

## *Curriculum Vitae (Abbreviated)*

**ROBERT JOHN RUSSELL**

January, 2019

### **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 in religion). Stanford University. 1968.

### **PRESENT POSITIONS**

The Ian G. Barbour Professor of Theology and Science

The Graduate Theological Union, Berkeley, 2006 - present.

Founder and Director

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

### **PRIOR POSITIONS**

Ian G. Barbour Professor of Theology and Science

The Graduate Theological Union, Berkeley, 2016-present

Ian G. Barbour Professor of Theology and Science

In Residence, The Graduate Theological Union, Berkeley. 1991 - 2016.

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.

Assistant Professor of Physics

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

### **PRIZES**

PCRS/Templeton Grant for Research, Writing and Publication: To support research on the project: *Time in Eternity: Pannenberg, Physics and Eschatology in Mutual Interaction* (University of Notre Dame Press, 2012).

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**

Fellow, the American Scientific Affiliation, 2015-present.

Founding Member, International Society for Science and Religion, 2002

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, FASE Essays, 1997.

Judge, Exemplary Essays, 1996, 1997.

## **DISTINGUISHED LECTURE AND FACULTY APPOINTMENTS**

Boyle Lecture, St. Mary le Bow Church, London, March 2017 (available online)

Sacred Texts Lecturer, GTU, March 2014 (with Ted Peters)

Henrietta Perdue Memorial Lectures, Stone Church, San Jose, California, February, 2010

Drury University Convocation Lecture, Springfield, Missouri, January, 2010

D. Perry and Betty Ginn Lecturer, McAfee School of Theology, Mercer University, Atlanta, Georgia, September, 2009

2008 John Calvin McNair Lecture in Science and Theology, St. Andrews Presbyterian College, October, 2008

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 quarterly by Francis and Taylor and co-edited with Ted Peters.

### Founding Editor

*CTNS Bulletin* (1982 - 2002)

### General Editor

Series of six volumes on *Scientific Perspectives on Divine Action*, jointly published by the Vatican Observatory and CTNS, 1993-2008.

### 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**

Innovator and Principal Investigator, CTNS TASF: Technical Assessment and Strategies for the Future (July 2015- June 2018)

Innovator and Principal Investigator, CTNS SATURN: Scientific and Theological Understandings of Randomness in Nature, July 1, 2013 – June 30, 2015.

General Editor, CTNS / Vatican Observatory Research Collaboration, 1990 - 2007.

Innovator and Principal Investigator, CTNS STARS: Science and Transcendence: Advanced Research Series, 2005 - 2009

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

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

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

## **ADVISORY BOARDS**

Chair, CTNS Advisory Board to the GTU (2016 – present)

Founding Member, Board of Directors, CTNS (1982 - 2016)

Executive Committee, International Society for Science and Religion (ISSR), 2008-2011

Member, John Templeton Foundation, Templeton World Charity Foundation, Templeton Religion Trust, 2010 - present

Board of Advisors, John Templeton Foundation, 1992-1998; 1999 - 2002, 2004-2006, 2010 - 2012

Consultant, Committee on Technology and Values, National Conference of Catholic Bishops, 1990-1995.

## **SERVICE APPOINTMENTS**

GTU Co-Convener, Area III: Systematic and Philosophical Theology (Spring, 1996, academic year 2002-2003)

GTU Dean's Search Committee (Fall, 2001)

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/GTU, The First Congregational Church, Berkeley, and the Bay Association of the United Church of Christ, Congregational.

## **ORDAINED POSITIONS**

Ian G. Barbour Professor of Theology and Science in Residence, the Graduate Theological Union. 1981 - present.

Ministry in Higher Education. Pastoral Associate, Carleton College Chapel. 1978 - 1981.

## **PUBLICATIONS**

### Books

*God's Providence and Randomness in Nature: Scientific and Theological Perspectives*, Robert John Russell and Joshua M. Moritz, editors (Templeton Press, anticipated 2019).

*Astrotheology: Science and Theology Meet Extraterrestrial Life*, Ted Peters, Martinez Hewlett, Joshua M. Moritz, Robert John Russell, eds. (Cascade Books, 2018).

*Time in Eternity: Pannenberg, Physics and Eschatology in Creative Mutual Interaction* (Notre Dame: University of Notre Dame, 2012)

*Science, Philosophy and Divine Action*, LeRon Shults, Nancey Murphy and Robert John Russell, eds. (Brill: 2009)

*The Evolution of Evil*, Gaymon Bennett, Martinez Hewlett, Ted Peters, and Robert John Russell, eds. (Vandenhoeck & Ruprecht, 2008)

*Cosmology from Alpha to Omega: Theology and Science in Creative Mutual Interaction*, (Minneapolis: Fortress Press, 2008)

*Physics and Cosmology: Scientific Perspectives on the Problem of Natural Evil*, Nancey Murphy, Robert John Russell, and William R. Stoeger, S. J., eds. (Vatican City State: Vatican Observatory Publications: Berkeley: Center for Theology and the Natural Sciences, 2007)

*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)

*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. Homayoun Hemmati (Tehran, Iran: Institute for Humanities and Cultural Studies, 2006).

Also: Korean translation of *Cosmology from Alpha to Omega*.

Essays / Chapters in Books, Dictionaries, and Encyclopedias

“Moving ahead on Southgate’s compound only-way evolutionary theodicy,” *Theology and Science* (anticipated, 2019).

“Southgate’s compound only-way evolutionary theodicy: deep appreciation and further directions” *Zygon: Journal of Religion and Science* 53:3 (August, 2018).

“The Crucial Importance of Nancey Murphy’s Deployment of Lakatos’s Methodology for Theology and Science,” *Arguing Our Way Toward Flourishing, festschrift for Nancey Murphy*, eds. Ryan Newson and Brad Kallenberg (Eugene, Or: Wipf and Stock publishers, 2015).

“Reflections on Science and Religion,” an article for an anthology edited by Medhi Golshani (2014).

“God and Time: A New Flowing Time Interpretation of Special Relativity and its Importance for Theology,” *God and the Scientist: Exploring the Work of John Polkinghorne*, Fraser Watts and Christopher C. Knight, eds. (Farnham, England: 2012)

“God and Infinity: Theological Insights from Cantor’s Mathematics,” *Infinity: New Research Frontiers*, Michael Heller and W. Hugh Woodin, eds. (Cambridge, Cambridge University Press: 2011)

“Does ‘The God Who Acts’ Really Act? Divine Action and Contemporary Science,” *Cambridge Dictionary of Christian Theology*, Ian McFarland, David Fergusson, Karen Kilby, and Iain Torrance, eds. (Cambridge: Cambridge University Press, 2011).

“Eschatology in Science and Theology,” *Blackwell Companion to Science and Christianity*, J. B. Stump and Alan Padgett, eds. (Oxford: Blackwell Publishing, 2011).

“Scientific Insights into the Problem of Personal Identity in the Context of a Christian Theology of Resurrection and Eschatology,” in *Personal Identity and Resurrection*, ed. Georg Gasser (Ashgate Publishing Company, 2010), 241-58.

“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 eschatology*, James Haire, Christine Ledger and Stephen Pickard, eds. (Adelaide: ATF, 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). Distributed in the U.S. by University of Notre Dame Press

“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). 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: 2005), p. 95-120.

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

“Beyond Dialogue: Toward a Mutual Transformation of Christianity, Buddhism and the Natural Sciences,” *Religion and Science*,

*Buddhism and Environmental Bioethics: Buddhist-Christian Dialogue (Shinran's Thought and the Contemporary World, Series V)*, edited by Ryusei Takeda (Kyoto, Japan: The Research Institute for Buddhist Culture, Ryukoku University, 2005), 71-99.

“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 *Dei Religion in Geschichte und Gegenwart* (Tübingen: Mohr Siebeck, 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).

“Causality”, “Contingency”, and “Complementarity” for *Dei Religion in Geschichte und Gegenwart* (Tübingen: Mohr Siebeck, 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)

“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, and in a 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, Guilio 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 Terriberly 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, Nancey 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

“Southgate’s Compound Only-Way Evolutionary Theodicy: Deep Appreciation and Further Directions,” *Zygon: Journal of Religion and Science* 53.3 (September, 2018), p. 711-726.

“Resurrection, Eschatology and the Challenge of Big Bang Cosmology,” *Interpretation Journal for Bible and Theology*, special edition edited by Anna Case-Winters (2015).

“In Memoriam: 1915-2015, Charles Hard Townes, outstanding scientist and international spokesperson for the convergence of science and religion,” *Theology and Science* vol. 13.1 (February, 2015)

“Bill Stoeger 1943 – 2014, Physicist, Cosmologist, and Leader in Theology and Science” *Theology and Science* vol. 12.3 (August, 2014)

“Ian G. Barbour (1923-2013): In Memoriam to the Pioneer of Science and Religion,” *Theology and Science* vol. 12.2 (May, 2014)

“A Response to the Reviewers (of TIE),” *Theology and Science* vol. 12.1 (February, 2014)

“Recent Roman Catholic Interpretations of Evolution,” Robert John Russell, *Theology and Science* vol. 11.3 (August, 2013).

“Normand Laurendeau: Spirituality and Science at the Apex of his Life’s Vision,” *Theology and Science* vol. 10.4 (November, 2012)

“Eschatology and Scientific Cosmology: From Deadlock to Interaction,” *Zygon: Journal of Religion and Science* (2012)

“The Higgs Boson, A Rational and Relational Nature, and the Logos of God,” *Theology and Science* vol. 10.4 (November, 2012)

“Eschatological Hope: A Grateful Response to Thomas Tracy,” *Theology and Science* vol. 10.1 (February 2012)

“*Cosmology from Alpha to Omega*: Response to Reviews,” *Zygon: Journal of Religion and Science* (2010)

“John Paul II on Science and Religion: A Deeply Appreciative Reflection,” *Theology and Science* vol. 9.3 (August, 2009)

“Response to Gregory Peterson”, *Conversations in Religion and Theology* (2009)

“An Appreciative Response to My Reviewers (of CAO),” *Theology and Science* vol. 9.2 (May, 2009)

“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: Response to Cardinal Schönborn’s concern over evolution” in *America, The National Catholic Weekly*, vol. 194, no. 6 (February 20, 2006).

“Scientific Cosmology, Philosophy and Theology: Perspectives on their Fruitful Interaction,” *Journal of the Korean Institute for Advanced Theological Studies* (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

Dialogue / review: *The Entangled God: Divine Relationality and Quantum Physics* by Kirk Wegter-McNelly, *Theology and Science* 14.1 (February, 2016).

“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 Pseudoelectric System, KBr:Li<sup>+</sup>,” (with Frank Bridges), *Physical Review B*. Vol. 26, No. 6 (1982).

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

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

“Suppression of the Pseudoelectric Resonance of KBr:Li<sup>+</sup> by OH<sup>-</sup>,” (with Frank Bridges), *Bulletin of the American Physical Society*. Vol. 22, No. 332 (1977).

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

“Isotope Effect on the Pseudoelectric Resonance of KBr:Li<sup>+</sup>,” (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).

## COURSES TAUGHT

### Graduate Theological Union, Berkeley

#### Doctoral Seminars:

*Advanced Seminar in Theology and Science*, 1991, 1999, 2003, 2006, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016.

*Barth's Development: 1914 - 1932* with Tim Lull and Ted Peters, 1993

*Cosmology and Eschatology* with Ted Peters, 1997

*Divine Action and Chaos in Nature* 1995

*Einstein in Philosophical and Theological Significance* 1987

*Evolution and Christian Theology*, with Mark Richardson, 1997

*Evolution, Evil and Eschatology*, with Ted Peters, Gaymon Bennett and Marty Hewlett, 2008

*Genes, Genocide and Theodicy*, with Ted Peters, 2003

*History of Theology: 1914 - 1965* with George Griener, 2008,

with Richard Schenck, 2010,

with Ted Peters, 2011

*History of Theology: 1965 – Present*, with Alejandro Garcia-Rivera, 1999

with Ted Peters, 1996, 2004, 2006

*Nature, Theology and Spirituality* with Mark Richardson, 1998

*Paul Tillich and Wolfhart Pannenberg*, with Patricia Codron and Ted Peters, 2007

*Paul Tillich: Systematic Theology*, with Ted Peters, 1998, 2015

*Philosophical and Scientific Perspectives on Divine Action*, with Mark Richardson, 1993

*Physics, Philosophy and Theology* 1991

with John Polkinghorne, 1990

*Quantum Physics: Philosophical and Theological Perspectives*

with Peter Degen, 1989

with Kirk Wegter-McNelly, 2002

*Resurrection, Eschatology, and Scientific Cosmology*, with Ted Peters, 2001

*The Trinity Today*, with Ted Peters, 1990

*Theology, the Person & Neuroscience*, with Mark Graves, 2005

*The theology of Paul Tillich*, with Ted Peters, 2015

*Time and Eternity*, with Ted Peters, 2010.

Various Special Reading Courses

M. Div. Courses:

*Christian Theology and Natural Science*, 2015

with Joshua Moritz, 2012

with Adam Pryor, 2009, 2011 (Newhall Scholar).

with Nathan Hallanger (CTNS Program Director), 2007

with Daren Erisman (Newhall Scholar), 2006

with Kirk Wegter-McNelly 2000, 2002, 2004 (Newhall Scholar)

Part 1, 1991

Part 2, 1992

with Ted Peters, 1990

*Current Thought in Science and Religion*,

with Francis Baur, Ted Peters, Ben Reist and Surjit Singh, 1982;

with Ian Barbour, 1983;

with Phil Hefner, 1985;

with Arthur Peacocke, 1986;

*Discernment and Nature: Christian Spirituality with Science and Religion*

with Elizabeth Liebert and Nancy Wiens St. John (Newhall Scholar), 2002

*Eschatology and Cosmology*, with Ted Peters and Junghyung Kim, 2011

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

*Introduction to Science and Religion for Church Ministry*

with Mark Richardson and CTNS Staff, 1997

*Introduction to Religion and Science*, 1985, 1986

*Mathematical and Physical Models in Theology*, 1983

*Nature, Theology and Spirituality*, with Mark Richardson, 1998

*Pannenberg's Systematic Theology*, with Ted Peters, 1998

*Philosophy of Science and Theological Inquiry*, with Nancey Murphy, 1984

*Physics and Eastern Thought*, with Durwood Foster, 1981

*Revolutions in Physics*, 1982

*Scientific Cosmology in Theological Perspective*, 1994

*Technology, Environment and Human Values*, 1989

with Judith Scoville (Newhall Scholar), 1993

with Carol Tabler (Newhall Scholar), 1991

with Andrew Dufner, 1982

*Theology and Science*, 1981, 1984, 1990

*Theology of Arthur Peacocke*, 1985

*Theology of Thomas Torrance*, 1982

*Time and Eternity*, with Ted Peters, 1988

*Whitehead, Science and Religion*, with Forrest Hartman, 1990

Various Special Reading Courses

The Lutheran School of Theology, Chicago, Ill.

*Christian Theology in the Context of Physics and Cosmology* 1986

Carleton College, Northfield, MN.

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 nonscience majors)

Department of Religion:

University of California, Santa Cruz, CA.

Department of Religion:

*Science and Religion*, 1977

**PROFESSIONAL MEMBERSHIPS**

Elected or appointed memberships

Founding Member, International Society for Science and Religion

Associate, Chicago Center for Religion and Science

Council on Graduate Studies in Religion, 1992-1994

Pacific Coast Theological Society

Sigma XI, Scientific Research Society

Society of Ordained Scientists

Open memberships

American Association for the Advancement of Science

American Academy of Religion

American Physical Society

Fellow, American Scientific Affiliation

Astronomical Society of the Pacific

Center for Process Studies

Federation of American Scientists

Institute on Religion in an Age of Science

World Wildlife Federation

**PERSONAL**

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

Married, two grown children.

Spouse is a Retired Minister of the United Church of Christ, Congregational.

Member, First Congregational Church, Berkeley.