaker: "History of Science at OU", Norman Kiwanis Club, July 1. Contributed paper: "Continuity through revolutions: a frame based account", Cognitive Science Society, University of Wisconsin-Madison, August 4 (co-author, X. Chen)

Contributed paper: "Continuity through revolutions: a frame based account", Philosophy of Science Association, Kansas City, Oct 24 (co-author and presenter, X. Chen)

Council Member, Mid-West Junto for the History of Science

# *1997*

Guest speaker: "Science and religion during the Scientific Revolution,"McFarlin Methodist Church, Norman, Oct 5. Contributed paper: "Why did anyone adopt the Copernican hypothesis? Towards a contextual account" 19th Annual Mid-America Conference on History, Oklahoma State University, Stillwater, Oklahoma, Sept 19. Panellist: "Worlds in Dialogue: A Guide to Integrating Faith and Scientific Learning" Westminster Presbyterian Church, Oklahoma City. Sept. 9. Contributed paper: "Brahe and Rothmann on Atmospheric Refraction" XXth International Congress of the History of Science, Liège, Belgium, July 22.

Contributed paper: "So why did anyone adopt the Copernican hypothesis?" Third Biennial History of Astronomy Workshop, Notre Dame University, Indiana, June 21.

Invited paper: "Stoic contributions to sixteenth century cosmology" CNRS conference on 'La Présence de la physique Stoïcienne dans la philosphie naturelle aux XVI<sup>e.</sup> et XVII<sup>e.</sup> siècles', Lille, France, May 16. Panellist: "Science and Religion Dialogue" Westminster Presbyterian Church, Oklahoma City. Feb 4: Science and Religion: Concord or Discord?; Feb 11 Cosmology.

### 1996

Paper: "Kuhn's mature philosophy of science and cognitive science" Max Planck Institute for the History of Science, Berlin, Germany, May 28.

Paper: "Kuhn and the Sociological Revolution" Pittsburgh Fellows Quadrennial Meeting, Castiglioncello, Italy, May 23.

Paper: "Reasoning *quia* and *propter quid* in the Lutheran response to Copernicus" History of the Philosophy of Science Working Group Conference, Roanoke VA, April 19.

Paper: "Realism and Instrumentalism in Sixteenth Century Astronomy: A Reappraisal" Midwest Junto for the History of Science, Kansas City, MO, Mar 30.

# 1995

Paper: "Religion and natural philosophy in Lutheran responses to Copernicus" Session on "Science and Religion," History of Science Society annual meeting, Minneapolis, Minnesota, 26-29 Oct 1995.

Instructor: Summer Short Course on "Reductionism and incommensurability" at the University of Aarhus, Denmark, July 22-28, 1995.
Paper: "Religion and natural philosophy in Lutheran responses to Copernicus" at the Workshop "Jewish Responses to Early Modern Science," sponsored by The Cohn Institute for the History and Philosophy of Science, Tel Aviv University, Israel, May 22-25, 1995.
Paper: "Stoic alternatives to Aristotelian natural philosophy," conference on "16th and 17th Century Philosophy: Conversations with Aristotle," Cambridge, England, April 10-13, 1995.

### *1994*

Organizer and Chair: Session on "Reconstructing Scientific Revolutions" History of Science Society, New Orleans, LA, October 1994. Paper: "Kuhn and the sociological revolution." Session - "Reconstructing Scientific Revolutions" History of Science Society, New Orleans, LA, October 1994. Chair: Session on "France and Germany." Conference on

Change and Continuity in Early Modern Europe, University

of Chicago, April, 1994.

Chair: Session on "Hertz, Wittgenstein and the Vienna Circle" Conference on 'Heinrich Hertz: Classical Physicist and Modern Philosopher." University of South Carolina, March 1994.

# *1993*

- Paper: "Understanding change and continuity," Conference on Science and Cultural Exchange in the Premodern World, University of Oklahoma, Feb 27, 1993.
- Invited Address: "Birds , Fish and Planets: Kepler and the Stoic tradition," Centre de Recherche sur l'Analyse et la Théorie des Savoirs, Université Lille III, France, Mar 25, 1993.
- Invited Address: "Birds, Fish and Planets: Kepler and the Stoic tradition," Institute for the History of Science, University of Aarhus, Denmark, April 1993.
- Invited Address: "History, Philosophy and Sociology: Which comes first in Science Studies?" University of Gottingen, Germany, May 1993.
- Paper: "Scientific revolutions," University of Konstanz, Germany, June 1993.
- Organizer and Chair: Session "Recent Work on Kepler," History of Science Society, Santa Fe, N.M., Nov 1993.
- Paper: "Kepler's Epistemology," Session "Recent Work on Kepler," History of Science Society, Santa Fe, N.M., Nov 1993.

### *1992*

Program Committee, Southern Society for Philosophy and Psychology, 1992 Meeting.

- Membership Committee, Southern Society for Philosophy and Psychology, 1992 Meeting.
- Organizer and Chair, "Relations between the philosophy of science and the psychology of science," Southern Society for Philosophy and Psychology, Memphis TN, 18 April 92.
- Chair, Session IV, Libertas Philosophandi Conference, VPI&SU, 3-4 April 92.
- Chair, Session IV, Six Objectors to Descartes' Six Meditations Conference. VPI&SU March 20-22, 1992.
- Organizer, Workshop on Kepler's Unification of Physics and Astronomy, University of Groningen, The Netherlands, June 18-21, 1992.
- Paper: "Birds, Fish and Planets: Sixteenth century alternatives to the Aristotelian account of planetary motion." Workshop on Kepler's Unification of Physics and Astronomy, University of Groningen, The Netherlands, June 20, 1992.
- Invited participant, Seminar on "Method in 16th century Aristotle commentators," August-Herzog-Bibliothek, Wolfenbüttel, Germany, Aug 31-Sept 13, 1992.
- Paper: "Birds, Fish and Planets: Sixteenth century alternatives to the Aristotelian account of planetary motion." Seminar on "Method in 16th century

Aristotle commentators," August-Herzog-Bibliothek, Wolfenbüttel, Germany, Aug 31-Sept 13, 1992.

Paper: "History, philosophy and sociology of science: Which comes first in science studies?" University of Konstanz, Germany, Dec 3, 1992.

### 1991

Chair and Commentator: "Seventeenth century cosmologies and philosophies of nature," History of Science Society, Madison, Wisconsin, Nov 1991.

- Paper: "The optical theory of comets from Apian to Kepler," History of Science Society, Madison, Wisconsin, Nov 1991.
- Panellist: European History, National Endowment for the Humanities, July 1990.
- Paper: "Historical standards and the philosophy of science," University of Mississippi, June 1991.
- Paper: "Philosophy of science and its competitors," Memphis State University, May 1991.
- Paper: "Rethinking the scientific revolution" Boston Colloquium for the Philosophy of Science, Feb 1991.

### 1990

Contributed paper: "Stoic contributions to early modern science," British Society for the History of Science conference on `The Scientific Revolution,' Oxford, England, July 1990.

Invited paper: "The concept of velocity in Kepler's astronomy," CNRS conference on "Le concept de la vitesse en astronomie, en mathematique et en physique d'Archimede a Galilee." Nice, France, June 1990.

- Invited Paper: "Optical theories of comets in the sixteenth century," Dibner Institute conference on `Optics: The history and transformation of a discipline,' Andover, MA, May 1990.
- Invited paper: "Can philosophy of science survive a co-operative venture with psychologists and sociologists?" American Philosophical Association, Central Division, April 1990.
- Paper: "What can we reasonably expect scientists to do? A response to Miriam Solomon," Southern Society for Philosophy and Psychology, Louisville, KY, March 1990.

# *1989*

Participant: Conference on The Mutual Relevance of Science Policy and Science Policy, VPI&SU, May 1989.

- Invited Address: "The research program as an actor's category: the case of Maxwell's electrodynamics" University of California at San Diego, April 1989.
- Chair: Philosophy Session 1 Wittgenstein. Southern Society for Philosophy and Psychology, New Orleans, LA, Mar 1989.
- Paper: "Copernicus, the Orbs and the Equant." Conference on "Pierre Duhem:

Historian and Philosopher of Science", VPI&SU, March 1989.

Co-Director: Conference on "Pierre Duhem: Historian and Philosopher of Science", VPI&SU, March 1989 (with R. Ariew).

# *1988*

- Paper: "Stoic contributions to early modern science." History of Science Society, Cincinnati, OH, Dec 1988.
- Paper: "Rules and practices: two limitations on algorithmic reconstructions." 18th World Congress of Philosophy, Brighton, England, Aug 1988.
- Paper: "Wittgenstein and the historicist project in philosophy of science." 13th International Wittgenstein Symposium, Kirchberg Austria, Aug 1988.
- Consultant for National Endowment for the Humanities, Improvement of Instruction Program, University of North Carolina at Asheville, April 18-19, 1988.
- Chair, Session 5: Wittgenstein. Southern Society for Philosophy and Psychology, Miami, FL, Mar 1988.
- Paper: "Copernicus and Ptolemy's sixteenth century critics." Conference on "The Ptolemaic Tradition: East and West," University of Pittsburgh, Pittsburgh PA, Mar 25-6, 1988.

### *1987*

- Chair, Session 25: The Discours de la methode and its reception. History of Science Society, Raleigh N.C., Oct. 1987.
- Paper: 'The Copernicus case: what the philosophers said and why.' Conference on "Continuity and Discontinuity in the Scientific Revolution", VPI&SU, Blacksburg, VA, Oct. 1987.
- Co-organizer (with R. Ariew): Conference on Continuity and Discontinuity in the Scientific Revolution, VPI&SU, Blacksburg, VA, Oct. 1987.
- Invited address: 'Was there a Copernican Revolution?' Inter-Mountain Philosophy Conference, Knoxville, TN, Oct. 1987.
- Invited address: 'Unifying philosophical and other studies of science: a practice based approach.' Metascience Research Group, Memphis State University, June 1987.
- Program Chair, Philosophy, Southern Society for Philosophy and Psychology, Atlanta, GA, April 1987.

# *1986*

- Paper: 'Reflexivity problems and the scientific study of science.' Society for the Social Study of Science, Pittsburgh, PA, Oct. 1986.
- Paper: 'Duhem on Maxwell' Philosophy of Science Association, Pittsburgh, PA, Oct. 1986. (with R. Ariew, VPI&SU).
- Paper: 'The reflexivity problem in the psychology of science.' Conference on the Psychology of Science, Memphis, TN, April 1986.
- Paper: 'Optical theories of comets in the sixteenth century' Workshop on Early Modern Science, VPI&SU, Blacksburg, VA, May 1986.

- Organizer: Conference on Early Modern Science, VPI&SU, Blacksburg, VA, May 1986.
- Chair, Wittgenstein Symposium, Southern Society for Philosophy and Psychology, Knoxville, TN, March, 1986.
- Assistant Program Chairman, Philosophy, Southern Society for Philosophy and Psychology, 1986.

# *1985*

- Paper: 'Duhem and Maxwell' History of Science Society, Bloomington, IN, November 1985.
- Chair, Session V, Conference on the Uses of Experiment, Bath, England, August 1985.
- Paper: 'Wittgenstein and the Authority of Science' 10th International Wittgenstein Symposium, Kirchberg a.W., Austria, August 1985.
- Invited address: "Maxwell's electrodynamics as a test case for Lakatos" NEH Summer Seminar, Blacksburg, VA, July 1985.

### 1984

- Paper: 'The limits of algorithmic reconstruction' Tennessee Philosophical Association, Nashville, Nov. 9-10, 1984.
- Paper: 'Jean Pena (1527-57) and Stoic Physics in the Sixteenth Century' Spindel Philosophy Conference 'Recovering the Stoics,' Memphis, Oct. 18-20, 1984.
- Co-Director: Spindel Philosophy Conference 'Recovering the Stoics,' Memphis, Oct. 18-20, 1984.
- Invited address: "Artificial Intelligence as a degenerating research programme" NEH Summer Seminar, Berkeley, CA, July 1984.
- Paper: 'Rules, Practices and Scientific Method.' Workshop on Scientific Methodology, Center for the Study of Science in Society, VPI&SU, April 5-7, 1984.
- Paper: 'Incommensurability and language games' Southern Society for Philosophy and Psychology, Columbia, S.C. April 19-20, 1984.

### *1983*

- Paper: "Gutting's defense of Kuhn," Southern Society for Philosophy and Psychology, Atlanta, April 1983.
- Co-ordinator, Mid-South Philosophy Conference, Memphis State University, Feb. 2, 1983.

# *1982*

Co-Director, Workshop on Limits of Historical Methodologies, Center for Philosophy of Science, University of Pittsburgh, May 21-22, 1982.

Invited Participant, Workshop on Ancient Science, Center for Philosophy of Science, University of Pittsburgh, May 7-8, 1982.

- Paper: "Lakatos's Methodology as an Alternative to Kuhn," Southeastern Conference on Human Development, Baltimore, MD, April 23, 1982.
- Paper: "On Supertheories," Center for the Study of Science in Society, VPI&SU, April 7, 1982.
- Paper: "Do We Need Supertheories?" Center for Philosophy of Science, University of Pittsburgh, January 11, 1982.
- Program Chairman, Philosophy, Southern Society for Philosophy and Psychology, 1982.

### *1981*

- Assistant Program Chairman, Philosophy, Southern Society for Philosophy and Psychology, 1981.
- Paper: "Uncle Ludwig's Book About Science, "Southwestern Philosophical Society, Denton, Texas, November 1981.
- Paper: "Alternatives to Relativism in Psychology." Southern Society for Philosophy and Psychology, Louisville, KY, April 1981.
- Invited address: "Galileo and the Copernican Revolution." University College Humanities Program, Memphis State University, March 1981, 80, 79, 78.

# 1980

- Paper: "Copernicus Reconsidered," Tennessee Philosophical Association, Nashville, Tennessee, November 1980.
- Paper: "Can Scientific History Repeat?" Philosophy of Science Association Biennial, Toronto, Ontario, Canada, October 1980.
- Invited participant: Workshop on Scientific Change, University of Pittsburgh Center for Philosophy of Science, May 1980.
- Paper: "Towards a Later Wittgensteinian Philosophy of Science," Southern Society for Philosophy and Psychology, Birmingham Alabama, April 1980.

### 1979

- Invited address: "Paradigms and Progress: Three recent views of scientific method," Faculty Seminar in the Social Sciences, Memphis State University, December 1979.
- Invited address: "Wittgenstein's Scientific Background," (two public lectures) University of Knoxville, November 1979.
- Invited address: "Education in Britain and America," Honors Student Association, Memphis State University, October 1979.
- Paper: "Anomalies, Counter examples and Progress," Tennessee Philosophical Association, Nashville, Tennessee, November 1979.
- Paper: "Untangling the Net Metaphor" American Philosophical Association, Denver, Colorado, April 1979.
- Paper: "Omnilinguals," Popular Culture Association, Pittsburgh, Pennsylvania, April 1979.
- Invited address: "Einstein's Centenary" (90m.) WEVL-Radio March 1979.

Co-Director, Einstein Centenary Conference, Memphis State University, March 14 16, 1979.

# *1978*

- Paper: "Tractatus 6.341" Tennessee Philosophical Association, Nashville, Tennessee, November 1978.
- Invited address:"Understanding Modern Science." (90m.) WEVL-Radio Memphis, Sept. 1978.
- Chair: Southern Society for Philosophy and Psychology, Section XII, Philosophy of Language, Orlando, Florida, March 1978.

# *1977*

Chair, Section 2: Philosophy of Science. Tennessee Philosophical Association, Nashville, TN, Nov 1977.

# 1976

Commentator: "The Transition from the Early Wittgenstein to the later Wittgenstein," Tennessee Philosophical Association, Nashville, Tennessee, November 1976.

### **APPENDIX 2**

# DISSERTATIONS AND THESES

### **Doctoral dissertations** (\* = Chair)

- 2013 John A. Stewart, "Chemical Affinity in Eighteenth Century Scottish Physiology and Agriculture"\*
- 2011 Mary Gwin, "The Virtues of Bayesian Epistemology" Philosophy, University of Oklahoma
- 2009 Sylwester Ratowt, "The Age of the Earth Controversy" History of Science, University of Oklahoma.\*
- Van Herd, "The Theology of Isaac Newton" History of Science, University of Oklahoma.\*
   David Steffes, "The "Eco-Worldview" of Charles Birch: Biology, Environmentalism, and Liberal Christianity in the 20th Century" History of Science, University of Oklahoma.
- 2006 Patrick Boner, "Kepler's Living Cosmos" University of Cambridge, England (external examiner).
- 2005 Katherine Tredwell, "The Exact Sciences in Lutheran Germany and Tudor England." History of Science, University of Oklahoma.\* Gabriel Rupp, "The Police In Different Voices: Isaac Newton and his Programme of Purification" Department of English, University of Oklahoma
- 2004 Tofigh Heidarzadeh, "Cometary Theory to the Age of Laplace." History of Science, University of Oklahoma.\*
   Mark Eddy "Architects of the self" History of Science, University of Oklahoma R. J. Thompson "The constitution of objects" Philosophy, University of Oklahoma F. V. Christiansen "Professional outlooks in science and engineering" Technical University of Denmark (external examiner)
- 2001 Sahab Yalcin, "Kant and the Paradox of Self Knowledge" Philosophy, University of Oklahoma.
  Voula Saridakis, "Late Seventeenth-Century Disciplinary Astronomy" STS, Virginia Tech.
  E. Scott Jones, "A Whiteheadian critique of Jaegwon Kim's analysis of the mindbody problem." Philosophy, University of Oklahoma.
- 2000 Gary Kroll, "Exploration in the Mare Incognita: natural history and conservation in early twentieth-century America." History of Science, University of Oklahoma. Kerry Magruder, "Theories of the Earth from Descartes to Cuvier." History of Science, University of Oklahoma.
- 1999 Greg Summers "A Sceptical Perspective: Conceptions and Practices of the Committee for the Scientific Investigation of Claims of the Paranormal." Interdisciplinary Ph.D., Union Institute, Cincinnatti.
- Stephen Gatlin, "William Sheldon and the Psychology of Reactionary Modernism," STS, Virginia Tech.\*
   Moira R. Rogers. "The Legitimation of Science in the Early German Enlightenment." STS, Virginia Tech.

- 1996 Patrick S. Cross, "The Organization of Science in Dublin from 1785 to 1835: The Men and their Institutions." History of Science, University of Oklahoma.
- 1995 J. Scott Hauger, "Reading Machines for the Blind: A Study of Federally Sponsored Technology Development and Innovation, 1943-1980." STS, Virginia Tech.\* Adam Serchuk, "The Development of American Wind Power, 1970-1992." STS, Virginia Tech.
- 1992 Xiang Chen, "Theories, Experiments and Human Agents: The Controversy between Emissionists and Undulationists in Britain, 1827-1859." STS, Virginia Tech.\*
- 1991 Andrea Burrows, "A Social Study of Women in Contemporary Biological Sciences." STS, Virginia Tech.
- 1990 Steven Downes, "Prospects for a Cognitive Science of Science." STS, Virginia Tech.

### Master's Theses (\* = Chair)

- 2016 Kraig Bartel, "Orazio Grassi and a 1623 *Treatise on the Sphere*: Astronomy and Physico-mathematics at the *Collegio Romano* in the Early Seventeenth Century."\*
- 2015 Nathan Kapoor "Wind Amid the Flame: Wind Energy in Late Nineteenth century Britain"\*
- 2014 Ashley Nelson "Money Science and Radical Politics: The Patronage of Harriet Martineau's Political Economy"
  - Jared Neumann "William Whewell, Augustus De Morgan and the Nomenclature of Victorian Logic and Induction"

Sam Callahan (Architecture) "Merchants to the Gods: Nabataean Identity in the Cities Incense Built"

- 2012 Harold S. Jenkins, "Georg Bartisch's *Augendienst*: placing ocular medicine in sixteenth-century Saxony".
- 2012 Margaret E. Gaida, "Optics from a Theological Perspective: The Appropriation of Alhacen's *De aspectibus* by Roger Bacon".
- 2009 Petar Markovski, "A Comparative History of *Hipparchos* and *FAME*: Space Astrometry in the 20th Century" History of Science, University of Oklahoma.\*
- 2008 John A. Stewart, "Richard Kirwan's Chemistry: Heat, Affinity, and Phlogiston in the 1780's" History of Science, University of Oklahoma.\*
- 2008 Hollie A. Stuart, "Our Place in the Universe: A Mythological Interpretation of the Anthropic Principle", College of Liberal Studies, University of Oklahoma.\*
- 2007 Asia Scudder, "A Map of Human Consciousness: A proposed model of selfdiscovery". College of Liberal Studies, University of Oklahoma.\*
- 2007 Mathis Krischel, "*Immer der krieg verschlingt die besten*: Biology, war, and scientific internationalism, 1912-1920" History of Science, University of

Oklahoma. 2004 Sylwester Ratowt "The concept of the sun, 1900-1910." History of Science, University of Oklahoma.\* Julie Grissom "Explaining plague in early modern Europe" History of Science, University of Oklahoma. Van Herd "The Concept of Ungrund in Jacob Boehme (1575-1624)." History of 2003 Science, University of Oklahoma.\* Melissa Rickman "Patronage and the Production of Scientific Books." History of Science, University of Oklahoma.\* Suzanne Van Ronk "Gerbert of Aurillac: De rationale et ratione uti." 2001 Darcy LeFevre, "Demonstratio Halonis: A Manuscript by Erasmus Reinhold." History of Science, University of Oklahoma.\* D. LeFevre, "Astronomy, Printers and the Melanchthon Circle." Library and Information Science, University of Oklahoma. Melissa L. Rickman, "Historical Context of Gerard's Herball" Library and Information Science, University of Oklahoma. 2000 Renzo Baldasso, "Filarete's Ospedale Maggiore." Art and Art History, University of Oklahoma. Katherine Tredwell Sumner, "Erasmus Reinhold's Response to Copernicus." 1999 History of Science, University of Oklahoma.\* Renzo Baldasso, "Galileo's Celestial Dynamics." History of Science, University of 1998 Oklahoma.\* 1997 Kevin Tapp. Non-thesis examination option. History of Science, University of Oklahoma.\* 1996 Aaron K. Poffenberger, "The Intersection of Humanist and Scholastic Dialectic in the Logic of Domingo de Soto." History of Science, University of Oklahoma. 1992 Peter Johnston, "The Hubble Space Telescope: An Historical Analysis." STS, Virginia Tech.\* Steven Gatlin,"William H. Sheldon's Constitutional Psychology: the Somatotype as Fiction." STS, Virginia Tech.\* Ranjan Chaudhuri, "Science as Practice: a Methodological Critique and Case Study." STS, Virginia Tech. Laura Blechschmitt, "Environmental Ethics and the Oyster of the Chesapeake Bay." STS, Virginia Tech. 1991 Garrit T. Curfs, "Experiment as Rhetoric in the Cold Fusion Controversy." STS, Virginia Tech. David Murphree, "Giordano Bruno." History, Virginia Tech. 1990 1989 Adam Serchuk, "Connectionism, Disciplinary Identity and Continuity." STS, Virginia Tech.\* 1988 Xiang Chen, "Conceptual Problems in Theory Appraisal." STS, Virginia Tech.\* Andrea Burrows, "Computers in Organisations." STS, Virginia Tech. 1978 Elaine Brown, "Philosophical Status of the Darwinian Paradigm." Philosophy, Memphis State University.\* 1976

1976 David R. McCrory, "Popper's Epistemology." Philosophy, Memphis State University.\*

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