

Curriculum Vitae

ROBERT JOHN RUSSELL

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EDUCATION

Ph.D. (Physics). University of California, Santa Cruz. 1978.
M.A. (Theology). Pacific School of Religion, Berkeley. 1972.
B.D. *Magna cum Laude*. Pacific School of Religion, Berkeley. 1972.
M.S. (Physics). University of California, Los Angeles. 1970.
B.S. (Physics; minor in music and religion). Stanford University. 1968.

PRESENT POSITIONS

The Ian G. Barbour Professor of Theology and Science

In Residence, The Graduate Theological Union, Berkeley, 2006 – present.

Founder and Director

The Center for Theology and the Natural Sciences, Berkeley. 1981–present.

PRIOR POSITIONS

Professor of Theology and Science

In Residence, The Graduate Theological Union, Berkeley. 1991–2006.

Associate Professor of Theology and Science

In Residence, The Graduate Theological Union, Berkeley. 1986–1991.

Assistant Professor of Theology and Science

The Graduate Theological Union, Berkeley. 1982–1985.

Visiting Adjunct Professor of Theology and Science

The Jesuit School of Theology, Berkeley. September 1981–June 1982.

Assistant Professor of Physics

Carleton College, Northfield, Minnesota. September 1978–June 1981.

PRIZES

PCRS/Templeton Grant for Research, Writing and Publication: To support a sabbatic leave, July 2000- August 2001, for research on the project: *Time in Eternity: Eschatology and Cosmology in Mutual Interaction*.

Prize for Outstanding Books in Theology and Science, co-editor, *Chaos and Complexity: Scientific Perspectives on Divine Action* (1995).

Prize for Exemplary Papers in Humility Theology, “Finite Creation Without A Beginning,” 1992.

HONORS

C. V.: Robert John Russell

Alum of the Year, Pacific School of Religion, 1999

Judge, The Templeton Prize for Progress in Religion, 1994–1997

Judge, CTNS Science and Religion Course Prize, 1994-95; 2000-2001

Judge, Q&E Prize for Science and Religion Courses, 1998

Judge, FASE Essays, 1997.

Judge, Exemplary Essays, 1996, 1997.

DISTINGUISHED LECTURE AND FACULTY APPOINTMENTS

Inaugural Lecture, The McIntyre Lecture in History and Philosophy of Science, Wheaton College, March, 2008

Inaugural Lecture, The Ian G. Barbour Lectureship in Religion and Modernity, Carleton College, January, 2008

Plenary Lecturer, Buddhist - Christian Conference on Science and Religion, Ryukoku University, Kyoto, Japan, 2005

Winslow Lecturer, Allegheny College, 2005

Goshen College Fifth Annual Conference on Religion and Science Special Lecturer, 2005

Religion in Life Week Lecturer, Hastings College, 2005

Plenary Lecturer, Buddhist - Christian Conference on Science and Religion, Ryukoku University, Kyoto, Japan, 2004

Witherspoon Lecturer, 2004,
Center of Theological Inquiry, January 29, 2004

GTU Distinguished Lecturer, 2002
Graduate Theological Union

Plenary Lecturer, Rediscovering Cosmos
Syracuse University, August, 1997.

Keynote Lecturer, First Australian Conference on Science and Theology
Institute for the Study of Christianity in an Age of Science and Technology, Sydney, July, 1997.

Lecturer, Gustavus Adolphus College Nobel Conference
30 Years of Space Exploration, October, 1997.

Lecturer, Killeen Chair of Theology and Philosophy
St. Norbert College, De Pere, Wisconsin, October, 1997.

Lecturer, Templeton/ASA Lecture Series, Fall 1994; Fall, 1996; Spring, 1997
Faculty Lecturer, University of St. Thomas (March, 1995)

Lecturer, Albertus Magnus Lectures
The Newman Center and The New Oxford Review, California Institute of Technology, October, 1991.

Faculty for CTNS Program in Continuing Education, Summer Schools, 1991–1994.

Faculty for Templeton Science and Religion Course Program Introductory and Advanced Workshops, 1994-present

Faculty member of Core Research Team, *Theological and Ethical Implications of the Human Genome Initiative*, CTNS research supported by the National Institutes of Health, 1991–1994.

Lecturer, Staley Distinguished Christian Scholar and Lecturer
Maryville College, Tennessee. February 1991.

Theologian In Residence
The College of Wooster, Ohio. January 1990.

Faculty member, Whitehead and Relativity Research Group, The Center for Process Studies, Claremont, California. 1988–1994.
Lecturer, Annual George Hitching Terriberly Memorial Lectures
Tulane University, New Orleans, Louisiana. September 1988.

University Lecturer and Beth Anne Harnish Memorial Lecturer
University Religious Center and California State University, Fresno. March 1988.

Visiting Lecturer
Lutheran School of Theology at Chicago. Fall 1986.

EDITORIAL APPOINTMENTS

Founding Co-Editor
Theology and Science (2003 -), a refereed journal published by Francis and Taylor and co-edited with Ted Peters.

Founding Editor
CTNS Bulletin (1982 - 2002)

General Editor
Series on *Scientific Perspectives on Divine Action*, jointly published by the Vatican Observatory and CTNS, 1993–2001.

Book Review Editor
Zygon: Journal of Religion and Science. 1985–1988.

Editorial Advisory Board
Zygon: Journal of Religion and Science. 1985–present.

Board of Editorial Advisors
Theology and the Sciences Series, Fortress Press.

PROGRAM LEADERSHIP

Principle Investigator, CTNS STARS: Science and Transcendence: Advanced Research Series, 2005-present.

Principle Investigator, CTNS Science and Religion Course Program, 1998 - 2002.

Principal Investigator, CTNS Science and the Spiritual Quest, 1996–1998; Senior Advisor, CTNS SSQ2, 1999-2003.

Principal Investigator, Science and Religion Course Program at CTNS, 1995–1996

Innovator and Director, Prizes for Outstanding Books in Theology and the Natural Sciences, 1995–1996

Innovator and Director, CTNS-Templeton Annotated Bibliography on the Relationship between the Physical Sciences and Spirituality, 1995

Innovator and Director, CTNS–Templeton Annotated Bibliography Database Analysis Project, 1995

ADVISORY BOARDS

Board of Directors, CTNS (1982 - present)

Board of Advisors, John Templeton Foundation (HTIC), 1992–1998; 1999 - 2002, 2004-present.

Consultant, Committee on Technology and Values, National Conference of Catholic Bishops, 1990–present.

SERVICE APPOINTMENTS

GTU Co-Convener, Systematic and Philosophical Theology Area (academic year 2002-2003)
(includes Doctoral Council and GTU Admissions Committee)

GTU Dean's Search Committee (Fall, 2001)

GTU Convener, Area III: Systematic and Philosophical Theology and Philosophy of Religion (Spring, 1996)
(includes Doctoral Council and GTU Admissions Committee)

External Reviewer, Theology and Science Group, American Academy of Religion, 1992.

ORDINATION

United Church of Christ, Congregational: Specialized Ministry to Higher Education. June 1978.

4-Way Ministerial Covenant with CTNS, The First Congregational Church, Berkeley; and the Bay Association of the United Church of Christ.

ORDAINED POSITIONS

Founder and Director, the Center for Theology and the Natural Sciences;
Professor of Theology and Science in Residence, the Graduate Theological Union. 1981–present.
Pastoral Associate, Carleton College Chapel. 1978–1981.

PUBLICATIONS

Theology and Science

Books

Time in Eternity: Eschatology and Cosmology in Mutual Interaction (in process)

Cosmology from Alpha to Omega: Theology and Science in Creative Mutual Interaction (Collected Writings in Theology and Science 1982-2007), (Minneapolis: Fortress Press, 2007).

Physics and Cosmology: Scientific Perspectives on the Problem of Natural Evil, ed. Nancey Murphy, Robert John Russell, and William R. Stoeger, S. J. (Vatican City State: Vatican Observatory Publications; Berkeley: Center for Theology and the Natural Sciences, 2007). To be distributed in the U.S. by University of Notre Dame Press

Scientific Perspectives on Divine Action: Twenty Years of Challenge and Progress. Robert John Russell, Nancey Murphy, and William R. Stoeger, S. J. eds. (Vatican City State: Vatican Observatory Publications, and Berkeley, The Center for Theology and the Natural Sciences, 2007). To be distributed in the U.S. by University of Notre Dame Press

Cosmology, Evolution, and Resurrection Hope: Theology and Science in Creative Mutual Interaction, Proceedings of the Fifth Annual Goshen conference on Religion and Science (edited by Carl S. Helrich, Pandora Press, 2006).

Fifty Years in Science and Religion: Ian G. Barbour and His Legacy," Robert John Russell, ed (Ashgate Publications: 2004)

Resurrection: Theological and Scientific Assessments, Ted Peters, Robert John Russell, and Michael Welker, eds. (Grand Rapids: Eerdmans Publishing Company, 2002)

Science and the Spiritual Quest: New Essays by Leading Scientists, W. Mark Richardson, Robert John Russell, Philip Clayton and Kirk Wegter-McNelly, eds. (London: Routledge, 2002).

Quantum Physics: Scientific Perspectives on Divine Action. Robert John Russell, Philip Clayton, Kirk Wegter-McNelly, and John Polkinghorne, eds. (Vatican City State: Vatican Observatory Publications, and Berkeley, The Center for Theology and the Natural Sciences, 2002). Distributed in the U.S. by University of Notre Dame Press, Notre Dame, Indiana.

The Neurosciences and the Person: Scientific Perspectives on Divine Action. Robert John Russell, Nancey Murphy, Theo Meyering and Michael Arbib, eds. (Vatican City State: Vatican Observatory Publications, and Berkeley: The Center for Theology and the Natural Sciences, 1999). Distributed in the U. S. by University of Notre Dame Press, Notre Dame, Indiana.

Evolution and Molecular Biology: Scientific Perspectives on Divine Action. Robert John Russell, William R. Stoeger, S. J. and Francisco J. Ayala, eds. (Vatican City State: Vatican Observatory Publications, and Berkeley: The Center for Theology and the Natural Sciences, 1998). Distributed in the U. S. by University of Notre Dame Press.

Chaos and Complexity: Scientific Perspectives on Divine Action. Robert John Russell, Nancey Murphy and Arthur R. Peacocke, eds. (Vatican City State: Vatican Observatory Publications, and Berkeley: The Center for Theology and the Natural Sciences, 1995) Distributed in the U. S. by University of Notre Dame Press.

Quantum Cosmology and the Laws of Nature: Scientific Perspectives on Divine Action. Robert John Russell, Nancey Murphy and C.J. Isham, eds. (Vatican City State: Vatican Observatory Publications, and Berkeley: The Center for Theology and the Natural Sciences, 1993) Distributed in the U. S. by University of Notre Dame Press.

John Paul II on Science and Religion: Reflections on the New View from Rome. Robert John Russell, William Stoeger, S.J., and George Coyne, S.J., eds. (Vatican City State: Vatican Observatory, 1990). Distributed in the U. S. by University of Notre Dame Press.

Physics, Philosophy and Theology: A Common Quest for Understanding. Robert John Russell, William Stoeger, S. J., and George Coyne, S.J., eds. (Vatican City State: Vatican Observatory, 1988). Distributed in the U. S. by University of Notre Dame Press.

Books in Translation: *Physics, Philosophy and Theology*

Spanish translation by Juan José Blásquez-Ortega, Alejandro González Sánchez and Eugenio Urrutia Albisua (Mexico: UPAEP, 2002).

Arabic translation by Dr. Homaoun Hemmati (Tehran, Iran: Institute for Humanities and Cultural Studies, 2006).

Essays / Chapters in Books

"The Bodily Resurrection of Jesus as a First Instantiation of a New Law of the New Creation: Wright's Visionary New Paradigm in Dialogue with Physics and Cosmology," *From Resurrection to Return: Perspectives from theology and science on Christian eschatology*, edited by James Haire, Christine Ledger and Stephen Pickard (Adelaide: ATF PACT Series, 2007).

"Physics, Cosmology and the Challenge to Consequentialist Natural Theodicy," in *Physics and Cosmology: Scientific Perspectives on Natural Evil*, ed. Robert John Russell Nancey Murphy, William R. Stoeger (Vatican City State: Vatican Observatory Publications, and Berkeley: Center for Theology and the Natural Sciences, 2007).

“Problems and Progress: An Overview of the CTNS/VO series”, *Scientific Perspectives on Divine Action: Twenty Years of Problems and Progress*. Robert John Russell, Nancey Murphy, and William R. Stoeger, S. J. eds. (Vatican City State: Vatican Observatory Publications, and Berkeley, The Center for Theology and the Natural Sciences, 2007). To be distributed in the U.S. by University of Notre Dame Press

"Arthur Peacocke on Method in Theology and Science and His Model of the Divine / World Interaction: An Appreciative Assessment," in *All That Is: A Naturalistic Faith for the Twenty-First Century*, Arthur Peacocke (edited by Philip Clayton) (Minneapolis: Fortress Press, 2007), 140-51.

“Quantum Physics and the Theology of Non-Interventionist Objective Divine Action,” *Oxford Handbook of Religion and Science*, Philip Clayton, editor; Zachary Simpson, associate editor (Oxford University Press, 2006), 579-595.

“Cosmology and Eschatology,” *Oxford Handbook of Eschatology*, Jerry Walls, editor. (2006)

“Eschatology and Scientific Cosmology: From Conflict to Interaction,” *What God Knows: Time, Eternity and Divine Knowledge*, Harry Lee Poe and J. Stanley Mattson, editors (Waco, TX: Baylor University Press: 2006).

“How should religion and science be creatively related? A Christian perspective,” edited by Ryusei Takeda (Kyoto, Japan: Ryukoku University, 2005), 5-34.

“Beyond Dialogue: Toward a Mutual Transformation of Christianity, Buddhism and the Natural Sciences,” edited by Ryusei Takeda (Kyoto, Japan: Ryukoku University, 2005), 71-100.

“Fruitful Interactions between Scientific Cosmology and Christian Theology,” *Faithful/Fateful Encounters: Religion and Cultural Exchanges between Asia and the West*, Selected Papers and Presentations from the Graduate Theological Union / Chinese Academy of Social Sciences Beijing, October 21-26, 2002, edited by Judith Berling, Philip Wickeri et. al. (2005)

“Science and Spirituality,” *Blackwell Companion to Christian Spirituality*, Arthur Holder, ed. (Oxford: Blackwell Publishing, 2005)

“Natural theodicy in an evolutionary context: the need for an eschatology of new creation,” *Theodicy and Eschatology*, Bruce Barber and David Neville, Task of Theology Today, V (Adelaide: Australian Theological Forum Press; 2005).

“Science and Spirituality,” *SCM Dictionary of Christian Spirituality*, Philip Sheldrake, ed. (SCM Press, 2004)

“The Contributions of the Natural Sciences for the Academic Discipline of Christian Spirituality,” in *Exploring Christian Spirituality: Essays in honor of Sandra M. Schneiders, I. H. M.*, Bruce H. Lescher and Elizabeth Liebert, SNJM, eds. (New York: Paulist Press, 2004)

“Science” by Robert John Russell and Kirk Wegter-McNelly, *The Blackwell Companion to Modern Theology*, Gareth Jones, ed. (Oxford: Blackwell Publishing, 2004), Ch. 32, p. 512-556.

“Introduction,” “Ian Barbour’s Methodological Breakthrough: Creating the ‘Bridge’ for Science and Theology,” and “Barbour’s Assessment of the Philosophical and Theological Implications of Physics and Cosmology” in *Fifty Years in Science and Religion: Ian G. Barbour and His Legacy*,” Robert John Russell, ed (Ashgate Publications: 2004)

“Relativity,” in *Religion in Geschichte und Gegenwart (RGG⁴)*, 2004).

“Sin, Salvation, and Scientific Cosmology: is Christian Eschatology Credible Today?,” Task of Theology Today, IV, edited by Duncan Reid and Mark Worthing (Australian Theological Forum Press: 2003).

“When Time Meets Eternity: Theology and Science in Mutual Creative Interaction”, proceedings, C. S. Lewis Conference 2002 (forthcoming 2003)

“Causality”, “Contingency”, and “Complementarity” for *Religion in Geschichte und Gegenwart (RGG⁴)*, forthcoming 2003).

“Special Providence and Genetic Mutation: A New Defense of Theistic Evolution, *Perspectives on an Evolving Creation*, edited by Keith Miller (Grand Rapids: William B Eerdmans Publishing Company, 2003)

“Theology and Science: Current Issues and Future Directions,” co-authored with Kirk Wegter-McNelly (*Blackwell Companion to Modern Theology*, forthcoming 2003).

“Bodily Resurrection, Eschatology and Scientific Cosmology: The Mutual Interaction of Christian Theology and Science,” in *Resurrection: Theological and Scientific Assessments*, Ted Peters, Robert John Russell, and Michael Welker, eds. (Grand Rapids: Eerdmans, 2002)

“Eschatology and Physical Cosmology” in *The Far Future: Eschatology from a Cosmic Perspective*, George F. R. Ellis, ed. (Philadelphia: Templeton Press, 2002).

“Forward”, “Methodology in Science and Religion,” in *Bridging Science and Religion*, Ted Peters and Gaymon Bennett, eds. (London: SCM Press, 2002). Also in the Chinese-language edition in simplified characters with Kang Phee Seng as a co-editor. To appear in Chinese-language edition in traditional characters, a Portuguese-language edition, a Spanish-language edition, and a Bahasa-language edition.

“Introduction” and “Divine Action and Quantum Mechanics: A Fresh Assessment,” in *Quantum Physics: Scientific Perspectives on Divine Action*. Robert John Russell, Philip Clayton, Kirk Wegter-McNelly, and John Polkinghorne, eds. (Vatican City State: Vatican Observatory Publications, and Berkeley, The Center for Theology and the Natural Sciences, 2002).

“Dialogo Science-Teologia, Metodo e Modelli”, translation of Part 1, “Theology and Science: Current Issues and Future Directions,” extended version, to appear in *Dizionario Interdisciplinare di Scienze e Fede*, Giuseppe Tanzella-Nitti, ed. (Città del Vaticano: Urbaniana University press, 2002).

“The Doctrine of Creation out of Nothing in Relation to Big Bang and Quantum Cosmologies,” *The Human Search for Truth: Philosophy, Science, Theology*, International Conference on Science and Faith / Jubilee for Scientists, Rome (Philadelphia: Saint Joseph’s University Press, 2002)

“Life in the Universe: Philosophical and Theological Issues,” *First Steps in the Origin of Life in the Universe*, proceedings, Sixth Trieste Conference on Chemical Evolution, Julian Chela-Flores, Tobias Owen and François Raulin, eds. (Dordrecht: Kluwer Academic Publishers, 2001).

“What are Extraterrestrials Really Like?”, *God for the 21st Century*, edited by Russell Stannard (Philadelphia: Templeton Foundation Press, 2000)

“Introduction” and “Special Providence and Genetic Mutation: A New Defense of Theistic Evolution,” in *Evolution and Molecular Biology: Scientific Perspectives on Divine Action*. Robert John Russell, William R. Stoeger, S.J., and Francisco J. Ayala, eds.. (1998).

“How should religion and science be creatively related? A Christian perspective”, Conference Proceedings, Ryukoku University, Kyoto (1997); *Hindu-Christian Studies Bulletin* (1997).

“Philosophy, Theology and Cosmology: A Fresh Look at their Interactions”, Padre Eligio, Giulio Giorello, Gioachino Rigamonti, Elio Sindoni, eds., *Scienze, Filosofia e Teologia di Fronte alla Nascita dell’Universo* (Como: Edizioni New Press, 1997).

“The God Who Infinitely Transcends Infinity: Insights from Cosmology and Mathematics into the Greatness of God,” *How Large is God?*, John Marks Templeton and Robert L. Herrmann, eds. (Philadelphia: Templeton Foundation Press, 1997). Also in Russian: *Dialogue between Science and Religion: Western and Eastern Christian Approaches* (Moscow, 2002)

“t=0: Is it Theologically Significant?” in *Religion and Science: History, Method, Dialogue*, W. Mark Richardson and Wesley J. Wildman, eds. (New York: Routledge, 1996).

“Introduction” and “Chaos: A Mathematical Introduction with Philosophical Reflections” with Wesley J. Wildman in *Chaos and Complexity: Scientific Perspectives on Divine Action*. Robert John Russell, Nancey Murphy and Arthur R. Peacocke, eds. (1995).

“Cosmology: Evidence for God or Partner for Theology?” in *Evidence of Purpose: Scientists Discover the Creator*, John Marks Templeton, ed. (New York: Continuum, 1994).

“Christian Discipleship and the Challenge of Physics: Formation, Flux, and Focus,” The George Hitching Terriberry Memorial Lecture, in *Reasoned Faith: Essays on the Interplay of Faith and Reason*, Frank T. Birtel, ed. (New York: Crossroad, 1993), 25-55.

“Introduction” and “Finite Creation without a Beginning: The Doctrine of Creation in Relation to Big Bang and Quantum Cosmologies” in *Quantum Cosmology and the Laws of Nature: Scientific Perspectives on Divine Action*. Robert John Russell, Nancy Murphy and C.J. Isham, eds. (1993).

“Theological Implications of Artificial Intelligence,” *The Science and Theology of Information*, C. Wasserman, R. Kirby and B. Rordorff, eds. (Editions Labor et Fides, 1992).

“Cosmology,” *New Handbook of Christian Theology*, Donald W. Musser and Joseph L. Price, eds. (Nashville, Abingdon Press, 1991).

“Theological Implications of Physics and Cosmology,” *The Church and Contemporary Cosmology*, James B. Miller and Kenneth E. McCall, eds. (Pittsburgh: Carnegie Mellon University Press, 1990).

“Cosmology, Creation and Contingency,” *Cosmos and Creation*, Ted Peters, ed. (Nashville: Abingdon Press, 1989).

“Agenda for the Twenty–First Century,” *The New Faith–Science Debate*, John Mangum, ed. (Fortress Press: Minneapolis and WCC Publications: Geneva, 1989).

“Quantum Physics in Philosophical and Theological Perspective,” *Physics, Philosophy and Theology: A Common Quest for Understanding*, Robert John Russell, William Stoeger, S. J., and George Coyne, S.J., eds.. (1988).

“Technology, Ethics and Education in a Global Perspective,” *Theological Education for the Future*, ed. Guy Fitch Lytle (Ohio: Forward Movement Publications, 1988).

“Whitehead, Einstein and the Newtonian Legacy,” *Newton and the New Direction in Science*, George V. Coyne, S.J., Michael Heller, and Jozef Zycinski, eds. (Citta Del Vaticano: Specola Vaticana, 1988).

“Evolutionary Understanding of Humanity and the Problem of Evil: Biological Evolution, Thermodynamics and the Problem of Evil,” *Kooperation und Wettbewerb*, Hans May, Meinfried Striegnitz and Philip Hefner, eds. (Rehberg-Loccum, West Germany: Evangelische Akademie Loccum, 1988).

“The Meaning of Causality in Contemporary Physics,” *Free Will and Determinism*, Viggo Mortensen and Robert C. Sorensen, eds. (Aarhus: Aarhus University Press, 1987).

“A Response to David Bohm's `Time, The Implicate Order and Pre-Space,““ *Physics and the Ultimate Significance of Time*, David R. Griffin, ed. (State University of New York Press, Albany, 1986).

“Foundations in Physics for Revising the Christian Creation Tradition,” with A. Dufner, S. J., *Cry of the Environment: Rebuilding the Christian Creation Tradition*, Philip N. Joranson and Ken Butigan, eds. (Bear & Co.: Santa Fe, 1984).

Essays in Journals

“Five Key Topics on the Frontier of Theology and Science Today,” *Dialog: A Journal of Theology* 46.3, no. Fall (2007): 199-207.

“Fruitful Interactions between Scientific Cosmology and Christian Theology,” *Korean Institute for Advanced Theological Studies Theological Journal* Vol. 2.2 (Fall, 2006).

“Evolution and Christian Faith” in *America, The National Catholic Weekly*, vol. 194, no. 6 (February 20, 2006).

“Five Attitudes towards Nature and Technology from a Christian Perspective,” *Theology and Science* 1.2 (October, 2003): 149-159.

Editorial: “Bridging Theology and Science: The CTNS Logo,” *Theology and Science* 1.1 (April, 2003): 1-3.

“Beyond Dialogue: Buddhism, Christianity and Science in Mutual Modification” (to appear in *Zygon: Journal of Religion and Science*).

“The Relevance of Tillich for the Theology and Science Dialogue,” *Zygon: Journal of Religion & Science* 36.2 (June, 2001)

“Did God Create Our Universe? Theological Reflections on the Big Bang, Inflation, and Quantum Cosmologies,” in *Annals of the New York Academy of Sciences*, vol. 950: *Cosmic Questions*, ed. J. B. Miller (New York: New York Academy of Sciences: 2001).

“Time in Eternity: Special Relativity and Eschatology”, in *Dialog: A Journal of Theology* 39.1 (Spring, 2000)

“Theology and Science: Current Issues and Future Directions,” extended version, available on the CTNS website and on a CD from Counterbalance. (2000)

“How the Heavens Have Changed!”, *Ad Astra: The Magazine of the National Space Society* (November/December, 1998) and *CTNS Bulletin* 19.3 (Summer, 1999)

“Does Creation Have a Beginning?” in *Dialog: A Journal of Theology* (Summer, 1997).

“Does the ‘God Who Acts’ Really Act? New Approaches to Divine Action in Light of Science” in *Theology Today* (April 1997)

“Religion and the Theories of Science; Response to Barbour, *Zygon: Journal of Religion and Science*. Vol. 31, No. 1 (March 1996).

“Cosmology from Alpha to Omega,” *Zygon: Journal of Religion and Science*. Vol. 29, No. 4 (December, 1994).

“Finite Creation Without A Beginning,” *The Way: Contemporary Christian Spirituality*. Vol. 32, No. 2 (October 1992).

“Contemplation: A Scientific Context,” *Continuum*. Vol. 2, Nos. 2 and 3.

“The Human Genome Project: What Questions Does It Raise for Theology and Ethics?” with Ted Peters. *Midwest Medical Ethics*. Vol. 8, No. 1 (Summer 1992).

“The Theological–Scientific Vision of Arthur Peacocke,” *Zygon*. Vol. 26, No. 4 (December 1991).

“Theological Lessons from Cosmology: Two Case Studies,” *Cross Currents: Religion & Intellectual Life*. Vol. 41, no. 3 (Fall 1991).

“Contemplation in the Vibrant Universe: The Natural Context of Christian Spirituality,” *CTNS Bulletin*. Vol. 11, no. 4 (Autumn 1991).

“Christian Discipleship and the Challenge of Physics: Formation, Flux, and Focus,” *Perspectives on Science and Christian Faith*. Vol. 42, No. 3 (September 1990). Also *CTNS Bulletin*. Vol. 8, No. 4 (Autumn 1988).

“The Thermodynamics of ‘Natural Evil,’” *CTNS Bulletin*. Vol. 10, No. 2 (Spring 1990).

“Bread of Life: A Communion Meditation,” *CTNS Bulletin*. Vol. 9, No. 3 (Summer 1989).

“Contingency in Physics and Cosmology: A Critique of the Theology of Wolfhart Pannenberg,” *Zygon: Journal of Religion and Science*. Vol. 23, No. 1 (March 1988).

“Science and Theology Today: A Fresh Appraisal of Peacocke's Thought,” *Religion & Intellectual Life*. Vol. V, No. 3, (Spring 1988).

“A Critical Appraisal of Peacocke's Thought on Religion and Science,” *Religion and Intellectual Life*. Vol. II, No. 4 (Summer 1985).

“How Does Modern Physical Cosmology Affect Creation Theology?” *Pacific Theological Review*. Vol. 18, No. 3 (Spring 1985).

“The Thought of David Bohm: Introduction,” with Ian G. Barbour, *Zygon*. Vol. 20, No. 2 (June 1985).

“The Physics of Bohm and its Relevance to Philosophy and Theology”, *Zygon*. Vol. 20, No. 2 (June 1985).

“Entropy and Evil,” *Zygon*. Vol. 19, No. 4, December 1984. Also *CTNS Bulletin*. Vol. 4, No. 2 (Spring 1984).

“Converging Streams,” *San Francisco Examiner/Chronicle*, August 11, 1984.

“Computers: Altering the Human Image and Society,” edited by Robert John Russell, *Computers & Society*. Vol. 13, No. 1 (1983).

“Energy and Values,” *New Catholic World*. Vol. 224, No. 1341 (May/June 1981).

Reviews of Books in Theology and Science

“Book Worth Rereading,” on *A Brief History of Time: From the Big Bang to Black Holes* by Stephen W. Hawking. *America*. Vol. 164, No. 4 (February 2, 1991).

A Brief History of Time: From the Big Bang to Black Holes by Stephen W. Hawking. *CTNS Bulletin*. Vol. 10, No. 1 (Winter 1990).

One World by John Polkinghorne. *Nature*. Vol. 321, No. 26 (June 1986). *Zygon*. Vol. 22, No. 1 (March, 1987).

The Miracle of Existence by Henry Margenau. *Zygon*. Vol. 20, No. 3 (September 1985).

The Sciences and Theology in the Twentieth Century ed. by A. R. Peacocke. *CTNS Bulletin*. Vol. 4., No. 1 (Winter 1984). *Zygon*. Vol. 20, No. 4 (December 1985).

The Dancing Wu Li Masters by Gary Zukav. *Zygon*. Vol. 15, No. 4 (December 1980).

Scientific Publications

“Some implications of chaos theory for the genetic analysis of human development and variation,” Lindon J. Eaves, Robert J. Russell, Katherine M. Kirk, and Nicholas G. Martin (to appear in 1999).

“Kerr Solution to Whitehead’s Theory of Gravity,” (with Christoph Wassermann), *Bulletin of the American Physical Society*. Vol. 32, No. 90 (1987).

“Systematic approach for comparing paraelectric tunneling models to resonance data,” *Physical Review B*. Vol. 26, No. 6 (1982).

“Unusual Paraelectric System, KBr:Li⁺,” (with Frank Bridges), *Physical Review B*. Vol. 26, No. 6 (1982).

“Relative Magnitude of Tunneling Parameters Versus Energy Levels in Paraelectric Models,” *Bulletin of the American Physical Society*. Vol. 26, No. 30 (1981).

“A New Paraelectric Center in NaCl:Li⁺,” (with Frank Bridges), *Bulletin of the American Physical Society*. Vol. 23, No. 18 (1978).

“Suppression of the Paraelectric Resonance of KBr:Li⁺ by OH⁻,” (with Frank Bridges), *Bulletin of the American Physical Society*. Vol. 22, No. 332 (1977).

“A New Paraelectric Center in Lithium–Doped KBr,” (with Frank Bridges), *Solid State Communications*. Vol. 21, No. 1011 (1977).

“Isotope Effect on the Paraelectric Resonance of KBr:Li⁺,” (with Frank Bridges), *Bulletin of the American Physical Society*. Vol. 21, No. 265 (1976).

“Magnetic-monopole solution of non-Abelian gauge theory in curved spacetime,” (with F. A. Bais), *Physical Review D*. Vol. 11, No. 2692 (1975).

PAPERS PRESENTED AND SPECIAL LECTURES

“The Role of Philosophy and Theology *in* Einstein’s General Relativity and Big Bang Cosmology: Technical Version,” Graduate Student Seminar, Kyokoku University, Kyoto, Japan, June 15, 2004.

“Science and Religion Today: 12 Questions to Christians and Buddhists in Dialogue,” Ryukoku University, Kyoto, Japan, June 15, 2004.

“The Role of Philosophy *in* Einstein’s General Relativity and Big Bang Cosmology,” Public Lecture, Ryukoku University, Kyoto, Japan, June 11, 2004.

“Eschatology and Scientific Cosmology: From Conflict to Interaction”, 2004 Witherspoon Lecture, Center of Theological Inquiry, Princeton, New Jersey, January 29, 2004.

“Evolution, Natural Theodicy, and ‘New Creation’ Eschatology”, Evolution and the Problem of Evil: An Interdisciplinary Workshop, Westmont College, Santa Barbara, CA., January 31, 2004

“Evolutionary Natural Evil: Implications for Christian Eschatology and Science,” Australian Theological Forum Annual Conference, Melbourne, Australis (May, 2003)

“Five Attitudes towards Nature and Technology from a Christian Perspective,” *Science and the Spiritual Quest: Tokyo Conference*, Fall 2002.

“When Time Meets Eternity: Theology and Science in Mutual Creative Interaction”, proceedings, C. S. Lewis Conference, Cambridge, UK., 2002

“Creation and Cosmology: Fruitful interactions between science, philosophy and theology”, CTNS / SRCP People’s Republic of China lecture tour (Beijing, Shanghai, Nanjing, Jinan) May, 2002.

“Chaos and Complexity: Theological Perspectives,” SRCP Qualifying Workshop, Canberra, Australia (January, 2002)

“Creation and Cosmology,” plenary lecture, SRCP Qualifying Workshop, Seoul, Korea (January, 2002)

“Cosmology, Entropy and Evil,” plenary lecture, SRCP Winter Workshop, Hayes Mansion, San Jose (January, 2002)

“Christian Theology and Natural Sciences: Accomplishments and Challenges,” GTU Distinguished Lecture 2002.

“Sin, Salvation, and Cosmology”, Australian Theological Forum and CTNS/SRCP Qualifying Conference, Adelaide, Australia, October, 2001.

“Resurrection, eschatology, and cosmology: theology and science in mutual modification”, Heidelberg conference on the resurrection and contemporary culture, Heidelberg, July 2001.

“Resurrection, eschatology, and cosmology: new directions of research”, Science and Religion Course Program, Summer Workshop, Berkeley, June 2001.

“Resurrection, eschatology, and cosmology”, Science and Religion Course Program Winter Workshop, Berkeley, January, 2001.

“Eschatology and cosmology: conflict or interaction?”, Conference on the Far Future located at the Pontifical Academy, The Vatican (November, 2000).

“Life in the Universe: Philosophical and Theological Issues,” Sixth Trieste Conference on Chemical Evolution: First Steps in the Origin of Life in the Universe, September, 2000.

“Divine Action and Quantum Mechanics: A Fresh Assessment,” CTNS/Vatican Observatory conference on science and divine action, Castel Gandolfo, June 2000.

“The Doctrine of Creation out of Nothing in Relation to Big Bang and Quantum Cosmologies,” International Conference on Faith and Science, Jubilee for Scientists, The Vatican, May, 2000.

“The Significance of $t=0$ for Creation,” *Ab initio temporis: Time, Creation, and Cosmology*, An International Symposium at Cornell College, Mt. Vernon, Iowa, April, 1999.

“Is the Universe the Creation of God?”, *Cosmic Questions Conference*, American Association for the Advancement of Science, April, 1999, Washington, D. C.

“The Relevance of Tillich for the ‘Theology and Science’ Dialogue,” The Annual Meeting of the Paul Tillich Society, New Harmony, Indiana, June, 1999.

“Relativity and Quantum Physics: Philosophical and Theological Implications,” special lecture, Religion and Science Honors Course, Yeshiva College, New York, April, 1999.

“Science and Religion Today,” *A Century of Nobel Prize: Science and Humanism*, an International Symposium, Interdisciplinary University of Paris / UNESCO, Paris, April, 1999.

“Science and Religion: Background and Current Issues,” Shabbaton Weekend / Dialogue on Judaism and Science, Department of Religious Studies, Arizona State University, Tucson, Arizona, February, 1999.

“Cosmology and Theology,” *Before the Beginning*, Symposium, Annual Meeting, American Association for the Advancement of Science, Anaheim, CA., January, 1999.

Faculty, Science and Religion Winter Workshop, Berkeley, January, 1999.

“Beyond Dialogue: Buddhism, Christianity and Science in Mutual Transformation,” lecture at the Science and Theology Session, Annual Meeting, American Academy of Religion, November, 1998 (to be published in *Zygon: Journal of Religion and Science*)

“Does ‘the God who Acts’ Really Act?”, faculty/graduate student colloquia, GTU, September, 1998.

“Cosmology and Theology: New Perspectives on Ancient Issues,” Symposium Keynote Lecture, Concordia College, September, 1998.

“The theological consequences of the thermodynamics of a moral universe: an appreciative critique and extension of the Murphy/Ellis project,” Annual Meeting, American Academy of Religion, November, 1997.

“How the Heavens Have Changed!”, Gustavus Adolphus College Nobel Conference Lecturer 30 Years of Space Exploration, October, 1997.

“Cosmology from Alpha to Omega,” Killeen Chair of Theology and Philosophy Lecturer St. Norbert College, De Pere, Wisconsin, October, 1997.

“Life in the Cosmos: Chance or Purpose?”, Rediscovering Cosmos Plenary Lecturer Syracuse University, August, 1997.

“Ways of Relating Science and Religion,” “God as Creator *ex nihilo* and Big Bang Cosmology,” “God as Continuous Creator and Biological Evolution,” “Cosmology and Eschatology,” First Australian Conference on Science and Theology Keynote Lecturer Institute for the Study of Christianity in an Age of Science and Technology, Sydney, July, 1997.

Faculty, Templeton S/R Course Workshop, CTNS (June 13-17, 1997).

Respondent, Jack Haught Research Conference, CTNS Fellowship (Apr 19, 1997).

“Cosmology from Alpha to Omega”, Templeton-ASA Lecturer Spring, 1997 (Carroll College, Mar 25, 1997)

Chapel and course presentation, United Theological Seminaries / Judith Scoville (Mar 10, 1997).

“Time in physics, philosophy and theology”, AAAS Annual Meeting S/R presentations, Seattle (Feb. 17, 1997)

“S/R on the Christian Campus,” Seattle Pacific University (Feb. 13, 1997).

Faculty, Templeton S/R Course Workshop, CTNS (Jan 10-14, 1997).

“Cosmology from Alpha to Omega”, Templeton-ASA Lecturer Fall, 1996 (Augustana College, Nov. 4; University of Wisconsin

at Oshkosh, Nov. 6; Creighton University, Nov. 7, 1996).

Faculty, Templeton S/R Course Workshop, CTNS (June 7-11, 1996).

Respondent, Margaret Wertheim Research Conference, CTNS Fellowship (April 20, 1996)

'Science and Theology: Conflict or Convergence?', Templeton Foundation University Lectures, Baylor University, Waco, Texas (April 11-12, 1996).

'Did God Create the Universe at $t=0$?', Templeton Foundation University Lectures, Baylor University, Waco, Texas (April 11-12, 1996).

Respondent to Dr. Charles Townes, Templeton-CTNS University Lecture, UC Berkeley (March 19, 1996).

"Mind/Body problem in s/r", New Hampshire Council on the Humanities (Feb 15, 1996).

Faculty, Templeton S/R Course Workshop, CTNS (Jan 26-29, 1996).

Earl Lecturer Respondent (Jan. 23-26, 1996).

Faculty, Templeton S/R Course Workshop, CTNS (June 23-28, 1995).

Respondent to papers, Consultation on S/R, Center of Theological Inquiry, Princeton (June 3-6, 1995)

"Science, values and education," Skirball Institute, Chicago (April 3-5, 1995)

Faculty lecturer, S/R conference, St. Thomas University, Minneapolis/St. Paul (March 7-9, 1995).

Faculty, Templeton S/R Course Workshop, Florida (Jan 5-8, 1995).

Respondent to Frank Tipler, CTNS Public Forum, Graduate Theological Union (March 26, 1995).

Respondent to Frank Tipler, Center for Science and Public Issues, Portland (Nov 7, 1994)

"Cosmology and the New World of Faith," Templeton Lectures, Fall 1994 (Atlanta, Sept 15; Colorado Springs, Sept 16; New York, Sept 26; Austin, Oct 16; Minneapolis/St. Paul, Nov 6)

"Science and religion in the context of honors undergraduate education", Eastern Kentucky University (May 11-15, 1994).

"Genetics, Ethics and Theology", Berkeley Town & Gown (May 2, 1994).

"Science and Religion: Theological Perspectives on the Dialogue", Woodstock Center, Georgetown University, Washington, D.C. (April 28, 1994).

"Science and Religion: Conflict or Convergence?", St. Thomas University, St. Paul, MN (April 27, 1994).

"Ethics and HGP: What options should we take?", Tri-Campus Ethics and Genetics Symposium, Texas (April 20-22, 1994).

"Nature and Creation in Modern Physics and Cosmology: A Trinitarian Approach," Fifth European Conference on Science and Theology (ESSAT), Munich, Germany (March 23-27, 1994).

"Religion and Science: Conflict or Convergence?", Occidental College, Los Angeles, California (October, 1993).

"Engineering Human Genetics: Ethical and Theological Issues for the Church," three-week series, Piedmont Community Church (September, 1993), supported by a grant to CTNS from the John Templeton Center for Humility Theology.

"Cosmology from Alpha to Omega," 1993 Templeton Symposium, *Science and Religion: Two Ways of Experiencing and Interpreting the World*, Chicago (August, 1993).

"Unlocking the Parable of the Sower of the Seed: Redemption in light of Human Genetics," NIH/HGI Consultation #4, Berkeley, California (August, 1993).

“A Fresh Exploration of the Symbol of a Cosmic Christ: Eschatology and Scientific Cosmology,” Annual Meeting, Catholic Theological Society of America, San Antonio, Texas (June, 1993).

“Eternally Creating Time,” CTNS Forum, Berkeley (March, 1993).

“COBE, Hawking, and theological implications,” *The Religious Significance of Big Bang Cosmology*, Session 3, and “Interface in the Academy,” *Oil and Water? Institutional interactions between Science and Religion*, Session 4, at the Annual Meeting of the American Association for the Advancement of Science, Boston (February, 1993).

“The Logistic Equation,” with Wesley Wildman, lecture at VO/CTNS mini-conference in Berkeley, California, October, 9, 1992 and Rome, Italy, December, 1992.

“Seekers and Makers of the Divine Will in an Evolutionary and Cosmological Context,” CTNS Decade Research Conference, Berkeley, April, 1992, and NIH/HGI Consultation #2, August, 1992.

“Two Decades of Accomplishments: Celebrating the British Forum on Religion and Science,” England, April, 1992.

Response to Gordon Kaufman, “Nature, History and God,” Seminar Paper at the Annual Meeting of the American Academy of Religion, Kansas City, November, 1991.

“Polanyi in Science and Religion: A Critical Assessment of Barbour and Peacocke,” Pacific Coast Theological Society, Berkeley, California, November, 1991.

“Creation Without a Beginning? Einstein, Hawking and Judeo-Christian Beliefs,” the 1992 Albertus Magnus Lecture, lecture at the Newman Center, the California Institute of Technology, Pasadena, California (October, 1991).

“Theological Implications of Artificial Intelligence,” paper presented at the Third Conference of the European Society for the “Science and Religion: Conflict or Convergence?,” “Cosmos and Creation: Towards a Fruitful Interaction,” and “Life in the Universe: From Creation to New Creation,” lecture series at the “February Meetings,” Maryville College (February, 1991).

“Science and Religion,” focal paper for research conference, The Free University, Amsterdam (December, 1990). Response to “Scientific Research and the Christian Faith,” GTU Distinguished Faculty Lecture by Ted Peters, November 1990.

“Is the Triune God the Basis for Physical Time?” for “Does God Have Time?” CTNS Research Conference with Robert W. Jenson, November 1990.

“Contemplation and Science: Converging Streams and the Human Future,” Bicentennial Symposium of the Carmelite Sisters of Baltimore, August 1990.

“Can Physics and Theology Interact Fruitfully? A Case Study on God, Evil, Cosmology and Chaos Theory,” for “Rediscovering Alexandria: Science, Religion and the Churches,” at the American Association for the Advancement of Science, February 1990.

“Theological Implications of Artificial Intelligence,” for “Information and Knowledge in Science and Theology,” Third European Conference on Science and Technology, University of Geneva, Switzerland, March 1990.

“For the Love of Nature,” Wooster Clergy Academy Lecture, The College of Wooster, Ohio, January 1990.

“Physics and Theology,” presentation to the Society of Physics Students, The College of Wooster, Ohio, January 1990.

“Does God Work Through Evolution, and if so, Why Is There So Much Suffering in the World?” for the Student Discussion Group, The College of Wooster, January 1990.

“Contemporary Physics: Changing Views on God and Nature,” lecture for the Ohio Agriculture Research and Development Center, Wooster, Ohio, January 1990.

“Converging Streams in Science and Religion,” Public Lecture, The College of Wooster, Ohio, January 1990.

“Competing Theories of Gravity: Einstein and Whitehead,” lecture to the Physics Department of the College of Wooster, Ohio, January 1990.

“The Church and the Sciences,” for the Newman Club and the Religious Studies Table, The College of Wooster, Ohio, January 1990.

“Can Science Help Solve Key Theological Problems? The Existence of God and Divine Action in a Broken World,” a Davies Forum Lecture at the University of San Francisco, November 1989.

“The Fruitfulness of Complementarity for Three Theological Problems,” as a presentation on Religion and Science with David Ray Griffin for the Pacific Coast Theological Society, Berkeley, November 1989.

“Science, Technology and the Church: Reasons and Grounds for Interrelationship,” lecture at a conference on “Christian Vocation in the Contemporary World,” United Campus Ministry of Pittsburgh, November 1989.

“Science and Theology: Convergence or Collision?” Religion Education Congress, Anaheim, California.

“What the Church Should Know about Evolution,” for “‘Only a Theory’: Present Evolution to the Public,” American Association for the Advancement of Science, January 1989.

“Eschatology and Physical Cosmology: Grounds for Hope?” Science and Religion Group, Annual Meeting of the American Academy of Religion, Chicago, November 1988.

“Tipler’s ‘Physical Eschatology’ and the Theological Program of Wolfhart Pannenberg,” lecture at the Second Pannenberg Symposium, Chicago Center for Religion and Science, November 1988.

“Are We ‘Created Co-Creators?’: A Theological Critique,” the Harnish Lectures, Fresno, California, October 1988.

“Physics and Philosophy of Whitehead and Einstein: Progress Report,” presented at the Center for Process Studies, Claremont, California, October 1988.

“Temporal Order and the Problem of Being versus Becoming: Insights from Special Relativity,” Consultation on Religion and Science, Center of Theological Inquiry, Burlingame, California, October 1988.

“Christian Discipleship and the Challenge of Physics,” visiting lectureship, Chair of Jewish-Christian Studies, Tulane University, September 1988.

“Theological Implications of Physics and Cosmology,” lecture at a conference for ordained Episcopal scientists, “Faith and Science: Living in Two Worlds,” sponsored by Trinity Church (for the Episcopal Church in America), Burlingame, April 1988.

“The Meaning of God and the Challenge of Science,” Beth Ann Harnish Memorial Lecture, University Religious Center, Fresno, March 1988.

“Converging Streams in Science and Religion,” University Faculty Lecture, California State University, Fresno, March 1988, and Santa Rosa Junior College, April 1988.

“Theological Implications of Physics and Cosmology,” lecture at a national conference for lay scientists and clergy sponsored by the United Presbyterian Church, Burlingame, December 1987.

“The Church in a Scientific/Technological Age: Agenda for the 21st Century,” Keynote Address for an international conference on “The New Scientific/Technological Age: What Difference Does it Make for our Church?” sponsored by the Lutheran Church in America and the Lutheran World Federation, Larnaca, Cyprus, December 1987.

“Science and Religion: A New View from Rome,” CTNS Public Forum, October 1987.

“Quantum Physics in Theological Perspective,” lecture at the Vatican Observatory during a conference on “Our Vision of God and Nature: Physics, Philosophy and Theology,” September 1987.

“Whitehead, Einstein and the Newtonian Legacy,” paper presented at the Cracow Conference sponsored by the Pontifical Theological Academy of Cracow and the Vatican Observatory, May 1987.

“Science and Religion: The Current Scene in America,” faculty lecture at the University of Geneva, Switzerland, June 1987.

“Whitehead, Einstein and the Problem of Gravity,” research lecture at the Center for Process Studies, March 1987.

“Philosophical and Theological Implications of Physics and Cosmology,” faculty lecture at the University of Redlands, California, March 1987.

“Steps Towards a Theology of Nature in the Thought of Ian G. Barbour,” given at the consultation on religion and science, “Implications of Scientific Cosmology for a Theology of Nature,” at the Annual Meeting of the American Academy of Religion, Atlanta, November 1986.

“Converging Streams in Science and Religion,” public lecture at Whitman College, Walla Walla, Washington, September 1986, and at the Lutheran School of Theology, Chicago, October 1986.

“Philosophical Problems in Contemporary Physics,” faculty lecture sponsored by departments of Astronomy, Physics and Religion, Whitman College, Walla Walla, Washington. September 1986.

“The Meaning of Causality in Contemporary Physics,” given at the International Conference on Free Will and Determinism, Copenhagen, Denmark, August 1986.

“Crossing between physics and theology: reliable bridge or slippery leap?” paper presented at the CTNS conference, “Critical Realism in Science and Religion,” on the work of Arthur Peacocke, March 1986.

“How Does Scientific Cosmology Shape a Theology of Nature?” CTNS Public Forum, November 1985.

“Order and Chaos in 20th Century Physics: Their History and Theological Significance,” International Congress of the History of Science, August 1985.

“Response to Milic Capek: ‘The Open World and Contemporary Physics,’ “ Physics and the Ultimate Significance of Time, Center for Process Studies, March 1985.

“Science and Religion: Approaches, Current Problems and Horizons,” Science and Religion Seminar, organized by the Applied Physics Department and the Ecumenical Ministries, Stanford University, January – February 1985.

“Theological Implications of Genetic Engineering,” UCC Consultation on Genetic Engineering, United Church Board for Homeland Ministries, Berkeley, October 1984.

“Beyond Dialogue: The Mutually Constructive Interaction of Science and Theology,” Annual Meeting, The American Association for the Advancement of Science, New York, May 1984.

Response: “Making the Catholic Mind: David Bohm,” University of Notre Dame, March 1984.

“Entropy and Evil,” CTNS Public Forum, March 1984.

“An Analysis of the Physics of David Bohm using the Methodology of Imre Lakatos,” Pacific Coast Theological Society, Berkeley, March 1983.

“New Knowledge, Richer Faith,” Lutheran Campus Faculty Forum, University of California at Los Angeles, February 1983.

Response: “Theology and the Origins of Life,” lecture by Freeman Dyson, sponsored by CTNS and the GTU, Berkeley, November 1982.

“Disorder and Order: A Study of Entropy and a Study of Evil,” for the Institute on Religion in an Age of Science, Star Island Conference, New Hampshire, July 1982.

“The New Physics: Impact on an Emerging Global Humanity,” keynote address to the Science, Technology and Religion Symposium, Michigan Technological University, Houghton, April 1982.

“Technology and Values: Issues for Campus Ministry,” Lutheran Campus Ministry Staff Conference, Menlo Park, February 1982.

“The Cauldron of Physics and Theology,” Afternoon Seminars, Pastoral Conference, Berkeley, February 1982.

COURSES TAUGHT

Graduate Theological Union, Berkeley

Doctoral Seminars:

(Academic sabbatical: Spring, 2005)

Genes, Genocide and Theodicy (with Ted Peters), 2003

Quantum Physics: Philosophical and Theological Perspectives (with Kirk Wegter-McNelly), 2002

Resurrection, Eschatology, and Scientific Cosmology (with Ted Peters), 2001

(Sabbatical leave 2000-2001)

Advanced Seminar in Theology and Science, 1999, 2003, 2003 (focus on Barbour)

History of Theology: 1965–Present (with Alejandro Garcia-Rivera), 1999; (with Ted Peters) 2004

Paul Tillich: Systematic Theology (with Ted Peters), 1998

Nature, Theology and Spirituality (with Mark Richardson), 1998

Cosmology and Eschatology (with Ted Peters) 1997

Evolution and Christian Theology (with Mark Richardson) 1997

History of Theology: 1965–Present (with Ted Peters) 1996, 2004

Divine Action and Chaos in Nature 1995

Barth's Development: 1914–1932 (with Tim Lull and Ted Peters) 1993

Philosophical and Scientific Perspectives on Divine Action (with Mark Richardson) 1993

Physics, Philosophy and Theology 1991

Advanced Seminar in Theology and Science 1991

The Trinity Today (with Ted Peters) 1990

Physics, Philosophy and Theology (with John Polkinghorne) 1990

Quantum Physics: Philosophical and Theological Perspectives (with Peter Degen) 1989

Einstein in Philosophical and Theological Significance 1987

Various Special Reading Courses

M. DIV. Courses:

(Academic sabbatical: Spring, 2005)

Discernment and Nature: Christian Spirituality with Science and Religion (with Elizabeth Liebert and Nancy Wiens St. John), 2002

Christian Theology and Natural Science, 2004; (with Kirk Wegter-McNelly), 2002; 2004

Contemporary Theology and Natural Science, 2000

(Sabbatical leave 2000-2001)

Pannenberg's Systematic Theology (with Ted Peters), 1998

Nature, Theology and Spirituality (with Mark Richardson), 1998

Introduction to Science and Religion for Church Ministry (with Mark Richardson and CTNS Staff), 1997

Scientific Cosmology in Theological Perspective, 1994

Human Genetics, Ethics, Theology (with David Cole and Richard Randolph), 1993

Technology, Environment and Human Values (with Judith Scoville), 1993

Christian Theology and Contemporary Science, Part 1, 1991; Part 2, 1992

Technology, Environment and Human Values (with Carol Tabler), 1991

Theology and Science, 1990

Whitehead, Science and Religion (with Forrest Hartman), 1990

Christian Theology and Contemporary Science (with Ted Peters), 1990

Technology, Environment and Human Values, 1989; (with Andrew Dufner), 1982

Time and Eternity (with Ted Peters) 1988

Current Thought in Science and Religion, 1982; (with Ian Barbour), 1983; (with Phil Hefner), 1985;

(with Arthur Peacocke), 1986; (with Francis Baur, Ted Peters, Ben Reist and Surjit Singh).

Introduction to Religion and Science, 1985, 1986

Theology of Arthur Peacocke, 1985

Philosophy of Science and Theological Inquiry (with Nancey Murphy) 1984

Theology and Science, 1981, 1984

Mathematical and Physical Models in Theology, 1983

Theology of Thomas Torrance, 1982

Revolutions in Physics, 1982

Physics and Eastern Thought 1981 (with Durwood Foster), 1981
Various Special Reading Courses
The Lutheran School of Theology, Chicago
Christian Theology in the Context of Physics and Cosmology 1986

Carleton College
1978–1981

Department of Physics:
Advanced Quantum Mechanics
Classical Mechanics
Contemporary Experimental Physics (advanced lab)
Electricity and Magnetism
General Relativity and Cosmology
Project Lab
Revolutions in Physics (for non–science majors)

Department of Religion:
Science and Religion (with Ian Barbour)

University of California, Santa Cruz

Department of Religion:
Science and Religion, 1977

SUMMER COURSES

Contemporary Science and Christian Theology, a two week CTNS Continuing Education Course for Clergy and Laity supported by the John Templeton Foundation, Berkeley, California, June, 1993.

Christian Theology and Contemporary Science, a two week CTNS Continuing Education Course for Clergy, Berkeley, California, June, 1992.

The Church in an Age of Science: The Challenge of Contemporary Science and Technology to Christian Theology and Ethics, a two week CTNS Continuing Education Course for Clergy supported by The Episcopal Church Foundation, Berkeley, California, June, 1991.

Technology in Tension with Values, a course in continuing education, Pacific Southwest Conference on Church World Mission. Asilomar, California (in conjunction with plenary sessions by Rustom Roy), July 1986.

Faith and Science: Dialogue and Interdependence, a summer workshop for laypersons, scientists and pastors, sponsored by the Presbyterian Church. Ghost Ranch, New Mexico, July, 1985.

Computers and Christian Education, a summer workshop for Christian educators sponsored by the Church Divinity School of the Pacific. July 1984.

ORGANIZATION OF NATIONAL AND INTERNATIONAL PROFESSIONAL SYMPOSIA

Chair, “Quantum Physics: Scientific Perspectives on Divine Action,” CTNS/Vatican Observatory Research Conference, Castel Gandolfo, June, 2000.

Chair, “Neurosciences and the Person: Scientific Perspectives on Divine Action,” CTNS/Vatican Observatory Research Conference, Pasierbiec, Poland, June, 1998.

Chair, “Science and the Spiritual Quest” Workshops for cosmology, physics, biology and technology (May 6-9, June 5-10, Dec. 10-15, 1997, Jan. 17-22, 1998); pre-conference, Vatican Observatory, Castel Gandolfo, September, 1997.

Co-Chair and Lecturer, "Evolution and Molecular Biology: Scientific Perspectives on Divine Action," CTNS/Vatican Observatory Research Conference, Castel Gandolfo, June, 1996; pre-conference, CTNS, Berkeley, September, 1995.

Co-Chair and Lecturer, "Chaos and Complexity: Scientific Perspectives on Divine Action," CTNS/Vatican Observatory Research Conference, Berkeley, August, 1993.

Co-Organizer and Respondent, "Metaphoric Process as the Reformation of Worlds of Meaning in Theology and Natural Science," CTNS Research Conference with Mary Gerhart and Allan Russell, Berkeley, February, 1993.

Organizer and Lecturer, "The Religious Significance of Big Bang Cosmology," Annual Meeting, The American Association for the Advancement of Science, Boston, February, 1993.

Organizer and Lecturer, "Chaos and Complexity Mini-Conference," an introductory conference for U.S. participants in the 1993 VO/CTNS conference, Berkeley, California, October, 1992, and for European participants, Rome, Italy, November, 1992.

Co-Organizer and Lecturer, "Building Bridges Between Theology and Science," CTNS Decade Conference, Berkeley, April, 1992.

Co-Organizer, "Genes, Genesis and God in Natural and Human History," CTNS Research Conference with Holmes Rolston, February, 1991.

Co-Chair and Lecturer, "Quantum Creation of the Universe and the Origin of the Laws of Nature," Vatican Observatory Conference, Rome, September, 1991.

Co-Organizer and Lecturer, "Polanyi's Contributions to Theology and Science," Centennial Conference on the Thought of Michael Polanyi, GTU, Berkeley, California March, 1991.

Organizer and Respondent, "Does God Have Time? The Doctrine of the Trinity and the Concept of Time in the Physical Sciences," CTNS Research Conference with Robert W. Jenson, November, 1990.

Workshop Convener, "Interpreting the Universe as Creation," Center for Theological Exploration: Second Consultation on Science and Religion, Utrecht University, December 1990.

Organizer and Respondent, "God's Interaction with the World," CTNS Research Conference with John Polkinghorne, May 1990.

Workshop Convener, "Artificial Intelligence, Human Intelligence and the Intelligence of Faith," for "Information and Knowledge in Science and Theology," Third European Conference on Science and Technology, University of Geneva, Switzerland, March 1990.

Organizer, "Genes, Culture and Personality," CTNS Research Conference with Lindon Eaves, October 1989.

Organizer, "Physical Cosmology in Philosophical and Theological Perspective" with William Stoeger, S.J., Fall 1988. Co-sponsored by the Vatican Observatory.

Organizer, "Is Natural Theology Possible from a Roman Catholic Perspective?" CTNS Fellow's Conference with Ernan McMullin and Norris Clarke, S.J., Spring 1988. Co-sponsored by the Vatican Observatory.

Organizer, "Faith and Science: Living in Two Worlds," a conference for ordained Episcopal clergy, through a grant to CTNS from the Trinity Church, April 1988.

Co-Chair and Lecturer, "Our Vision of God and Nature: Physics, Philosophy and Theology," Vatican Observatory Conference, Rome, September 1987.

Organizer, "The Doctrine of Creation and Modern Science," CTNS Fellow's Conference with Wolfhart Pannenberg, April 1987. Co-sponsored by the GTE Foundation.

Member of organizing committee and participant, ongoing colloquia on the Bishops' Pastoral Letter on Peace, organized by the Roman Catholic Diocese of Oakland, California.

Organizer and Lecturer, "Building Bridges between Science and Religion: Sharing Vocations and Values," weekend conference, Episcopal Diocese of San Joaquin, May, 1986.

Organizer, "Critical Realism in Science and Religion," CTNS Research Conference with Arthur Peacocke, Spring 1986.

Contributor, "Consultation on Scientific and Intellectual Change," Division for World Mission and Ecumenism, Lutheran Church of America, Jacksonville Beach, February 1984.

Moderator, "Theology & Physics: The Implications of the Work of David Bohm," CTNS Research Conference, Berkeley, April 1983.

Moderator and Editor, "Computers: Altering the Human Image and Society," West Coast Consultation on Faith, Science and the Future, co-sponsored by CTNS and the World Council of Churches, Berkeley, January 1982.

CHURCH AND DENOMINATIONAL MINISTRY

"Religion and Science," adult seminar at First Presbyterian Church, San Anselmo, April, 1999.

"Religion and Science," adult seminar at First Congregational Church, Berkeley, February, 1999.

"Religion and Science," adult seminar at First Presbyterian Church, Berkeley, February, 1994; October, 1994.

"Christian Faith in a Scientific Age," sermon, Church of the Valley, Van Nuys, California, October, 1993.

"The Church and the World of Science," all-day church workshop, Church of the Valley, Van Nuys, California, October, 1993.

"Religion and Science," adult seminar at United Methodist Church, Walnut Creek, California, October, 1993.

"Bound and Free: God, Genes and Free Will," sermon, Piedmont Community Church, California, January, 1993.

"Hawking's God?" adult seminar, Piedmont Community Church, California, November, 1992.

"Faith and the Quantum World," Adult Education Series, Piedmont Community Church, California, April 1991.

"Contemporary Science and Philosophy: Why Should It Matter to the Church?" Advent Series with Mark Richardson, St. John Episcopal Church, Montclair, December 1990.

"Faith and Science: Conflict of Convergence?" and "Technology, Environment and Human Values: What Role the Church?" Adult Education Series, First Congregational Church of Berkeley, September–October 1990.

Task Force on Theology and Science, United Presbyterian Church, 1983–1988.

"Binding Love," sermon at Westminster Presbyterian Church and First Presbyterian Church of Wooster, Ohio, January 1990.

"Considering Ethics in Policy Making," first classes in a series at Westminster Presbyterian Church, Wooster, Ohio, January 1990.

"God, Humanity and Nature in Genesis 1 and Genesis 2," sermon at Kneseth Israel Temple, Wooster, Ohio, January 1990.

"Converging Streams," sermon at Piedmont Community Church, April, 1989.

"Converging Streams in Science and Religion," an Alice Crafts Lecture for the Davis Community Church, January 1989.

"Theology and Science: A New View from Rome," Piedmont Community Church, April 1988.

"Converging Streams," Adult Education Series, Presbyterian Community Church, Pleasanton, and Menlo Park Presbyterian Church, November 1986.

Consultation on Religion and Science, Trinity Institute (Episcopal), New York, October 1986.

Conference on Religion and Science, the National Conference of Catholic Bishops, Detroit, Michigan, September 1986.

“Binding Love,” sermon at Walla Walla United Church of Christ, September 1986.

Weekend Conference Leader, the Bishop's School (Episcopal), Arizona, August 1986.

Adult Education Class, First Presbyterian Church, San Anselmo, California, June 1986.

Weekend Conference Organizer and Leader for San Joaquin Diocese, Episcopal Church at ECCO, May 1986.

Campus Ministers Regional Meeting Presentation, San Anselmo, May 1986.

Series on Religion and Science focusing on Arthur Peacocke's *Intimations of Reality* at the Piedmont Community Church, November 1985.

“Modern Cosmology and Creation Theology: Conflict or Synthesis?” Sunnyvale Presbyterian Church Elders Annual Dinner, October 1984.

“Entropy and Evil,” Seminar, First Presbyterian Church, Livermore; First Presbyterian Church, Oakland; Sunnyvale Presbyterian Church; California, Fall 1984.

“Science and Religion: Conflict or Synthesis?” Adult Education Series, First Congregational Church, Berkeley, February–March 1984.

“Science and Religion - Broadening World Views,” Adult Education Series, Covenant Presbyterian Church, Palo Alto, September–October 1983.

“New Knowledge, Richer Faith,” sermon at Almaden Valley United Church of Christ, April 1983.

“Theology and Science in the Church Community,” Sermon and Sunday Series, First Presbyterian Church of Livermore, January–February 1983.

Fall term Chapel Student Retreat leader, Carleton College, 1978.

“Science and Religion” discussion group organizer and leader for science faculty of United Church of Christ, Northfield, Minnesota.

Palm Sunday, 1979 and February 1, 1981 Carleton Chapel sermon, Carleton College.

Monthly evening prayer and communion services leader, Carleton Chapel, Carleton College.

Leader, Student Study Group on the Revelation of John, United Church of Christ, Northfield, Minnesota.

PROFESSIONAL MEMBERSHIPS

Elected or appointed memberships

International Society for Science and Religion
Associate, Chicago Center for Religion and Science
Council on Graduate Studies in Religion, 1992–1994
International Network for Religion and Animals
Pacific Coast Theological Society
Sigma XI, Scientific Research Society (lifetime member)
Society of Ordained Scientists
Society for Values in Higher Education

Open memberships

American Association for the Advancement of Science
American Academy of Religion

American Physical Society
Astronomical Society of the Pacific
Bread for the World
Center for Process Studies
Federation of American Scientists
Institute for Theological Encounter with Science and Technology
Institute on Religion in an Age of Science
World Wildlife Federation

PUBLIC MEDIA AND INTERVIEWS

Television

Interviewed, Austrian film crew for a public television documentary, April 19, 2001
Interviewed, CBS Sunday Morning News, Rita Braver / Brian Healy, aired Nov. 22, 1998.
“Faith and Reason,” PBS Special Documentary, Margaret Wertheim, aired September, 1998.
CNN Interview, Aug 8, 1996.
“If E.T. phones home, will it be safe to answer?,” *Sci-tech Story Page*, CNN American, Inc., August 9, 1996.
“Science, Religion and Misconceptions”, *Polemics: Television for Thinking People*, KFCB TV Channel 42, June 13, 1996.
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PERSONAL

Born in Los Angeles, California, August 23, 1946.

Married, two grown children.
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