

JAMES E. McGUIRE
Curriculum Vitae

RECENT POSITION:

Professor, Department of History and Philosophy of Science, University of Pittsburgh with secondary professorial appointments in the Departments of Philosophy and History, and Adjunct Professor of Communication in the Department of Communication

EDUCATION:

B.A., Honours (Philosophy and Mathematics)
University of Western Ontario, 1956

ACADEMIC HONORS:

Oxford University Scholarship, 1959-1960
Fellow-Elect in the History Department of New York University for a National Science Fellowship Award, 1971
Amundsen Professor of British History-Elected, University of Pittsburgh, 1971
Andrew Clarke Memorial Lecturer, U.C.L.A., 1974
National Science Foundation Grant, 1973-1975
National Science Foundation Grant, 1976-1978
National Science Foundation Grant, 1978-1980
Silverman Visiting Professor, 1990, Tel-Aviv University, The Cohn Institute for the History and Philosophy of Science and Ideas
Elected Fellow of the Wissenschaftskolleg, Berlin, for academic year 1991-92
Visiting Lecturer at the University of the Bosphorous, Istanbul, 1998
Sarton Chair Holder, University of Ghent, 2010-2011

EMPLOYMENT RECORD:

Tutor in Philosophy at Jesus, Exeter, St. Johns, and New Colleges, Oxford, 1958-1960
Lecturer in History and Philosophy of Science, University of Leicester, Head of Department, 1960-1962
Lecturer in History and Philosophy of Physics, University of Leeds, 1962-1971
Visiting Professor of History, Cornell University, 1966-1967
Visiting Professor of History of Science, Harvard University, 1969
Visiting Amundsen Professor of British History, University of Pittsburgh, 1971
Professor of History and Philosophy of Science, University of Pittsburgh, Department of History and Philosophy of Science, 1971-
Senior Research Associate, Center for Philosophy of Science, University of Pittsburgh, 1971-2022

PROFESSIONAL ACTIVITIES:

Board of the Faculty of Science, University of Leicester,
Board of the Faculty of Arts, University of Leicester, 1961-1962
Board of the Faculty of Arts, University of Leeds, 1965-1966
Graduate Council of the Arts Faculty, University of Pittsburgh,
Graduate Student Placement Officer, Department of History and Philosophy of Science, University of Pittsburgh, 1971-1974
Director of Graduate Studies, Department of History and Philosophy of Science, University of Pittsburgh, 1975-1988
Undergraduate courses listed for the Western European Studies Certificate Program
Graduate Student Placement, 1995-96

ORGANIZER:

Pittsburgh/Carnegie-Mellon Universities' Workshop in the Mechanical Philosophy, 1971

Medieval Science Workshop, University of Pittsburgh, 1982

Aristotelian Modality Workshop, University of Pittsburgh, 1984

Co-planner and co-organizer of the Ninth International Workshop sponsored by Tel-Aviv University, the Van Leer Jerusalem Institute, and the Israeli Academy of Science and Humanities, "Narrative Patterns in Scientific Disciplines"

Organizer of forthcoming conference "Science, Reason and Rhetoric" which took place on November 6-8, 1992.

EDITORIAL ACTIVITIES:

Consulting Editor, Studies in History and Philosophy of Science, 1970

Consulting Editor, The Pittsburgh Series in the History and Philosophy of Science, 1978

Member of the Editorial Board of the Pittsburgh Series in the Philosophy of Science

PUBLICATIONS:

1962:

- 1) Review of Robert McRae's *The problem of the unity of the sciences*, *Philosophical Books*, Vol. III, 8.
- 2) Review of Stephen Toulmin's *Foresight and Understanding*, *Philosophical Books*, Vol. III, 15-17.

1963:

- 3) Review of Thomas Kuhn's *Structure of Scientific Revolutions*, *Philosophical Books*, Vol. IV, 14-16.
- 4) Review of Charles Gillispie's *Edge of objectivity*, *English Historical Review*, CCCVIII, 580-587.

1964:

- 5) Review of Maurice Mendelbaum's *Philosophy, sciences, and sense perception*, *Philosophical Quarterly*, 16, 277-279.

1965:

- 6) Review of L. P. Williams' *Michael Faraday: A biography*, *Listener*, 1965.
- 7) Review of L. Kellner's *Alexander Von Humboldt*, *English Historical Review*, CCXV, 415-416.
- 8) "Intellectual history or scientific biography?," *History of Science*, 5, 110-118.

1966:

- 9) Review of Alexander Koyre's *Newtonian essays*, *British Journal for the History of Science*, III, 184.
- 10) (With P. M. Rattansi), "Newton and the 'Pipes of Pan'." *Notes and Records of the Royal Society*, 21, 104-144.
- 11) "Body and Void and Newton's De Mundi Systemate: Some New Sources", *Archive for Hist. of Exact Sciences*, 3, 207-247.

1967:

- 12) "Transmutation and immutability: Newton's doctrine of physical qualities," *Ambix*, 14, 69-95.

1968:

- 13) "The Origins of Newton's doctrine of essential qualities," *Centaurus*, 12, 233-260.
- 14) "Force, active principles, and Newton's invisible realm," *Ambix*, 15, 154-200.
- 15) Review of Robert H. Kargon's *Atomism in England from Harriot to Newton*, *British Journal for the History of Science*, Vol. IV, 73-77.
- 16) Review of Gerald A. Cragg's *The Cambridge platonist*, *Cambridge Review*, 30,

130-137.

1969:

- 17) Review of Voltaire's *The elements of Newton's philosophy*, *British Journal for the History of Science*, Vol. IV, 300.

1970:

- 18) Review of John W. Yolton, ed., *John Locke: Problems and perspectives*, *British Journal for the History of Science*.
- 19) Review of *The methodological heritage of Newton*, ed., R. Butts and Davis, *Nature*.
- 20) "Atoms and the 'analogy of nature'," *Newton's third rule of philosophizing*, *Studies in History and Philosophy of Science*, Vol. I, 1-59.
- 21) "Newton's principles of philosophy: An intended preface for the 1704 *Opticks* and a related draft fragment," *The British Journal for the History of Science*, Vol. V, 178-187.
- 22) "Newton's state of inertia' and vis insita," *The Annus Mirabilis of Sir Isaac Newton: 1666-1966*, 186-191. (The MIT Press).

1971:

- 23) "Cavendish and the Vis viva controversy: A Leibnizian postscript," *Isis*, 225-227 (with P. J. Heimann).
- 24) "British science," article in *Encyclopedia Americana*.
- 25) "Newtonian forces and Lockean powers: Concepts of matter in 18th century thought," *Historical Studies in the Physical Sciences*, 3, 223-306, (with P. M. Heimann).
- 26) Review of Robert S. Schofield's *Mechanism and materialism*, *British Journal for the History of Science*, 5.

1972:

- 27) "Boyle's conception of nature," *J.H.I.*, 22, 523-542.

1973:

- 28) "Newton and the demonic furies: Some current problems and approaches in the history of science," *History of Science*, XI, 21-48.

1974:

- 29) "Forces, powers, aethers, and fields," *Boston Studies*, 60, 119-159.

1975:

- 30) "God and nature: Priestley's way of rational dissent," *Historical Studies in the Physical Sciences*, Vol. 6, monograph in length (with John McEvoy),.
- 31) "Labyrinthus continui: Leibniz on substance, activity and matter," *Matter, Motion, and Space* (Ohio State Press, 1975).
- 32) "The rejection of Newton's atomism in 18th century British theories of matter," *Concepts of Matter*, Vol. 2, ed., Ernan McMullin, 1974.

1977:

- 33) "Neoplatonism and active principles: Newton and the *Corpus Hermeticum*," *William Clark Memorial Library Publications*. (Book, 200 pp.)

1978:

- 34) "Newton on God, place, and time: An unpublished source," *British Journal of History of Science* (July, 1978).
- 35) "Existence, actuality, and necessity: Newton on space and Time," *Annals of Science*, (October, 1978), pp. 463-508.
- 36) Review of Bernard Williams: *Descartes: the project of pure inquiry*, *Philosophy of Science*.

1980:

- 37) "Newton's cosmology and absolute space," in *General History of Astronomy*, ed., Michael Hoskin.

1982:

- 38) "Space, infinity, and indivisibility: Newton on the creation of matter," in *Contemporary*

Newtonian Research, ed., Z. Bechler, pp. 145-195.

1983:

- 39) "Space, geometrical objects, and infinity: Newton and Descartes on extension," in *Nature Mathematicized*, ed., William R. Shea, pp. 69-112.
- 40) *Certain philosophical questions: Newton's Trinity notebook*, Cambridge University Press, pp. 520 (with Martin Tamny).

1984:

- 41) *How Things Are: Theories of predication and the history of Philosophy*, Reidel, pp. 450. (edited with James Bogen).
- 42) "Phenomenalism, Relations, and Monadic Representation: Leibniz on Predicate Levels" in *How Things Are*, pp. 205-233.

1985:

- 43) "Newton's Astronomical Apprenticeship: Notes of 1664/5", *Isis*, Vol. 76, Number 283, pp. 349-365, (with Martin Tamny).

1986:

- 44) "Aristotle's Great Clock: Necessity, Possibility and the Motion of the Cosmos in *De Caelo* i.12" *Philosophy Research Archives* vol. XII, 1986-87, pp. 1-62, with James Bogen.
- 45) "Philoponus on Physics ii.I: phusis, dynamis and the Motion of the Simple Bodies," *Ancient Philosophy*, Vol. 5, part 2.

1988:

- 46) "An annotated Translation of Plotinus, *Ennead* III.7, On Eternity and Time" *Ancient Philosophy*, Vol. 8, pp. 251-271, with Steve Strange.

1989:

- 47) "Some Cautionary Strictures on the Writing of the Rhetoric of Science" *Rhetorica* Vol. VII, 87-99 (with Trevor Melia).
- 48) "Minds, Ideas and Texts: Between Images of Knowledge and the Construction of Significance" in *Storia Delle Idee: Probleme E Prospettive* (Edizione dell'Ateneo, Rome) pp. 117-134.
- 49) Helio-Horo: The Genesis of the Copernican World" *London Review of Books* pp. 14-15.

1990:

- 50) "Predicates of Pure Existence: Newton on God's Space and Time," in *Philosophical Perspectives on Newtonian Science* (Yale University Press, 1990) edited by Phillip Bricker and R.I.G. Hughes.

1991:

- 51) "The Rhetoric of the Radical Rhetoric of Science", *Rhetorica*, Vol. 9, pp. 301-316, (with Trevor Melia).

1992:

- 52) "Scientific Change: Perspectives and Proposals", in *Introduction to the Philosophy of Science*, Prentice Hall, pp. 132-178.

1994:

- 53) "Natural Motion and Its Cause: Newton on the 'Vis Insita' of Bodies" In *Self-Motion: From Aristotle to Newton*, edited by Mary Louise Gill and James Lennox.

1995:

- 54) "How To Tell The Dancer From The Dance: Limits and Proportions in the Argument About the Nature of Science." Published in *Science, Reason and Rhetoric* edited by Henry Krips, J.E. McGuire, and Trevor Melia (Pittsburgh, Constant Press).
- 55) *Science, Reason and Rhetoric* edited by Henry Krips, J.E. McGuire, and Trevor Melia, (Pittsburgh, Constance Press).
- 56) "Tradition and Innovation: Newton's Metaphysics of Nature", Kluwer, December, 1996.

2000:

- 57) “Science Unfettered: A Philosophical Study in Sociohistorical Ontology”, (with Barbara Tuchanska) Ohio University Press in their series in Continental Philosophy.

2001:

- 58) “More Fetters to Unfetter: a reply to Depew and Schmaus”, *Social Epistemology*, Vol. 16 pp. 399-409

2003:

- 59) “Letter to the editor” (This is a detailed response to a review of my work with Barbara Tuchanska (see item 57) *International Studies in the Philosophy of Science*, Vol. 17 pp. 191-193.

2005:

- 60) “The Rhetoric of Sprat’s Defense of the Royal Society”, *Archives Internationales d’Histoire Des Sciences*, Vol. 55 no 154, pp. 203-210.
- 61) “Natural Motion and Its Causes: Newton on the “Vis Insita” of Bodies”, *Self-Motion from Aristotle to Newton*, edited by Mary Louise Gill and James G. Lennox, Princeton University Press.
- 62) “The Hermeneutics of the Self: Foucault on Subjectification and Genealogical Critique”, *Nowa Krytyka*, Vol. 18, pp. 51-67 (in Polish, translated by Barbara Tuchanska).
- 63) “Knowing Causes: Descartes on the World of Matter”, *Philosophica*, vol. 76, pp. 11-44 (with Peter K. Machamer and Justin Sytsma).

2006:

- 64) “Aristotle on Motion, Changes and Predication”, *Essays in Ancient Greek Philosophy*, edited by Richard N. Bosley & Christos Y. Panayides, University of Nikosia Press.

2007:

- 65) “A Dialogue with Descartes: Newton on True and Immutable Natures”
Journal of the History of Philosophy, Vol. 45, No 1, pp. 103-125
- 66) “Newton y las flautas de Pan”, *Estudios de Filosofia*, no 35, Universidad de Antioquia, pp.149-187, (with Pio M. Rattansi, see item 10) (in Spanish)

2009:

- 67) “Descartes’s Changing Mind”, Princeton University Press, Princeton and Oxford (with Peter Machamer)
- 68) “The Fate of the Date: The Theology of Newton’s Principia Revisited”,
Canonical Imperatives: Rethinking the Scientific Revolution, edited by Margaret J. Osler, Cambridge Press, pp. 271-296.

2011:

- 69) “Ideas and Texts: Newton and the Intellectual History of Science”, *Sartoniana*, University of Gent, Vol. 24 edited by R. Rubens and M. Van Dyck, pp. 37-48
- 70) “In God Power and Essence Are Not Distinguished: Descartes and Spinoza on Causa Sui”,
Sartoniana, University of Gent, Vol. 24 edited by R. Rubens and M. Van Dyck, pp. 57-78

2012:

- 71) “Newton and the Mechanical Philosophy: Gravitation as the Balance of the Heavens”, *The Southern Journal of Philosophy*, Vol. 50 Issue 3, pp. 370-388 (with Peter K. Machamer and Hylarie Kochiras).

2013:

- 72) “Da ciência descontextualizada à ciência no contexto social e histórico”, *Revista Brasileira de História da Ciência (Brazilian Journal of the History of Science)*, vol. 6, no. 2, pp. 151-182 (with Barbara Tuchanska).
- 73) “Newton's Ontology of Omnipresence and Infinite Space”, *Oxford Studies in Early Modern Philosophy*, Vol. VI, edited by Daniel Garber and Donald Rutherford, (with Edward Slowik)

2015:

74) Newton et la flûte de Pan, Éditions Allia, Paris, translated by Alexander Minski, with Pio M. Rattansi (see item 10)

2018:

75) “Voluntarism and panentheism: the sensorium of God and Isaac Newton’s theology”, *The Seventeenth Century*, Vol. 33, Issue 5, pp. 587-612 (with John Henry).