

CELIA EVANGELINE DEANE-DRUMMOND

CURRICULUM VITAE

M.A. (Cantab), Ph.D., PGDip.C.S., B.A.(Hons), PGCE, Ph.D.

130 MALLOY HALL, NOTRE DAME, IN 46556, USA

PHONE (574) 631-7666 • FAX (574) 631-3033

CELIA.DEANE-DRUMMOND.1@ND.EDU

EDUCATION

Postgraduate Certificate in Education (Secondary), Manchester Metropolitan University, 1994.

- Religious Education; Second subject: Science.

Ph.D., Department of Theological Studies, Manchester University, 1992.

- Supervisor: Professor Richard Bauckham

B.A. (Honours), Theology, Trinity College, Bristol, 1989.

- CNAAB (2:1).

Postgraduate Diploma, Christian Studies (PGDip.C.S.), Regent College, Vancouver, Canada, 1983.

Ph.D., Plant Physiology, Reading University, 1980.

- Joint CASE award with Dr. Clarkson (ARC & Oxford) and Dr. Johnson (Reading).

B.A. (Honours), Natural Sciences, Girton College, Cambridge University, 1977.

- Part 2 Botany (2:1); Became *MA* in 1980.

EMPLOYMENT

Director, Center for Theology, Science and Human Flourishing, University of Notre Dame, March 2015–present.

Professor of Theology, Department of Theology, University of Notre Dame, August 2011–present.

- Concurrent appointment with teaching responsibilities in the College of Science.

Professor of Theology and the Biosciences, Department of Theology and Religious Studies, University of Chester, 2000–11.

Reader, Department of Theology and Religious Studies, University of Chester, 1999–2000.

Senior Lecturer, Department of Theology and Religious Studies, University of Chester, 1996–99.

Lecturer, Department of Theology and Religious Studies, University College Chester, 1994–96.

Visiting Lecturer, Theological Studies, Manchester University, 1991–93 (Part-time).

International Consultancy for Religion, Education and Culture (ICOREC), Manchester Metropolitan University, 1991–94 (Part-time).

Lectureship, Botany, Durham University, 1984–86.

SERC Postdoctoral Research Fellow, Botany, Cambridge University, 1982–83.

Postdoctoral Research Fellow, Botany, University of British Columbia, 1980–82.

TEACHING

Key: N – new course developed; T – team-taught course

UNIVERSITY OF NOTRE DAME, UNITED STATES

- 2016–17: *Theology for a Fragile Earth* (THEO 40638), undergraduate course. Also offered as concurrent masters course (THEO 60653). (N) *This course was awarded a Teaching Outside the Classroom grant to enable students to participate in a field trip to the ancient woodland area of Warren Woods, Michigan.*
- Single credit courses. *Science and Values* (SC 40510); *Global Bioethics Seminar* (BIOS60202); *Ecology in Catholic Social Thought Seminar* (SC 3XXX). (N). Buy out from other teaching from JTF grant.
- 2015–16: *Morality, Evolution and Animal Ethics* (THEO80505), Doctoral seminar in Moral Theology. (N)
Buy out from other teaching from JTF grant and course release as Director of Center for Theology, Science and Human Flourishing.
- 2014–15: *Environmental Ethics* (THEO60635), Masters Course
Creation and Spirit, Doctoral Seminar (THEO83832) (N)
Bioethics (GH60545), Core Masters Program in Global Health
Global Bioethics Seminar (BIOS60202) (N)
- 2013–14: *Science and Theology* (THEO20627) second-year Foundations course (undergraduate) (N)
Bioethics (GH60545) Core Masters Program in Global Health
Sustainability: Principles and Practice (SUS20010), Sustainability Minor Core Course (undergraduate) (N)
Know Your Catholic Faith: Catholic Social Teaching and the Environment (THEO30043) (undergraduate) (N).
This course (THEO 30043) was awarded a teaching outside the classroom grant so that students could take this course at Lindenwood Retreat center, Michigan.
'Environmental Photography and Theology' in *Photo Futures* with Terry Evans (undergraduate) (N)
Doctoral Reading Course for John Slattery (N)
- 2011–12: *Science and Wisdom* (THEO83530), Doctoral Seminar (N)
Environmental Ethics (THEO60636), Masters Course (N)
Bioethics (GH 60545) Core course, Masters Program in Global Health (N)
Science and Values (SC40510), College of Science (undergraduate) (N)

UNIVERSITY OF CHESTER, UNITED KINGDOM:

BA Honors Programs (Combined honors), B.Ed. and B.Th. (Single honors); Level 4 (50–100 students); Level 5 (30–45 students), and Elective Level 6/M (15–20 students).

Level 4 Modules

<i>Philosophy and Theology</i>	<i>Black Theology</i> (N)
<i>Introduction to Christian Theology</i> (N/T)	<i>Religion and Ethics</i> (N)
<i>Christianity and Environment</i> (N)	<i>Christian Moral Issues</i>
<i>Beliefs and Practices of the Christian Church</i>	<i>Feminist Theology</i> (N)
<i>Celtic Christianity</i> (N)	<i>Christianity</i> (I)

Level 5 Modules

<i>The Development of Christian Theology</i> (N/I)	<i>The Rise of Modern Theology</i> (I)
<i>Methodology in Theology & Rel. Studies</i> (N)	<i>Reformation</i>
<i>Contemporary Theological Issues</i> (I)	<i>Philosophy of Religion</i> (I)

Level 6/M Modules

<i>Historical and Contemporary Debates in Christian Theology</i> (N)	<i>Philosophy of Religion</i> (I)
<i>Eco-Theology and Environmental Ethics</i> (N)	<i>Theology of Adult Education</i> (N)
<i>New Frontiers in Biology and Theology</i> (N)	<i>Crisis in Belief</i> (I)
<i>Issues in Christian Theology</i> (I)	<i>Religion and Society in Victorian Britain</i> (I)
<i>Research Methods in Applied Theology</i> (I)	<i>Contemporary Issues in Medical Ethics</i> (N)
<i>Research Methods in Applied Theology and Adult Education</i>	<i>Science and Religion</i> (M only) (N)

Contributor, *Revolution and Evolution Summer School*, joint BA humanities program

Supervisor, numerous Level 3 undergraduate dissertations

Note: not all modules ran every year, but were on a rolling program of study.

Module Coordinator for team teaching:

Level 1: *Introduction to Christian Theology* (core module),

Level 2: *The Development of Christian Theology* (core module)

Level 3: *Issues in Christian Theology*, *Research Methods in Applied Theology*, *Crisis in Belief*, and *Religion and Society in Victorian Britain*, *Urban Theology*

Level M (postgraduate and masters): *Science and Religion*

TEACHING RESPONSIBILITIES 2008–11

All modules were year long (24 weeks) except master's modules and were on rolling program.

Level 4: *Christian Theology: Themes and Methods*

Level 5: *Christian Ethics*

Level 6: *Ecotology and Environmental Ethics*, *Contemporary Issues in Medical Ethics*, *Research Dissertation*

Level M: *Science and Religion*, *Theology After Darwin* (N), *Environment and Animals: Theology and Ethics* (N)

ACTIVITIES IN COURSE DEVELOPMENT

MA Science and Religion, University of Chester

Development and Director of postgraduate program in Science and Religion from 2002, with exit awards at Certificate, Diploma and Masters Level, with optional modules drawn from the Departments of Biological Sciences, Health and Social Science, Geography, and Theology and Religious Studies. Program was successfully validated through the University of Liverpool in December 2003, and students were admitted into the pilot program in 2003/4. After Chester received degree and postgraduate degree awarding powers, the University awarded the degree. The degree became a stream in an overall MA Theology provision in 2009/10.

RESEARCH SUPERVISION FOR DOCTORAL DEGREES

UNIVERSITY OF NOTRE DAME

- Advisor and doctoral committee for Michelle Marvin, Theology and Science track, HPS program. Dissertation topic: Theology and the sciences of the mind. Expected graduation: summer 2019.
- Doctoral Committee for Stewart Clem, Moral Theology. Dissertation topic: Language, anthropology and morality. Expected graduation: summer 2018.
- Doctoral Committee for John Slattery, Theology and Science track, HPS program. Dissertation topic: Theology and science controversies in Fr. John Zahm. Expected graduation: summer 2017.
- Doctoral Committee for Kyle Beam, Political Science. Dissertation: *Future Primitive: The Politics of Militant Ecology*. Oral examination and expected graduation: June 24 2016.
- Doctoral Committee for Dan Castillo, Systematic Theology, GLOBES Program (Global Perspectives in Biology and Environmental Studies). Dissertation: *An ecological theology of liberation*. Graduated August 15 2014.

UNIVERSITY OF CHESTER

- Rebecca Artinian-Kaiser, Ph.D., February 2015.
- Ms. Jackie Turvey, completed 2015 after transfer to additional advisor (David Clough).
- John McKeown, joint, Ph.D., 2011.
- Anne Marie Sowerbutts, Ph.D., June 2008.
- Lisa Goddard, Ph.D., March 2008. Winner of Gladstone student bursary.
- Andrew Hunt, M.Phil., July 2007.
- Rev. Stephen Bellamy, Ph.D., September 2006.

- Peter Cox, Ph.D., 2002. Winner of one of three 1997 University College Chester prizes for research.

EXTERNAL EXAMINER

London School of Theology (LST) undergraduate program 2007–11, including theology and ethics.

Heyendaal Institute, Radboud University, Nijmegen, The Netherlands. External evaluator for research centre for theology, sciences, and culture, according to ‘Standard Evaluation Protocol’, March 2007.

University of Lampeter, 2003–6: B.Th. in Theology, M.A. in Religion and Ecology, 2003–7.

Milltown Institute, Dublin, Ireland, 2003–4: M.Min. (Mission Theology) and B.Th. (Spirituality and Pastoral Ministry).

Dalgaun, 2004–7: M.A. Religion and Ecology.

Newman College (affiliated with Birmingham and Coventry Universities), 1995–99: Theology in B.Ed. Honors and B.A. Hons. Degrees.

Examiner for doctoral degrees at the universities listed:

- Evan Pederick (Murdoch University, Perth, Australia, 2016)
- Barry James Davies (University of Victoria, New Zealand, 2015)
- Sally Douglas (University of Divinity, Victoria, Australia, 2014)
- Crina Gschwandtner (Durham University, UK, 2012)
- Revd. Tim Bull (Kings’ College, London, 2011)
- Kerry George (University of Monash, Australia, 2009)
- Eva Lotta Granten (University of Lund, Sweden, 2003) (Respondent)
- Julie Norris (Birmingham University, Queens Foundation, 2002)
- Roger Hitchings (London University, 2001)
- Alison Simpson (Aberdeen University, Scotland, 2000)

Open University. External RAE assessor in relation to the Maryvale Institute (Birmingham), which included evaluation of all book outputs of the Institute, ranging from theology to ethics.

ADMINISTRATION

SENIOR RESEARCH ADMINISTRATION

Director, Center for Theology, Science and Human Flourishing, University of Notre Dame
www.ctshf.nd.edu

- Bid for new Notre Dame research center – Center for Theology, Science and Human Flourishing – approved February 24, 2015.
- Appointed inaugural Director of Center, March 2015.
- Center Manager, Dr. Rebecca Artinian-Kaiser appointed October 1, 2015. An administrative assistant, Ms. Katie Zakas Rutledge, was appointed December 9, 2015. Assistant Director, Fr. Terry Erhman (C.S.C) appointed July 1st 2016.
- The three broad research foci of the Center are *Origins*, *Natures* and *Futures*, and grants will be sought under these umbrella themes in the coming years.
- International conferences or advanced colloquia currently planned:
 - *Humility, Wisdom, and Grace in Deep Time*, January 19–22, 2017, Stellenbosch, South Africa.
 - *The Quest for Consonance: Theology and Natural Sciences*, University of Notre Dame, April 2017.
 - *The Deep History of Wisdom*, London Notre Dame Gateway, July 2017.
 - *The Science of Virtues and the Virtues of Science*, London Notre Dame Gateway, August 2018.
- The Center collaborated with the Center for Social Concerns and the Reilly Center to host a special event on the encyclical *Laudato Si* in November 2015 with Dr. Denis Edwards.

- There are named members of Faculty who will play an active role in the Center, with Fellows more loosely affiliated with the interests of the Center. At present there is an internal advisory board consisting of Professors Don Howard (Philosophy); Agustín Fuentes (Anthropology); M. Catherine Hilkert (Systematic Theology); Gerard McKenny (Moral Theology). The external advisory board consists of Professors Tom McLeish (Physics, Durham University); Michael Spezio (Psychology, Scripps College); Denis Edwards (Systematic Theology/Science and Religion, Australian Catholic University); Anje Jackelén (Science and Religion, Lutheran Archbishop of Sweden); Sarah Coakley (Philosophical Theology, Cambridge University); Niels Gregersen (Philosophical Theology/Science and Religion, Copenhagen University); Michael Welker (Systematic Theology, FIIT, University of Heidelberg). The advisory board meets face to face once every three years.

Director, Research Centre for Religion and the Biosciences, University of Chester, 2001–11.

- Centre was launched in 2001/2002, with final approval from Academic Board in March 2000, following prior approval from the Board of Arts and Humanities and the Research Committee.
- The formal launch date was February 28, 2002, with official opening by Rev. Dr. Arthur Peacocke, winner of the Templeton Prize for Progress in Religion in 2001, and attracting over 100 people.
- The Centre focused on those aspects of the dialogue between religion, particularly Christianity, and the biosciences that are of particular relevance to public debate. The Centre was particularly concerned with theological and ethical issues arising from engagement with the biosciences, including environmental science, medicine, and genetic engineering. Its mission was threefold: research (organizing conferences and publications); education (incl. promotion of a new MA in science and religion), and public discourse (incl. a series of public lectures on issues of public interest).
- It involved a strategic link between members of the Biology Department and members of staff from the Theology and Religious Studies Department. In 2003 the Centre became incorporated into a Local Society Initiative supported by Metanexus, allowing considerable expansion of its activities, including a doubling of its membership in the first year, three guest lectures a year, roundtable discussion groups, and an annual conference.
- The themes of the three lecture series were *Global Ecology* (2003/4), *Genetics: Ethical Questions* (2004/5), *Animal Matters* (2005/6). Non-themed series were held in 2006/7 and 2007/8. A themed series of lectures entitled *Theology After Darwin* was held in 2008/9 and attracted audiences of over 100 on each occasion. A further lecture series on *Ecology and Theology* was held in 2009/10 and 2010/11. Two research colloquia drawing on international expertise on biomedical ethics were organized at St Deiniol's library in 2002 and 2005 (see research funding), with edited volumes arising out of these colloquia (see publications). A third international research colloquium in November 2007 on *Animals, Theology and Ethics* led to the publication of a book entitled *Creaturely Theology: On God, Humans and Other Animals*, jointly edited with David Clough (SCM Press, 2009). In May 2011 the Centre hosted the European Forum for the Study of Religion and Environment, *Animals as Religious Subjects*. The conference keynote papers were published in a book under the same title in 2013.

GENERAL ADMINISTRATION

UNIVERSITY OF NOTRE DAME

Cronin Award for Writing Excellence. Committee leader, Program of Liberal Studies, February 2016.

Fellow, Kroc Center for Peace Studies, 2015–present.

Provost's Search Committee, Dean of Science, 2014–15.

Lead Faculty Member, with Jessica Hellmann and Bruce Huber, for *People, Policy and Environment* research initiative for the Reilly Center, 2014–15.

Hosted and coordinated visit by Professor Jennifer Wiseman, Director of the Religion and Science Program, American Academy for the Advancement of Science, and Chief Scientist on Hubble telescope, NASA, November 2014.

Hosted and coordinated visit by Professor Tom McLeish, Pro-Vice Chancellor of Research, Durham University, UK. Public talks and sessions on *Faith and Wisdom in Science* (OUP, 2014), October 2014.

Committee, Systematic Theology Area, Theology Department, Notre Dame, 2013–present.

Committee, Moral Theology Area, Theology Department, Notre Dame, 2013–present.

Coordinator, Systematic Theology area, Master of Theological Studies Program, 2013–15.

Participant, Faculty visit from Notre Dame International to Durham University, February 2014. Memorandum of Agreement signed November 2014. Liaison with Theology Department and College of Science.

Member, Virtues Working Group, 2013–14.

Committee for evaluation of applications for Notre Dame Institute for Advanced Study fellowships, and Templeton-funded advanced fellowships (\$1.8M). NDIAS directed by Prof. Vittorio Hösle, 2012–13; Prof. Brad Gregory, 2013–present.

Committee, HPS Theology track graduate entry, 2012–present.

Leader, Sustainability Reading Group, a three-year research project (January 2012–June 2014) funded by ISLA (\$9,000). See under grants awarded.

Member, Nanotechnology Working Group (interdisciplinary), 2011–12.

Member, Evolution Working Group, 2011–12. Interdisciplinary group led by Dr. Grant Ramsey (Philosophy).

Committee, ‘Bridging the Gap Between Stem Cell Science and Society’ project, Notre Dame, 2012–13, directed by Prof. David Hyde (Biological Sciences).

Fellow, Eck Center for Global Health, 2012–present.

Fellow, John Reilly Center for Science, Technology, and Values, 2012–present

UNIVERSITY OF CHESTER

Tutor, Roman Catholic Certificate in Religious Studies link, 2001–5.

Tutor, St. Deiniol’s library link, 2002–11.

Postgraduate Degrees Committee, 1996–2002 (Committee discontinued in 2002).

Board of Arts and Humanities, 2002–6.

Program Leader, Bachelor of Theology, B.Th. (Hons) Degree, 2006–9.

Academic personal tutor for about thirty students.

Research Degrees Committee, 2002–9.

Director and founder, Centre for Religion and the Biosciences, 2002–11.

Director, MA in Science and Religion, 2002–11.

Director, MA in Adult Education with Theological Reflection, 1996–2002.

STAFF DEVELOPMENT

Awarded Wakonse Fellowship by the Kaneb Center, University of Notre Dame, to attend Wakonse Summer School for University Teachers, Camp Miniwanka, Lake Michigan, May 23–29, 2012. www.wakonse.org.

Achieved membership of Institute of Learning and Teaching (ILT), August 2000.

Manchester University, ‘Desktop Publishing: Quark X Press’, November 1994.

Open University, ‘Writing for Open Learning Workshop’, November 1994.

Erasmus Intensive course, ‘Intercultural Relations and Education: Theories, Policies and Practices’, Lisbon, March 1994.

RESEARCH

RESEARCH INTERESTS

Systematic theology and moral theology informed by contemporary and historical sources (for example, Thomas Aquinas, Hans Urs von Balthasar) in its relationship with creation and the natural world as understood by science, including genetics, ecology, animal behavior, anthropology, bioethics, particularly environmental ethics, genetics and ethics, animal ethics, global development, and transhumanism.

RESEARCH GRANTS, AWARDS, AND CONTRACTS

- June 2016: *The Quest for Consonance* (see below). Awarded \$10,000 for co-sponsorship by John Reilly Center for Science, Technology and Values.
- March 2016: *The Quest for Consonance: Theology and the Natural Sciences*. Joint project with Don Howard (Philosophy) Awarded \$99,194 from the Templeton Religion Trust to underwrite conference April 2017.
- March 2016: *The Science of Virtue*. Awarded \$5,000 Mini Henkels Award (ISLA) to support public lecture by Michael Spezio, September 2016.
- December 2015: *Humility, Wisdom and Grace in Deep Time: A Conversation between Theology and Evolutionary Anthropology*. Awarded \$16,300 from the Global Collaborative Initiative grant from Notre Dame International for an advanced symposium in South Africa.
- December 2015: *Humility, Wisdom and Grace in Deep Time: A Conversation between Theology and Evolutionary Anthropology*. Awarded \$60,000 from the John Templeton Foundation for an advanced symposium in South Africa.
- November 2015: *The Deep History of Wisdom*. Awarded \$20,000 Large Henkels Award (ISLA) for an international conference in London associated with the *Evolution of Wisdom* project, July 2017.
- June 2015: *Developing Virtues in the Practice of Science*. Awarded \$3.1 million grant by the Templeton Religion Trust, 2016–19. Co-PIs: Darcia Narvaez and Tom Stapleford; Collaborators: Agustin Fuentes and Margot Fassler. <http://ctshf.nd.edu/research/virtues-and-the-practice-of-science/>
- May 2015. *Ecology in Jürgen Moltmann's Theology*. Awarded \$5,000 subvention (ISLA) to support second edition and paperback of book originally published in 1997. New edition *in press*, 2016.
- December 2014: *Human Distinctiveness*. Awarded \$1.78 million for a joint summer seminar and research project on human distinctiveness, 2015–18. <http://ctshf.nd.edu/research/human-distinctiveness/>
- August 2014: *The Evolution of Wisdom*. Awarded a \$216,998 development grant by the John Templeton Foundation for a joint project with Agustin Fuentes on the evolution of wisdom. <http://ctshf.nd.edu/research/evolution-of-wisdom-project/>
- October 2011: *Human Nature and Evolution*. Awarded a Senior Fellowship of \$150,000 for co-leading a project on Human Nature and Evolution, September 2012–June 2013 at the Center of Theological Inquiry, Princeton. Responsibility included selection and joint leadership of a team of eight scholars and two postdoctoral fellows. http://www.ctinquiry.org/program#current_inquiry.
- 2011–14: *Sustainability Reading Group*. Awarded \$3,000/year from the Institute for Study of the Liberal Arts (ISLA), Notre Dame, to run a cross-disciplinary reading group on Sustainability.
- July 2009–July 2010: *Knowledge Transfer Grant*. Awarded £48,000 from CAFOD for a twelve-month secondment from university teaching and administration.
- September 2007–May 2008: *AHRC Research Leave Grant*. Awarded £28,000 for an eight-month sabbatical leave to complete *Christ and Evolution: Wonder and Wisdom* (Fortress Press, USA; SCM Press, UK). Book was awarded A* rating, which is highest possible rating ('must be funded as a matter of very highest priority').

- Advisor for Manchester University bid for AHRC Religion and Society Programme on *Religion and Climate Change* with Peter Scott and Elaine Graham.
- 2007: *Animals, Theology and Ethics* Colloquium. Awarded £2,500 from St. Deiniol's library to support the colloquium (November 2007), which led to an edited book with David Clough entitled *Creaturely Theology: On God, Humans and Other Animals* (SCM Press, 2009).
- 2005: *Medical Ethics* Colloquium. Awarded £5,000 from St. Deiniol's library to support colloquium (June 2005), which led to the edited book with Peter Scott: *Future Perfect? God, Medicine and Human Identity* (2006).
- February–March 2005: Awarded £20,000 from the John Templeton Foundation for sabbatical leave to complete book, *Wonder and Wisdom* (2006).
- 2002–3: Awarded £8,000 from the Arts and Humanities Research Board for sabbatical leave, to complete *The Ethics of Nature* (2004).
- March 2002: *Genetics and Ethics* Colloquium. Awarded £5,000 from St Deiniol's library to support research colloquium, which led to the edited book: *Brave New World: Theology, Ethics and the Human Genome* (2003).
- 2003–6: Awarded Metanexus Grant of \$5000/year for Local Society Initiative.
- 2001–2: Awarded £5,000/year from Christendom Trust for three years to help establish the Centre for Religion and the Biosciences at University College Chester. On the Centre see section above.
- Winner of development grant (\$2,000) for contribution to development of science and religion in curriculum, 1999.
- Winner of 1997/1998 Templeton science and religion course competition (\$10,000) for course entitled 'New Frontiers in Biology and Theology' taught at Level 3 (B.A. Hums., B.A. Combined Studies, B.Th.) and Level M program (M.Ed., M.Th.) and M.Sc. degree in Environmental Science. Course taught beginning in February 1999 and September 1999.
- 1997: *Religious Dimensions of Public Attitudes to the New Genetic Technology*. Awarded a joint grant of £2,000 from the Christendom Trust for a research project with the Centre for the Study of Environmental Change, Lancaster University. Grant used to organize a Colloquium at Lancaster University entitled 'Re-Ordering Nature: Theology and the New Genetics', March 8, 2000.
- April 1996: Awarded £1000 from University College Chester for B.A. Humanities staff to obtain remission from teaching for a three-month sabbatical leave, summer 1996. Used to complete *Theology and Biotechnology: Implications for a New Science* (1997).
- 1995: Awarded £30,000 from the St. Gabriel Trust to develop a masters program in adult education and theology by open learning.

COLLABORATIVE RESEARCH PROJECTS

Invited participant. Council of Independent Colleges (CIC) and its *Network for Vocation in Undergraduate Education* (NetVUE)

- Three-year project coordinated by Prof. David Cunningham, Hope College. First meeting: June 16–20, 2014. Follow-up meetings: Atlanta, Georgia (January 29–February 1, 2015); Grand Rapids (July 30–August 2, 2015).

Invited participant. *The Colossian Forum on Faith Science and Culture*, Science and Theology

- Three-year interdisciplinary research program coordinated by William Cavanaugh and James Smith. 'Beyond Galileo—to Chalcedon: Re-imagining the Intersection of Evolution and the Fall'. First Meeting: June 22–25, 2013 (Michigan); second meeting: June 9–13, 2014 (New Buffalo); final conference: March 2015, Garret Evangelical Seminary.

Invited participant. *Understanding Human-Environmental Interfaces in Anthropocene River Systems through Transdisciplinary Collaborations*

- Five-year interdisciplinary project between humanities and geographical and ecological sciences, Principal Investigator – Dr. Jason Kelly, Director, IUPUI Arts and Humanities Institute, Associate Professor of British History, IUPUI, Indianapolis; Professor Helen Berry, Newcastle upon Tyne. First conference, January 23–25, 2014 (Indianapolis).

EXPERT COMMITTEES

- International Advisory Board for the Life Sciences, John Templeton Foundation (2014–16).
- National Speech and Debate Association's Big Questions Advisory Board (2015–16).
- Expert consultant for Secretariat (Fr. Patrick Daly) for Commission of the Roman Catholic Bishops' Conferences of the European Union (COMECE) at Secretariat, Brussels (May 12, 2015) to draft Working Paper on Climate Change for COMECE fall conference prior to the Paris COP 21 Climate Change Summit. See:
 - Press release: www.comece.eu/site/en/ourwork/pressreleases/2015/article/9911.html
 - Report: www.comece.eu/dl/trkLJKJOOKKJqx4kJK/Climate_Report_EN_2P.pdf
- Expert Advisory Panel for two-year 'Faith and Science Teaching (FAST) Project', The Colossian Forum in partnership with The Kuyers Institute of Christian Teaching and Learning, Calvin College (June 16, 2014–June 2016).
- One of five members invited by the Swedish Research Council and the Swedish Research Council for Environment, Agricultural Sciences and Spatial Planning (*Formas*) for the Humanities, Social Sciences, and Educational Sciences Expert Panel for the mid-term evaluation of the 'Linnaeus Grants' (January 26–February 1, 2014) in Sweden. In 2008, 20 Swedish research centers were granted 50–95 million SEK (corresponding to 6–11 million EUR/8–15 million USD) over a 10-year period.
- International Advisory Board, John Templeton Foundation (2002–5, 2007–10, 2011–14).
- Committee member, Science and Religion Forum (2006–7).
- Distinguished Program Development Committee for John Templeton sponsored project: *Pontifical Council for Culture, Science, Theology and the Ontological Quest, STOQ II*, Vatican (April 2007–10).
- External international panel of 25 academics for the *John Templeton Award in Theological Promise*, coordinated by Michael Welker, University of Heidelberg, Germany (2006–9).
- Co-opted member of the Ethics and Law Committee of the Human Fertilization and Embryology Authority (February 2004–7).
- Executive international committee for the *Christian Faith and the Earth* Project, organized by Professor Ernst Conradie, culminating a 2012 conference in South Africa; joint editor for volume emerging from conference.
- Executive committee for the *European Forum for the Study of Religion and the Environment*, also founding member from 2004. See www.hf.ntnu.no/relnateur/.
- Following guest lecture given to the 'Faith and Culture' Roman Catholic Bishop's Committee in April 1997; helped formulate a new policy on environmental issues, including consultation (October 2004).
- Roman Catholic Bishop's Committee of England and Wales.

THEOLOGICAL PUBLICATIONS (for science publications, see Appendix)

MONOGRAPHS AND EDITED VOLUMES

ACADEMIC

Ecology in Jürgen Moltmann's Theology, 2nd edition, paperback, Eugene, OR: Wipf and Stock, 2017. (Originally published in hardback by Ewin Mellen Press, 1997).

Technofutures, Nature and the Sacred: Transdisciplinary Perspectives. Contributing editor with Sigurd Bergmann and Bronislaw Szerszynski. Farnham: Ashgate, 2015.

Christian Faith and the Earth: Current Paths and Emerging Horizons. Edited by Ernst Conradie, Sigurd Bergmann, Celia Deane-Drummond, and Denis Edwards. London: T & T Clark/Bloomsbury, 2014.

The Wisdom of the Liminal: Evolution and Other Animals in Human Becoming. Grand Rapids: Eerdmans, 2014.

- Honorable Mention: B 21 Faith and Science, 2015 Catholic Press Association Book Awards.

Animals as Religious Subjects: Transdisciplinary Perspectives. Editor, with David Clough and Rebecca Artinian-Kaiser. London: Bloomsbury/T&T Clark, 2013.

Religion and Ecology in the Public Sphere. Editor, with Heinrich Bedford Stroh. London: Continuum, 2011.

Creaturely Theology: God, Humans and Other Animals. Co-editor, with David Clough. London: SCM Press, 2009.

Christ and Evolution: Wonder and Wisdom. Minneapolis: Fortress Press, 2009; London: SCM Press, 2009. Funded by the AHRC. For reviews, see *Ars Disputandi* 10(2010): 63–6; *Scottish Journal of Theology* 65:4 (2010): 496–7; <http://catholicbooksreview.org/2009/deane.htm>.

Teilhard de Chardin on People and Planet. Contributing editor. London: Equinox, 2006.

Future Perfect? God, Medicine and Human Identity. Co-editor, with Peter Scott. London: Continuum/T&T Clark, 2006. Second edition (paperback), January 2010.

Genetics and Christian Ethics. Cambridge: Cambridge University Press, 2006.

- Selected for the International Society for the Study of Science and Religion Library Collection.
- Selected for Templeton Prize for Outstanding Book in Science and Religion, 2005.

The Ethics of Nature. Oxford: Blackwells, 2004. Funded by AHRB.

- Selected for Templeton Prize for Outstanding Book in Science and Religion, 2005.

Brave New World? Theology, Ethics and the Human Genome. Contributing editor. London: Continuum/T&T Clark, 2003.

ReOrdering Nature: Theology, Society and the New Genetics. Co-editor, with Bronislaw Szerszynski. London: Bloomsbury/T&T Clark, 2003.

- Selected for Templeton Prize for Outstanding Book in Science and Religion, 2004.

Creation Through Wisdom: Theology and the New Biology. London: T&T Clark, 2000.

- Nominated for the Louiseville Grawemeyer Award in Religion, 2007.

Ecology in Jürgen Moltmann's Theology. Lewiston, NY: Edwin Mellen Press, 1997. Foreword by Prof. Richard Bauckham.

Theology and Biotechnology: Implications for a New Science. London: Geoffrey Chapman, Cassell, 1997. Also available in the USA with Trinity Press International.

- Nominated for Templeton Prize for Outstanding Book in Theology and the Natural Sciences.

ACADEMIC – IN PREPARATION

The Evolution of Human Wisdom. Editor, with Agustín Fuentes. Contract secured. Lexington Press. Expected publication date, 2018.

On Care for Our Common Home: Theology and Ecology Across the Disciplines. Editor, with Rebecca Artinian-Kaiser. *Religion and the University Series*, eds. Oliver Crisp, Gavin D'Costa, Mervyn Davies, and Peter Hampson. Contract secured with Bloomsbury. Expected publication date 2018.

Religion in the Anthropocene. Editor, with Sigurd Bergmann and Markus Vogt. Contract secured with Wipf and Stock. Expected publication date May 2017.

PEDAGOGICAL

Re-imagining the Image of God: Humans and Other Animals, Goshen Lectures, 2012. Kitchener, ON: Pandora Press, 2014.

Ecotheology. London: Darton, Longman and Todd, 2008.

Wonder and Wisdom: Conversations in Science, Spirituality and Theology. London: Darton, Longman and Todd, 2006. Book project funded by the John Templeton Foundation. Also published with Templeton Foundation Press (USA) and Novalis (Canada).

Biology and Theology Today: Exploring the Boundaries. London: SCM Press, 2001.

Genetic Engineering for a New Earth? Theology and Ethics of the New Biology. Grove Ethical Studies, vol. 114. Cambridge: Grove Books, 2000.

Gaia and Green Ethics: Implications of Ecological Theology. Grove Ethical Studies, vol. 88. Cambridge: Grove Books, 1993.

PEDAGOGICAL – IN PREPARATION

A Primer in Ecotheology: Theology for a Fragile Earth. (Cascade Series and contract secured with Wipf and Stock, Expected submission date, January 2017; publication late 2017.

POPULAR

Rising to Life, editor. London: CAFOD, February 2011.

Seeds of Hope: Facing the Challenge of Climate Justice. London: CAFOD, November 2009.

A Handbook in Ecology and Theology. SCM Press, April 1996. This book was published with the World Wide Fund for Nature. Also available in USA. Translated into Indonesian in 1998.

Faith in the Future: Christian Involvement in Shaping Our Society by Elizabeth Breuilly, Celia Deane-Drummond and Martin Palmer. London: Harper Collins, 1991. Published in conjunction with a tape from the BBC Radio 4 Series ‘Seeds of Faith’.

CONTRIBUTIONS TO BOOKS (by invitation where relevant)

ACADEMIC

‘Looking at Humans Through the Lens of Deep History: A Trans-disciplinary Approach to Theology and Evolutionary Anthropology’. In *New Approaches in Theological Inquiry*, edited by Robin Lovin and Joshua Mauldin. Grand Rapids: Eerdmans (in press).

‘Moral Origins and Evolutionary Ethics: Navigating the Maze in Conversation with Wentzel van Huyssteen’. In *Human Origins and Theology: Essays in Honor of Wentzel van Huyssteen*, edited by Daniel Petersen and Christopher Lilley. Grand Rapids: Eerdmans (in press).

‘Animal Rights Revisited’. In *Ecology and Non-Human Ethics of Compassion*, edited by Melissa Brotton. Ecocritical Theory and Practice Series. Lanham, MD: Lexington Books, 2016 (in press).

‘Biology and Theology: Contemporary Issues’. In *Oxford Research Encyclopedia of Religion*, edited by Niels Gregersen, Oxford University Press, 2016 (in press).

‘In Adam All Die? Questions at the Boundary of Niche Construction, Community Evolution and Original Sin’. In *Beyond Galileo: Evolution and the Fall*, edited by W. Cavanaugh and J. Smith. Grand Rapids: Eerdmans, 2016 (in press).

‘Human Natures: Moving us Forward? Response’. In *Verbs, Brains and Bones*, edited by Agustin Fuentes and Aku Visala. Notre Dame: University of Notre Dame Press, 2016 (in press).

‘The Technologization of Life: Theology and the Trans-human and Trans-Animal Narratives of the Post-Animal’. In *Technofutures, Nature and the Sacred*, edited by Celia Deane-Drummond, Sigurd Bergmann, and Bronislaw Szerszynski, 139-58. Farnham: Ashgate, 2015.

‘Introduction’. In *Technofutures, Nature and the Sacred* edited by Celia Deane-Drummond, Sigurd Bergman, and Bronislaw Szerszynski, 1–16. Farnham: Ashgate, 2015.

- 'Beyond Separation or Synthesis: Christ and Evolution as Theodrama'. In *Darwin in the 21st Century: Nature, Humanity and God*, edited by Phillip R. Sloan, Gerald McKenny, and Kathleen Eggleston, 355–79. Notre Dame, IN: University of Notre Dame Press, 2015.
- 'The Wisdom of Fools: A Theo-dramatic Interpretation of Deep Incarnation'. In *Incarnation: On the Scope and Depth of Christian Theology*, edited by Niels Henrik Gregersen, 177–202. Minneapolis: Fortress Press, 2015.
- 'Creation'. In *Systematic Theology for a Changing Climate*, edited by Peter Scott and Michael Northcott, 69–89. London: Routledge, 2014.
- 'In God's Image and Likeness: From Reason to Revelation in Humans and Other Animals'. In *Questioning the Human: Perspectives on Theological Anthropology for the 21st Century*, edited by Lieven Boeve, Yves De Maesene, and Ellen Van Stichel, 60–75. Bronx, NY: Fordham University Press, 2014.
- 'Discerning Creation in a Scattering World: Questions and Possibilities'. In *To Discern Creation in a Scattering World*, edited by F. Depoortere and J. Haers, 565–8. Leuven: Peeters, 2013.
- 'Believing Deeply in Creation: Christ and Evolution as Theodrama'. In *Evolutionsbtheorie und Schöpfungsglaube: Neue Perspektiven de Debatte*, edited by Hubert Philipp Weber and Rudolf Langthaler, 187–200. Vienna: Vienna University Press, 2013.
- 'Introduction'. In *Animals as Religious Subjects: Transdisciplinary Perspectives*, edited by Celia Deane-Drummond, Rebecca Artinian-Kaiser, and David Clough, 1–12. London: Continuum, 2013.
- 'Degrees of Freedom: Humans as Primates in Dialogue with Hans Urs von Balthasar'. In *Beyond Human: From Animality to Transhumanism*, edited by Charlie Blake, Claire Molloy, and Steven Shakespeare, 180–200. London: Continuum, 2012.
- 'Trans-human or Trans-animal? The Theological and Ethical Implications of Transhuman Projects'. In *Transhumanism and Transcendence: Christian Hope in an Age of Technological Enhancement*, edited by Ron Cole-Turner, 115–30. Cambridge, MA: MIT Press, 2012.
- 'Introduction' with Heinrich Bedford Strohm. In *Religion and Ecology in the Public Sphere*, edited by Celia Deane-Drummond and Heinrich Bedford-Strohm, 1–14. London: Continuum/T&T Clark, 2011.
- 'Public Theology as Contested Ground: Arguments for Climate Justice'. In *Religion and Ecology in the Public Sphere*, edited by Celia Deane-Drummond and Heinrich Bedford-Strohm, 189–210. London: Continuum/T&T Clark, 2011.
- 'Deep Incarnation and Eco-Justice as Theo-drama: A Dialogue between Hans urs von Balthasar and Martha Nussbaum'. In *Ecological Awareness: Exploring Religion, Ethics and Aesthetics*, edited by Sigurd Bergmann and Heather Eaton, 193–206. Berlin: LIT, 2011.
- 'Beyond Humanity's End: An Exploration of a Dramatic versus Narrative Rhetoric and its Ethical Implication'. In *Future Ethics: Climate Change and Apocalyptic Imagination*, edited by Stefan Skrimshire, 242–59. London: Continuum, 2010.
- 'Bodies in Glass: A Virtue Approach to Ethical Quandaries in a Cyborg Age through a Recovery of Practical Wisdom'. In *A Glass Darkly: More Discussions in Medicine and Theology*, edited by John Eldford and Gareth Jones, 61–80. New International Studies in Applied Ethics. Bern: Peter Lang, 2010.
- 'Postscript' with David Clough. In *Creaturely Theology*, edited by Celia Deane-Drummond and David Clough, 266–9. London: SCM Press, 2009.
- 'Introduction' with David Clough. In *Creaturely Theology*, edited by Celia Deane-Drummond and David Clough, 1–18. London: SCM Press, 2009.
- 'Are Animals Moral? Taking Soundings Through Vice, Virtue, Conscience and Imago Dei'. In *Creaturely Theology*, edited by Celia Deane-Drummond and David Clough, 190–210. London: SCM Press, 2009.
- 'Animal Ethics: Where do we go from here?'. In *Moral Theology for the Twenty-First Century: Essays in Celebration of Kevin Kelly*, edited by Bernard Hoose, Julie Clague, and Gerard Mannion, 155–63. London: Continuum, 2008.

- ‘Plumbing the Depths: A Recovery of Natural Law and Natural Wisdom in the Context of Debates about Evolutionary Purpose’. In *The Deep Structure of Biology: Is Convergence Sufficiently Ubiquitous to Give a Directional Signal?*, edited by Simon Conway Morris, 195–217. West Conshohocken, PA: Templeton Foundation Press, 2008.
- ‘Freedom, Conscience and Virtue: Theological Perspectives on the Ethics of Inherited Genetic Modification’. In *Design and Destiny: Jewish and Christian Perspectives on Human Germ Line Modification*, edited by Ron Cole-Turner, 167–200. Cambridge, MA: MIT Press, 2008.
- ‘Where Streams Meet? Ecology, Wisdom and Beauty in Bulgakov, von Balthasar and Aquinas’. In *Wisdom or Knowledge?: Science, Theology and Cultural Dynamics*, edited by Hubert Meisinger, Willem B. Drees, and Zbigniew Liana, 108–26. ESSSAT Proceedings 2004. London: Continuum/T&T Clark, 2006.
- ‘The Logos as Wisdom: A Starting Point for a Sophianic Theology of Creation’. In *In Whom We Live and Move and Have Our Being: Reflections on Panentheism in a Scientific Age*, edited by Arthur Peacocke and Philip Clayton, 233–45. Grand Rapids: Eerdmans, 2004.

ACADEMIC – IN PREPARATION

- ‘Recovering Practical Wisdom as a Guide for Human Flourishing: Navigating the CRISPR Challenge’. In *Human Flourishing in an Age of Gene Editing*, edited by Eric Parens and Josephine Johnson. Proposal under consideration with Oxford University Press.
- ‘Practical Wisdom in the Making: A Theological Approach to Early Hominin Evolution in Conversation with Modern Jewish Philosophy’. In *The Evolution of Wisdom*, edited by Celia Deane-Drummond and Agustín Fuentes. Contract secured with Lexington Press.
- ‘Evolution, Deep History and Human Obligations in the Multi-Species Commons’. In *On Care for Our Common Home: Theology and Ecology Across the Disciplines*, edited by Celia Deane-Drummond and Rebecca Artinian-Kaiser. *Religion and the University Series*, edited by Oliver Crisp, Gavin D’Costa, Mervyn Davies and Peter Hampson. Contract secured with Bloomsbury.
- ‘Born to be Wild: Emergent Wisdom Through Human-Horse Encounters’. In *Encountering Earth: Thinking Theologically With a More Than Human World*, edited by Tim Harvie and Matthew Eaton. Contract secured with Wipf and Stock.
- ‘Performing The Beginning After the End: A Theological Anthropology for the Anthropocene’. In *Religion in the Anthropocene*, edited by Celia Deane-Drummond, Sigurd Bergmann, and Markus Vogt. Contract secured with Wipf and Stock.
- ‘Introduction’. Joint with Sigurd Bergmann and Markus Vogt. In *Religion in the Anthropocene*, edited by Celia Deane-Drummond, Sigurd Bergmann, and Markus Vogt. Contract secured with Wipf and Stock.

PEDAGOGICAL

- ‘Rivers at the End of the End of Nature in the Anthropocene: Ethical Trajectories of Grand Narrative or Dramatic Accounts of the Place of the Human’. In *Rivers of the Anthropocene*, edited by Jason Kelly and Helen Berry. University of California Press, 2017 (in press).
- ‘The Art and Science of Vocation: Wisdom and Conscience as Companions on a Way’. In *Integrating Vocation Across Diverse Fields Of Study*, edited by David Cunningham. NETVUE Project. Oxford: Oxford University Press 2016/7 (in press).
- ‘Windows to the Divine Spirit in Creation: Between Species Encounters, Wild Justice and Image Bearing in an Ecological Perspective’. In *The Nature of Things: Re-discovering the Spiritual in God’s Creation*, edited by Graham Buxton and Norman Habel. Eugene, OR: Cascade/Wipf and Stock, 2016 (in press).
- ‘Catholic Social Teaching and Ecology: Its Promise and Limits’. In *Fragile World: Ecology and the Church*, edited by William Cavanaugh. Eugene, OR: Cascade/Wipf and Stock, 2016 (in press).

- 'The Amnesia of Modern Universities: An Argument for Theological Wisdom in the Academe'. In *Educating for Wisdom in the Twenty First Century*, edited by Darin Davis. South Bend, IN: St Augustine's Press, 2016 (in press).
- 'Re-Making Human Nature: Transhumanism, Theology and Creatureliness in Bioethical Controversies'. In *Religion and Transhumanism: The Unknown Future of Human Enhancement*, edited by Calvin Mercer and Tracy Trothen, 245–254. Santa Barbara: Praeger, 2015.
- 'Discourse on Faith and the Earth' with Ernst Conradie, Sigurd Bergmann, and Denis Edwards. In *Christian Faith and the Earth*, edited by Ernst Conradie, Sigurd Bergmann, Celia Deane-Drummond, and Denis Edwards, 1–10. London: Bloomsbury/T&T Clark, 2014.
- 'What are the Resources for Building a Christian Ethos in a Time of Ecological Devastation?' In *Christian Faith and the Earth*, edited by Ernst Conradie, Sigurd Bergmann, Celia Deane-Drummond, and Denis Edwards, 157–76. London: Bloomsbury/T&T Clark, 2014.
- 'Who on Earth is Jesus Christ? Plumbing the Depths of Deep Incarnation'. In *Christian Faith and the Earth: Current Paths and Emerging Horizons in Ecotheology*, edited by Ernst Conradie, Sigurd Bergmann, Celia Deane-Drummond, and Denis Edwards, 31–50. London: Bloomsbury/T&T Clark, 2014.
- 'Technology, Ecology and the Divine: A Critical Look at the Rising Tide of New Technologies Through a Theology of Gratuitousness'. In *Just Sustainability: Technology, Ecology, and Resource Extraction*, edited by Christiana Peppard and Andrea Vicini, 145–56. Catholic Theological Ethics in the World Church, vol. 3. Maryknoll: Orbis, 2015.
- 'How is Theology Inspired by the Sciences?'. In *Conceptions of Truth and the Unity of Knowledge*, edited by Vittorio Hosle, 300–23. Notre Dame, IN: University of Notre Dame Press, 2014.
- 'Christ and Evolution: A Drama of Wisdom?'. In *Science and Religion in the Twenty-First Century: The Boyle Lectures, 2004–2013*, edited by Russell Re Manning and Michael Byrne, 141–57. London: SPCK, 2013.
- 'The Good, the Bad and the Ugly: Wonder, Awe and Paying Attention to Nature'. In *Aesth/ethics in Environmental Change*, edited by Sigurd Bergmann and Irmgaard Blindow, 71–84. Berlin: LIT, 2013.
- 'Homo divinis: Myth or Reality?'. In *Darwinism and Natural Theology: Evolving Perspectives*, edited by A. Robinson, 39–46. Cambridge: Cambridge Scholars Press, 2012.
- 'Climate Change: Engaging Theology with Science and Society'. In *God, Humanity and the Cosmos*, edited by Christopher Southgate, 3rd edition, 420–40. London: Continuum, 2011.
- 'Biotechnology: A New Challenge for Theology and Ethics'. In *God, Humanity and the Cosmos*, edited by Christopher Southgate, 3rd edition, 390–419. London: Continuum, 2011.
- 'Does Sustainable Development Have a Future?'. In *Transforming Exclusion: Engaging Faith Perspectives*, edited by Hannah Bacon and Wayne Morris, 63–75. London: Continuum/T&T Clark, 2011.
- 'Ecology: A Dialogue'. In *Grounding Religion: A Field Guide to the Study of Religion and Ecology*, edited by Whitney Bauman, 64–72. London: Routledge, 2010.
- 'Ecotheology'. In *The Cambridge Dictionary of Christian Theology*, edited by Ian McFarland, David Fergusson, Iain Torrance, and Karen Kilby, 156–7. Cambridge: Cambridge University Press, 2011.
- 'Whence Comes Religion?'. In *Theology, Evolution and the Mind*, edited by Neil Spurway, 42–8. Cambridge: Cambridge Scholars Publishing, 2009.
- 'Theology's Intersection with the Science/Religion Dialogue'. In *A Science and Religion Primer*, edited by Heidi A. Campbell and Heather Looy, 28–32. Grand Rapids: Baker Academic, 2009.
- 'The Alpha and the Omega: Reflections on the Origin and Future of Life from the Perspective of Christian Theology and Ethics'. In *Exploring the Origin, Extent and Future of Life: Philosophical, Ethical and Theological Perspectives*, edited by Constance M. Bertka, 96–114. Cambridge: Cambridge University Press, 2009.
- 'Can There Be a Public Theology of Sustainability? A Response to Mawil Izzi Dien'. In *Creation and the Abrahamic Faiths*, edited by Neil Spurway, 135–42. Cambridge: Cambridge Scholars Publishing, 2008.

- 'Theology, Ecology and Values'. In *Oxford Handbook in Science and Religion*, edited by Philip Clayton, 891–907. Oxford: Oxford University Press, 2006.
- 'Theology and the Biological Sciences'. In *The Modern Theologians: An Introduction to Christian Theology Since 1918*, edited by David Ford and Rachel Muers, 357–69. Oxford: Blackwell Publishing, 2005.
- 'Religion and the Environment'. In *Dictionary of Contemporary Religion in the Western World*, edited by Christopher Partridge and Douglas Groothuis. Downers Grove, IL: IVP, 2001.
- 'Creation'. In *Cambridge Companion to Feminist Theology*, edited by Susan Parsons, 190–207. Cambridge: Cambridge University Press, 2002.
- 'Biotechnology: A New Challenge for Theology and Ethics'. In *God, Humanity and the Cosmos: A Textbook in Science and Religion*, edited by Christopher Southgate, Celia Deane-Drummond, Paul Murray, Michael Robert Vegus, Lawrence Osborn, Michael Poole, Jacqui Stewart, and Fraser Watts, 355–87. London: T&T Clark, 1999.
- 'Adult Education with Theological Reflection: A MultiDisciplinary Approach Through Open Learning'. In *Lifelong and Continuing Education: What is a Learning Society? Monitoring Change in Education*, edited by Paul Oliver. Farnham: Ashgate, 1999.
- 'Jürgen Moltmann on Heaven'. In *The Unseen World: Christian Reflections on Angels, Demons and the Heavenly Realm*, edited by Anthony S. Lane, 49–64. Milton Keynes: Paternoster Press, 1997.
- 'A Response to Elizabetta Donini's 'Women and a Politics of Diversity: A Perspective of Radical Immanence''. In *Ecofeminism and Theology*, edited by Mary Grey and Elizabeth Green, 70–3. 1994 Yearbook of the European Association of Women in Theological Research. Kampen: Kok Pharos Publishing, 1994.

PEDAGOGICAL – IN PREPARATION

- 'The Bible and environmental ethics' for *Handbook in the Bible and Ecology*, edited by Hilary Marlow and Mark Harris. Contract awarded, Oxford University Press.
- 'Resurrection and the Transhumanist Promise'. In *Religious Transhumanism and Its Critics*, edited by Arvin Gouw, Brian Patrick Green, Ted Peters. Contract awarded, Vandenhoeck and Ruprecht.

POPULAR

- 'Human Nature from a Religious Perspective' (contribution). In *Conversations on Human Nature*, edited by Agustín Fuentes and Aku Visala, 274–86. Walnut Creek, CA: Left Coast Press, 2015.
- 'Wonder and the Religious Sense in Chimpanzees'. In *The Jane Effect: Celebrating Jane Goodall*, edited by Dale Petersen and Marc Bekoff, 225–27. San Antonio: Trinity University Press, 2015.
- Approximately 100 essays selected from 160 essays submitted.
- 'What is Creation For?'. In *A Faith Encompassing All Creation: Addressing Commonly Asked Questions about Christian Care for the Environment*, edited by Tripp York and Andy Alexis-Baker, 7–17. Eugene, OR: Wipf and Stock/Cascade Books, 2014.
- 'Environmental Ethics'. In *Christianity: The Complete Guide*, edited by John Bowden. London: Continuum, 2005.
- 'Biotechnology and Theology'. In *Science, Religion, and Society: An Encyclopedia of History, Culture and Controversy*, edited by Arri Eisen and Gary Laderman, 780–6. Armonk, NY: M.E. Sharpe, 2006.
- 'Environmental Ethics'. In *Science, Religion, and Society: An Encyclopedia of History, Culture and Controversy*, edited by Arri Eisen and Gary Laderman, 492–98. Armonk, NY: M.E. Sharpe, 2006.
- 'Science and Religion: Enemies or Partners?' Inset text for Hutchinson Gallup *Info '94*, 195. Helicon, 1994.
- 'The Ordination of Women Debate'. Inset text for Hutchinson Gallup *Info '94*, 181. Helicon, 1994.

POPULAR – IN PREPARATION

Climate Change: Is it Too Late? Invitation from *First Things*.

ARTICLES

ACADEMIC

- '*Morality's Deep History: Empathy and the Evolution of Compassion and Wisdom*', *Zygon*, 2017 (in press).
- 'Pope Francis: Priest and Prophet in the Anthropocene', *Environmental Humanities* (Commentary Section), (in press).
- 'The Evolution of Morality: Three Perspectives'. With Augstín Fuentes and Neil Arner. *Philosophy, Theology and the Sciences*, October 2016 (in press).
- Editorial, Special Issue: 'Evolution of Wisdom'. *Philosophy, Theology and the Sciences*. October 2016 (in press).
- '*Laudato Si*' and the Natural Sciences: An Assessment of Possibilities and Limits'. *Theological Studies* 77.2 (2016): 392–415.
- 'Review Essay: Why Persons Matter: A Jewish Defense'. Review essay on Alan Middleton, *Why Person's Matter* (Princeton: Princeton University Press, 2015), *Harvard Theological Review*, 109.2 (2016): 302–12.
- 'Natural Law Revisited: Wild Justice and Human Obligations to Other Animals'. *Journal for the Society for Christian Ethics* 35.2 (2015): 159–73.
- With John Berkman, 'Catholic Moral Theology and the Moral Status of Non-Human Animals'. *Journal of Moral Theology* 3.2 (2014): 1–10.
- 'Evolutionary Perspectives on Inter-Morality and Inter-Species Relationships Interrogated in the Light of the Rise and Fall of *Homo sapiens sapiens*'. *Journal of Moral Theology* 3.2 (2014): 72–92.
- Editor, Special Issue: 'Human Nature and Evolution'. *Philosophy, Theology and the Sciences* 1.2 (2014).
- With Agustín Fuentes, 'Human Being and Becoming: Situating Theological Anthropology in Interspecies Relationships in an Evolutionary Context'. *Philosophy, Theology and the Sciences* 1.2 (2014).
- 'In God's Image and Likeness in Humans and Other Animals: Performative Soul-Making and Graced Nature'. *Zygon* 47.4 (2012): 934–48.
- With Paul Wason, 'Becoming Human in Theistic Perspective'. *Zygon* 47.4 (2012): 870–74.
- Took editorial responsibility for five articles in this issue, as well as others emerging from the colloquium published in the December 2012, March 2013, and June 2013 issues of *Zygon*.
- 'Joining in the Dance: Ecology in Roman Catholic Social Teaching'. *New Blackfriars* 93.1044 (2012): 193–212.
- 'The Ethics of Assisted Dying: A Case for a Recovery of the Prudence among the Virtues'. *Studies in Christian Ethics* 24.4 (2011): 1–14.
- 'A Case for Collective Conscience: Climategate, COP-15, and Climate Justice'. *Studies in Christian Ethics* 24.1 (2011): 1–18.
- 'The Breadth of Glory: A Trinitarian Eschatology for the Earth through Critical Engagement with Hans Urs von Balthasar'. *International Journal of Systematic Theology* 12.1 (2010): 46–64.
- 'Are Animals Moral? A Theological Appraisal of the Evolution of Vice and Virtue'. *Zygon* 44.4 (2009): 932–51.
- Response to James A. Nash: 'The Bible vs. Biodiversity: The Case against Moral Argument from Scripture'. *Journal for the Study of Religion, Nature and Culture* 3.2 (2009): 271–8.
- 'Shadow Sophia in Christological Perspective: The Evolution of Sin and the Redemption of Nature'. *Theology and Science* 6.1 (2008): 13–32.
- 'Shadow Sophia in Christological Perspective: A Reply to Responses'. *Theology and Science* 6.1 (2008): 61–72.
- 'Plumbing the Depths: A Recovery of Natural Law and Natural Wisdom in the Context of Debates about Evolutionary Purpose'. *Zygon* 42.4 (2007): 981–98.

- 'Environmental Justice and the Economy: A Christian Theologian's View'. *Ecotheology* 11.3 (2006): 294–310.
- 'Editorial'. *Ecotheology* 11.1 (2006): 5–8.
- 'Editorial'. *Ecotheology* 10.3 (2005): 277–80.
- 'Editorial'. *Ecotheology* 10.2 (2005): 141–6.
- 'Editorial'. *Ecotheology* 10.1 (2005): 7–10 (Letter 5–6).
- 'Sophia, Mary and the Eternal Feminine in Pierre Teilhard de Chardin and Sergei Bulgakov'. *Ecotheology* 10.2 (2005): 215–31.
- 'Editorial'. *Ecotheology* 9.1 (2004): 3–6.
- 'Genetic Interventions in Nature: Perspectives from a Christian Ethic of Wisdom'. In *Biodiversity and Ecology as Interdisciplinary Challenge*, edited by Denis Edwards and Mark Worthing. *Interface* 7.1 (2004): 30–44. Adelaide, ATF Press.
- 'Living from the Sabbath: Developing an Ecological Theology in the Context of Biodiversity'. In *Biodiversity and Ecology as Interdisciplinary Challenge*, edited by Denis Edwards and Mark Worthing. *Interface* 7.1 (2004): 1–13. Adelaide, ATF Press.
- 'Editorial'. *Ecotheology* 8.2 (2003): 133–6.
- 'Wisdom, Justice and Environmental Decision Making in a Biotechnological Age'. *Ecotheology* 8.2 (2003): 173–92.
- With Robin Grove-White and Bronislaw Szerszynski, 'Genetically Modified Theology: The Religious Dimensions of Public Attitudes to Agricultural Biotechnology'. *Studies in Christian Ethics* 14.2 (2001): 23–41.
- 'Wisdom: A Voice for Theology at the Boundary with Science'. *Ecotheology* 10 (2001): 27–39.
- 'Come to the Banquet: Seeking Wisdom in a Genetically Engineered Earth'. *Ecotheology* 9 (2000): 27–37.
- 'FutureNatural? The Future of Science Through the Lens of Wisdom'. *The Heythrop Journal* 40.1 (1999): 41–59.
- 'Gaia as Science Made Myth: Implications for Environmental Ethics'. *Studies in Christian Ethics* 9.2 (1996): 1–15.
- 'Genetic Engineering for the Environment: Ethical Implications of the Biotechnology Revolution'. *The Heythrop Journal* 36.3 (1995): 307–27.
- 'Response to Michael Northcott: Is There a Green Christian Ethic?' *Studies in Christian Ethics* 7.4 (1994): 46–51.

ACADEMIC – IN PREPARATION

PEDAGOGICAL

- 'Deep History, Amnesia and Animal Ethics: A Case for Inter-Morality'. *Perspectives on Science and Christian Faith* 67.4 (2015): 1–9.
- 'The Birth of Morality and the Fall of Adam through an Evolutionary Inter-Species Lens'. *Theology Today* 72.2 (2015): 182–93.
- With Barbara Rossing, 'The Eco-theological Significance of John 10.10: Abundant Life through the Sabbath, Trinitarian Vestiges and the Tree of Life'. *The Ecumenical Review* 65.1 (2013): 83–97.
- 'Christ and Evolution: A Drama of Wisdom?' Boyle Lecture (New Series) *Zygon* 47.3 (2012): 524–41.
- 'Ecological Conversion in a Changing Climate: An Ecumenical Perspective on Ecological Solidarity'. *International Journal of Orthodox Theology* 3.1 (2012): 78–104.
- 'Experiencing Wonder and Seeking Wisdom'. *Zygon* 42.3 (2007): 587–90.

- ‘Wisdom Remembered: Recovering a Theological Vision of Wisdom for the Academe’. Special Issue: *London Review of Education* 5.2 (2007): 173–84. Published in *Wisdom in the University*, edited by Ronald Barnett and Nicholas Maxwell, 72–88. London: Routledge, 2008.
- ‘Finding Wonder, Seeking Wisdom: Reflections at the Boundary of Science and Religion’. *Modern Believing* 47.4 (2006): 17–28.
- ‘Fabricated Humans? Human Genetics, Ethics and the Christian Wisdom Tradition’. *Dialog* 44.4 (2006): 365–74.
- ‘Genes, Clones and God: Theology, Ethics and the New Genetic Technologies’. *Science and Religion Forum Reviews* 35 (2000): 6–11. Review article edited by Professor David Bartholomew.
- ‘Theology and the Culture of the Sciences’. *New Blackfriars* 81.947 (2000): 36–46.
- With Hilary Ineson, ‘Theological Reflection’. *Adults Learning* 9.6 (1998): 20–2.
- ‘A New Dawn? The Roman Catholic Church and Environmental Issues’. *New Blackfriars* 78 (1997): 316–26.
- ‘Sophia: The Feminine Face of God as a Metaphor for an EcoTheology’. *Feminist Theology* 16 (1997): 11–31.
- ‘Development and Environment in Dialogue with Liberation Theology’. *New Blackfriars* 78 (1997): 279–89.
- ‘Reshaping Our Environment: Implications of the New Biotechnology’ *Theology in Green* 5.1 (1995) 19–33.
- ‘Biology and Theology in Conversation: Reflections on Ecological Theology’. *New Blackfriars* 74 (1993): 465–73.
- ‘Recalling the Dream: Celtic Spirituality and Ecological Consciousness’ *Theology in Green* 7 (1993): 32–8.
- ‘A Critique of Jürgen Moltmann’s Green Theology’. *New Blackfriars* 73 (1992): 554–65.
- ‘The Green Theological Temperature: A Survey of Theological College Education in the UK’. *Theology in Green* 2 (1992): 22–6.
- ‘God and Gaia: Myth or Reality?’ *Theology* 95 (1992): 275–83.
- ‘Moltmann’s Ecological Theology: A Manifesto for the Greens?’ *Theology in Green* 1 (1992): 21–7.

PEDAGOGICAL – IN PREPARATION

POPULAR

- ‘What Can Evolutionary Biology Contribute to Theology and Vice Versa?’ *Big Questions Online*, John Templeton Foundation, May 12, 2016, <https://www.bigquestionsonline.com/2016/05/12/what-can-evolutionary-biology-contribute-theology-vice-versa/>.
- ‘Naming and Shaming the Anthropocene’, April 22, 2016, *Anthropocene Forum*, University of Indiana, Bloomington, <http://www.indiana.edu/~csres/forum.php>.
- ‘The Search for Wisdom’, *Origins, Natures, Futures*, March 1, 2016, Center for Theology, Science and Human Flourishing, <http://blogs.nd.edu/origins-natures-futures/2016/03/01/the-search-for-wisdom/#more-80>.
- ‘Evolution, Atonement and the Redemption of All Creation’, Part 1, June 29, 2015, *Biologos*, <http://biologos.org/blogs/archive/evolution-atonement-and-the-redemption-of-all-creation-part-1>.
- ‘Evolution, Atonement and the Redemption of All Creation, Part 2, June 30, 2015, *Biologos*, <http://biologos.org/blogs/archive/evolution-atonement-and-the-redemption-of-all-creation-part-2>.
- ‘Choices Can Make All the Difference’. *Catholic Times*, October 27, 2013.
- With Dominic Johnson, Robin Lovin, and Agustín Fuentes, ‘What Scientists and Theologians Talk About: Highly Evolved Questions’. *Christian Century*, August 7, 2013, 30–33.
- ‘Faith Meets Physics’. *The Living Church*, February 17, 2013, 18. Review of John Polkinghorne, *Testing Scripture: A Scientist Explores the Bible*.

- With Dominic Johnson, Agustín Fuentes, Lee Cronk, Hillary Lenfesty, Jeff Schloss, and Richard Sosis, 'Darwin Day: Evolving Perspectives on God', *ETVOL*, February 12, 2013.
www.thisviewoflife.com/index.php/magazine/articles/darwin-day-evolving-perspectives-on-god.
- With Dominic Johnson, Jan-Olav Henriksen, Jeffrey Schloss, Aku Visala, Richard Sosis, Eugene Rogers, Robert Song, and Conor Cunningham, 'Religion in Evolutionary Perspective: Adaptive Faith'. *The Christian Century*, February 29, 2013, 34–49.
- 'Rowan's Call to Awareness'. *The Guardian*, October 14, 2009.
www.guardian.co.uk/commentisfree/belief/2009/oct/14/rowan-environment-religion.
- 'Environmental Justice: Expanding the Catholic Tradition'. *Shap Journal*, September 2008.
- 'A Call for Transformation: Tracing the Theological Roots of Living Sustainably'. *Live Simply Anthology*, edited by Annabel Shilston-Thomas. Canterbury Press, 2008.
- 'A Recovery of Wisdom as Virtue for an Ethics of Genetics'. *Perspectives on Science and Christian Faith*, March 1, 2007. Proceedings of the American Academy of Science Conference, 2006.
- 'Mystery of the Cross'. *The Tablet*. Steps to Easter Series, March 25, 2006, 15.
- 'The Dawn of the Clone Age: Where Might Wisdom Be Found?' In *Spiritual Information: 100 Perspectives on Science and Religion*, edited by Charles Harper, 524–8. Philadelphia: Templeton Foundation Press, 2005.
- Reflections and Prayers on Missal readings for Second week of Lent in the CAFOD/DLT Lent book: *Small World*, 24–37. London: Darton, Longman and Todd, 2004.
- 'The Dawn of the Clone Age?' *Priests and People* 17.7 (July 2003): 268–73.
- 'Trade Costing the Earth'. In *Turn the Tables: Reflections on Faith and Trade*, edited by Linda Jones and Rebecca Dudley, 34–7. London: CAFOD/Darton, Longman and Todd, 2003.
- 'Biotechnology, Ecology and Wisdom'. *Priests and People* 13.10 (October 1999): 364–8.
- 'Genetic Engineering: Foe or Friend'. In *God for the 21st Century*, edited by Russell Stannard, 89–91. West Conshohocken, PA: Templeton Foundation Press, 2000.
- 'Biotechnology: A New Challenge for Science and Religion'. *The New Theologian* 9.1 (Autumn 1998): 6–13.
- 'Christianity and the Environment'. *The New Theologian* 8.2 (March 1998): 38–44.
- 'The Search for the Holy Grail'. *SPLICE* 5.1 (1998): 10–11.
- 'The Next Revolutionary Prophet: A Mohammed, a Marx or a Microbiologist?' *Life and Religions* 1.2 (Winter 1997): 16–21.

MEDIA AND POPULAR ARTICLES ON *LAUDATO SI'*

NATIONAL MEDIA

- NBC Nightly News*, Interview: 'Pope Francis Calls for Action on Climate Change', June 17, 2015.
- Mashable*: 'How Pope Francis is about to Reshape the Climate Discussion', *Opinion*, June 14, 2015.

INTERNATIONAL MEDIA

- Australian Broadcasting Corporation* (5+ outlets): 'The Theological Tapestry of Laudato Si''. In "'Care for Our Common Home": Taking Up the Moral Challenge of Pope Francis', edited by Scott Stevens, *ABC Religion and Ethics*, June 19, 2015.
- Australian Broadcasting Corporation*, Op-Ed: 'Pope Francis: A Man for All Seasons', *ABC Religion and Ethics*, March 30, 2015.
- Australian Broadcasting Corporation*: 'Reconciliation as the Gift of Heaven. In 'The Pope in America: A Theological Travelogue', *ABC Religion and Ethics*, October 13, 2015.

REGIONAL/LOCAL MEDIA

- South Bend Tribune*: 'Viewpoint: Protecting God's Gift to Us All', August 23, 2015.

BLOGS/ONLINE

'Fragile Earth: Catholic Social Teaching and Ecology'. Live-streamed webinar for Notre Dame Alumni Association and Friends, June 24, 2015.

Notre Dame Magazine: 'A Canticle for Planet Earth', Fall 2015.

Bulletin of the Atomic Scientists, Op-Ed: 'In Imitation of Christ: Pope Francis' Encyclical on Climate Change'. *Analysis*, June 12, 2015.

Bulletin of the Atomic Scientists, Op-Ed: 'A Catholic Approach to Climate'. *Analysis*, April 24, 2014.

EDITORIAL

Reviews Editor for journal *Theology in Green/Ecotheology* from 1994–99. Editor: Professor Mary Grey.

EDITORIAL BOARDS

Theology and Science, 2003–present.

Zygon, October 2013–present.

British Journal of Theological Education, edited by Donald Macaskill and Zoe Bennett Moore, 2005–9.

Book Series, *Religion, Theologie und Naturwissenschaft*, member of editorial board, Vandenhoeck and Ruprecht, Germany. 2015–present.

Book Series, *New International Studies in Applied Ethics*, edited by John Elford and Simon Robinson. Bern: Peter Lang, 2008–present.

Book Series, *Religion and the University*. London: Bloomsbury/T&T Clark. Other members of the board: William Abraham, Mervyn Davies, Gavin D'Costa, and Peter Hampson. Aim of series is the interdisciplinary relationship of theology/philosophy to the various disciplines within the university, as well as the idea of a Christian university.

Ad hoc editorial work for the following journals *Theological Studies*, *Journal of Anglican Studies*, *Theology Today*, *International Journal of Systematic Theology*, *Studies in Christian Ethics*, *Journal for the Society of Christian Ethics*, *Heythrop Journal*, *Journal of Philosophical Research*, *The Thomist*, *Environmental Values*, *Rural Theology*, *Worldviews*, *Filozoficzne Aspekty Genezy (Philosophical Aspects of Origin)*

Advisory Board, Science and Religion in Schools Project 2008-2011, directed by Professor John Hedley Brooke.

EDITOR

Editor, *Philosophy, Theology and the Sciences*, 2014–present.

One of four international editors invited to develop this new international academic journal published by Mohr Siebeck. Other invited editors: Niels Gregersen (Denmark); Dirk Evers (Germany), and Greg Peterson (USA) 2014-2017; Michael Spezio (USA) 2017-. First issue published in 2014.

Consulting Editor, *Journal for the Study of Religion, Nature and Culture*, 2007–present.

JSRNC replaced *Ecotheology*. Editor in Chief: Bron Taylor, University of Florida.

Editor, *Ecotheology*, March 2001–6.

In June 2003 the journal was renamed *Ecotheology: The Journal of Religion, Nature and the Environment*, and increased from three issues/year to four issues/year in 2006, when it changed publishers from Continuum to Equinox.

CONSULTANCY

CRITICAL READER to comment on books/proposals submitted to the following publishers:

SPCK

Cambridge University Press (UK, USA)

Oxford University Press (UK, USA)

SCM Press

Lexington Books

Chicago University Press

Temple University Press

Equinox

Routledge

Continuum

IVP Books
Harvard University Press

ENDORSEMENTS. Invitations to endorse a number of books, including, for example:

Josh Reeves and Steve Donaldson, *A Little Book for New Scientists* (2016)

Melissa Brotton, *Ecotheology in the Humanities: An Interdisciplinary Approach to Understanding the Divine and Nature* (2016)

Jan-Olav Henriksen and Karl Olav Sandnes, *Jesus as Healer: A Gospel for the Body* (2015)

Marc Bekoff, *Rewilding Our Hearts: Building Pathways of Compassion and Coexistence* (2014)

John McKeown, *God's Babies: Natalism and Bible Interpretation in Modern America* (2014)

Ryan P. McLaughlin, *Preservation and Protest: Theological Foundations for an Eco-Eschatological Ethics* (2014)

Cynthia Crysdale and Neil Ormerod, *Creator God, Evolving World* (2013)

K. Reynhout, *Interdisciplinary Interpretation: Paul Ricoeur and the Hermeneutics of Theology and Science* (2013)

Martin Nowak and Sarah Coakley, *Evolution, Games and God: The Principle of Cooperation* (2013)

Neil Messer, *Flourishing: Health, Disease and Bioethics in Theological Perspective* (2013)

Nicola Hoggard Creegan, *Animal Suffering and the Problem of Evil* (2013)

Norman Wirzba, *Food and Faith: A Theology of Eating* (2011)

Antje Jackelen, *Time and Eternity* (2005)

Mikael Stenmark, *How to Relate Science and Religion* (2004)

John Bryant and John Searle, *Life in Our Hands* (2004)

Consultation Workshop following Reckitt Lecture on 'Forgetting the Land', relating social science research, ecology, and spirituality, by Prof. John Rodwell (Lancaster University) at the College of the Resurrection, Mirfield, September 7, 2006.

Advisory Board, *Science and Religion Primer*, edited by Heidi Campbell and Heather Looy. Grand Rapids: Baker Academic, 2009.

Consultant and Advisor, 'Battle for the Truth: The Purpose and Meaning of Life', a series of multimedia productions from Kharis Productions, directed by Iain Morris. Filming began September 16, 2009.

External Grant Evaluator for the Leverhulme Trust, John Templeton Foundation, Wellcome Trust, and the Arts and Humanities Research Council.

Advisory Panel, 'Green Gospel' Working Party, organized by Martin Palmer.

Theological Reference Group for CAFOD (Catholic Fund for Overseas Development) from 2004–present. Assumed leadership role from 2009–10 during my secondment with CAFOD. From 2011 involvement more limited.

Consultant for planning meeting for World Council of Churches Consultation on Stem Cell Research, Geneva, November 30–December 2, 2008.

Theological Accompanier for CAFOD as NGO representation, United Nations Summit, Copenhagen, December 9–14, 2009.

Consultant, California Council for Science and Technology for 'Trust and Accountability in Science'. Pre-board meeting and board meeting: October 18–19, 2010; October 13–14, 2011.

BOOK REVIEWS

Over 40 entries of theological terms and two short review articles on 'Science and Religion' and 'Women in the Church', *Dictionary of Religious Ideas* (Helicon, 1994), by invitation.

Published over 200 book reviews between 1992–2016 in the following journals:

The Tablet

The Heythrop Journal

Science and Christian Belief

The Expository Times

Modern Believing

Theology

Contact

Third Way

Crucible

Ecotheology

Interdisciplinary Science Review
Feedthemics
The Times Higher Educational Supplement
Theology and Science
Studies in Christian Ethics

International Journal of Systematic Theology
Modern Believing
Horizons, The Journal of the College Theology
Society

PRESENTATIONS

PAPERS INVITED AT SYMPOSIA AND CONFERENCES FOR THEOLOGY

Note: for papers given at national and international conferences in science, see Appendix.

ACADEMIC

- 'Deep Incarnation and *imitatio Christi*: The Significance of Christology for the Ecological Virtues'. Keynote address. *Sustainable Development and the Contribution of Church Communities* conference. The University Centre Saint-Ignatius Antwerp, University of Antwerp, Belgium. December 7–9, 2016
- 'Evolutionary Anthropology, Entanglement and Creaturely Hope: A Theology for Conservation Ethics', *Ecology and Hope* conference, Carey Baptist College, New Zealand, January 8, 2016.
- 'Morality's Deep History: Empathy and the Evolution of Compassion and Wisdom', Panel session *Against Empathy? Theological Interrogation of Neuroscientific Debates on the Existence of the Human Mirror Neuron System and the Moral Significance of Empathy*. Participants Michael Spezio, Celia Deane-Drummond, Anne Runehov, Charlene Burns, and Gregory Peterson. International Society of Science and Religion (ISSR) Annual Conference at AAR, Atlanta, November 20, 2015.
- 'The Cry of the Earth: Listening to *Laudato Si* Through the Medium of Eco-theology'. Keynote address. Australian Catholic University Advanced Seminar, *Laudato Si: The Greening of the Church*. Opening Event of New Rome Building, joint with Catholic University of America, Rome, September 22–25, 2015.
- 'Performing The Beginning After the End: A Theological Anthropology for the Anthropocene'. Keynote address. *Religion in the Anthropocene: Challenges, Idolatries and Transformations*, European Forum for the Study of Religion and Environment, LMU, Munich, May 14–17, 2015.
- 'Catholic Social Teaching and Ecology: Its Promise and Limits'. Keynote address. *Fragile World: Ecology and the Church*, World Catholicism Week Conference, de Paul University, April 12, 2015.
- 'In Adam All Die: Questions at the Boundary of Niche Construction, Community Evolution, and Original Sin'. Keynote address. *Reimagining the Intersection of Evolution and the Fall*, Garrett Evangelical Seminary, sponsored by the Colossian Forum, March 25–28, 2015.
- 'Windows to the Divine Spirit in Creation: Between Species Encounters, Wild Justice and Image Bearing in an Ecological Perspective'. Keynote address. *Rediscovering the Spiritual in God's Creation*, Tabor Research Institute, Adelaide, March 10–15, 2015.
- 'Natural Law Revisited: Wild Justice and Human Obligations to Other Animals'. Society for Christian Ethics, Chicago, January 11, 2015.
- 'Synthetic Biology'. Panel session contributor. Bioethics Interest Group, Society for Christian Ethics, Chicago, January 9, 2015.
- 'Creation and Evolution'. Chair of panel session with Cynthia Crysdale and Neil Ormrod, Systematic Theology Special Interest Group American Academy of Religion, November 23, 2014.
- 'The Uses and Abuses of Science in Religious Environmentalism'. *International Society for Science and Religion*, meeting held in conjunction with American Academy of Religion, San Diego, November 22, 2014.
- 'The Wisdom of the Liminal: Re-Imaging Human Nature through an Evolutionary and Inter-Species Lens'. Keynote address. *Human Natures: Moving us Forward*, University of Notre Dame, April 2–3, 2014.
- 'The Rise of Morality and the Fall of Adam through and Evolutionary Interspecies Lens'. Keynote address. Conference in Honor of Wentzel van Huyssteen, Princeton Theological Seminary, November 19, 2014.

- 'Human Becoming and the Construction of Community Niche: A Transdisciplinary Approach'. Joint Panel with Agustin Fuentes and Grant Ramsey for *Transfusion and Transformation: The Creative Potential of Interdisciplinary Knowledge Exchange*. Institute of Advanced Study, Durham University, July 15–17, 2014.
- 'Rivers of the Anthropocene'. Contributor to joint project betw. humanities and geographical and ecological sciences, Indianapolis and Newcastle upon Tyne. First conference: Indianapolis: January 23–25, 2014.
- 'Evolving Social Worlds: Theodrama and Niche Construction'. Presentation for Association of Teachers in Moral Theology, Leeds, May 17–19, 2013.
- Panel for 'New Directions in Biology'. *Science and Faith* Conference, Durham University, April 12–14, 2013. Panel televised and now available online.
- 'Is "human nature" also "speciesist"? Evolutionary perspectives on *H.sapiens* and other hominids'. Contributor to Panel: *Ascending to the Margins: Speciesism as a Concern in Catholic Thought*, with John Berkman and Charles Camosy. *Society for the Study of Christian Ethics*, Chicago, January 4, 2013.
- 'What are the Resources for Building a Christian Ethos in a Time of Ecological Devastation?' Plenary Lecture. *Christian Faith and the Earth* Conference, Sustainability Institute, University of the Western Cape, South Africa, August 5–13, 2012.
- 'Human Reason and Animal Minds'. Presentation for Association of Teachers in Moral Theology, Leeds, May 12–15, 2012.
- 'How is Theology Inspired by the Sciences?' Keynote address. *Conceptions of Truth and Unity of Knowledge*, Notre Dame Institute for Advanced Study Conference, April 12–14, 2012.
- 'In God's Image and Likeness'. Key contributor to Templeton-funded colloquium on *Human Becoming*, in celebration of Owen Gingerich's 80th birthday, Omni Island Resort, Florida, February 26–29, 2012.
- 'Wisdom Remembered: The Place of Theological Wisdom in the Academy'. Keynote featured lecture. *Educating for Wisdom in the 21st Century*, Baylor Institute of Faith and Thought, Baylor University, October 27–29, 2011.
- 'Joining in the Dance: Ecology in Roman Catholic Social Teaching'. Keynote address. Catholic Theological Society of Great Britain, St Mary's College, London, September 5–8, 2011.
- 'Human Responsibilities to Other Animals: Biotechnology and Sustainability'. Keynote address. *Belief in Dialogue: Science, Culture and Modernity*, sponsored by British Council and International Society for the Study of Science and Religion, American University of Sharjah, June 21–23, 2011.
- 'Ecological Conversion in a Changing Climate: An Ecumenical Perspective on Ecological Solidarity'. *Ecumenism and Orthodoxy in Europe*, University of Bamberg, June 16–18, 2011, in celebration of Jürgen Moltmann's 85th birthday.
- 'The Nature of Freedom in a Post-Darwinian World'. Keynote address. *Anthropos: Developing a Theological Anthropology for the 21st Century*, University of Louvain, Belgium, April 13–16, 2011.
- 'Contested Ground Post-COP-15: Theological Arguments for Climate Justice'. *Climate Change: Rethinking Contested Concepts*, Religion and Ecology Group, American Academy of Religion, Atlanta, November 1, 2010.
- Presider, Animals and Religion Working Group Session: *Thinking Animals, Rethinking Theology: Abrahamic and Indigenous Traditions*, American Academy of Religion, Atlanta, October 30, 2010.
- 'A Case for Collective Conscience: Climategate, COP-15, and Climate Justice'. Keynote address. *Theology and Climate Change*, Society for the Study of Christian Ethics, Cambridge, September 3–5, 2010.
- 'Sustainable Development'. Short paper for Catholic World Congress in Ethics, Trent, Italy, July 22–28, 2010.
- 'The Good, the Bad and the Ugly: Wonder, Awe and Paying Attention to Nature'. Keynote address. *Aesth/ethics in Environmental Change* Workshop, EFSRE, Hiddensee, Germany, May 23–28, 2010.

- 'Beyond Separation or Synthesis: Christ and Evolution'. Keynote address. *Darwin in 21st Century: Nature, Humanity and God*, John Reilly Centre, University of Notre Dame, November 2–5, 2009.
- Final Plenary Address, Louvain Explorations in Systematic Theology, VII. Congress on *Discerning Creation in a Scattering World*, Catholic University at Louvain, Belgium, October 28–31, 2009.
- Contributor, Building Bridges Seminar – Muslim/Christian Dialogue Meeting on Science and Religion, hosted by Archbishop Rowan Williams, Istanbul, June 15–19, 2009.
- 'The Ethics of Assisted Dying: A Case for a Recovery of the Prudence Among the Virtues'. Keynote address. *Eastern Orthodox and Western Christian Perspectives on Bioethics*, Durham University, April 27–29, 2009.
- 'Degrees of Freedom: Humans as Primates in Dialogue with Hans Urs von Balthasar'. Keynote address. *Animality: Revolutions to Come*, Liverpool Hope University, April 23–24, 2009.
- 'The Breadth of Glory: A Trinitarian Eschatology for the Earth through Critical Engagement with Hans Urs von Balthasar'. Keynote address. Society for the Study of Theology, The Netherlands, April 1, 2009.
- 'Are Animals Moral? The Evolution of Vice and Virtue'. *Theology and Animals International Colloquium*, Centre for Religion and the Biosciences, St Deiniol's Library, Hawarden, November 2–4, 2007.
- 'Living as Imago Christi'. Keynote address. European Forum on *The Human Person in the Twenty-first Century*, Athens, September 18–24, 2007.
- 'God, Evolution and the Mind'. Response to Steven Mithen, Gowland Lecture, Science and Religion Forum Annual Conference, University of Kent at Canterbury, September 6–9, 2007.
- 'Seeking Practical Wisdom: A Roman Catholic Approach to Genethics as a Case Study in Bioethics'. Keynote address. Catholic-Shia Conference, Worth Abbey, Ethics in Today's Society, July 9, 2007.
- 'Are Animals Moral? A Theological Appraisal of the Evolution of Vice and Virtue'. Keynote address. *Linnaeus and Homo Religiosus Historical and Contemporary Perspectives on the Biological Roots of Religious Awareness and Human Identity*, Uppsala University, Sweden, May 30–June 2, 2007.
- 'Shadow Sophia in Christological Perspective: The Evolution of Sin and the Redemption of Nature'. Keynote address. Russell Fellowship Award Conference, Centre for Theology and the Natural Sciences (CTNS), Berkeley, March 31, 2007. Fellowship also included public lecture on 'The Search for Wisdom and the New Genetics' and taught sessions with doctoral students.
- 'Animal Ethics: Where Do We Go From Here?'. Short paper. *For the Love of the Church: Essays in Celebration and Honour of Kevin Kelly*, Liverpool Hope University, March 9–11, 2007.
- Formal responses to all plenary speakers at BIAMS (British and Irish Association of Mission Studies) Conference, London, Christian Mission and Environmental Justice, October 4, 2006.
- Respondent to 'Islam and Environmental Sustainability' by Dr. Mawil Izzu Dien. *Creation and the Abrahamic Faiths*, Science and Religion Forum, Manchester, September 11–13, 2006.
- 'A Recovery of Wisdom as Virtue for an Ethics of Genetics'. Keynote address. *Embedding Christian Values in Science and Technology*, American Scientific Affiliation annual conference, Calvin College, July 2006 and seminar for American Scientific Affiliation, 'Weaving Wonder and Wisdom: Developing A Christian Face for Values in Science'.
- 'Finding Wonder, Seeking Wisdom: Reflections at the Boundary of Science and Religion'. Keynote address. *Religion and Science: Old Enemies or New Friends?* Modern Churchpeople's Union Conference, July 12–15, 2005.
- 'Environmental Justice and the Economy: A Christian Theologian's View'. Keynote address. *Religion and Environment in Europe* Institute for Church and Environment, Theological Philosophical College, Benediktbeuern, Germany, June 4, 2005.
- 'Ethics, Evolution and Human Identity'. Research Symposium. *Nature and Ethics*, Nassau, Bahamas, John Templeton Foundation, *The Ontology of Ethics*, October 1–2, 2004.

- 'Fabricated Humans? Human Genetics, Ethics and the Christian Wisdom Tradition'. Keynote address. *A Posthuman Future?* Ian Ramsey Centre, St Anne's College, Oxford, July 21, 2004.
- 'Plumbing the Depths: A Recovery of Natural Law and Natural Wisdom in the Context of Debates about Evolutionary Purpose', Paper presented to International Colloquium on Purpose in Evolution, sponsored by Humble Approach Initiative, Mary Anne Meyers, John Templeton Foundation, Castel Gandolfo, Italy, June 24–26, 2004.
- 'Where Streams Meet? Ecology and Theological Wisdom from the East and the West', Keynote address. *Streams of Wisdom? Science, Theology and Cultural Dynamics*. ESSSAT. 10th European Conference, Barcelona, April 1–6, 2004.
- 'Living From the Sabbath: An Ecotheological Basis for Approaching Biodiversity' and 'Genetic Interventions in Nature: Perspective from a Christian Ethic of Wisdom'. Two keynote addresses. *Theological and Scientific Perspectives on Biodiversity* Conference, Adelaide, Australia, January 23–26, 2004.
- 'Putting Preimplantation Genetic Diagnosis in its Context: A Christian Ethical Response'. Keynote address. Science and Religion Forum, September 2003.
- 'Forbidden Knowledge: A Theologian's View'. Keynote address. *Is there forbidden knowledge?* Centre for Ethics and Values, Garrett Evangelical Theological Seminary, April 25, 2003.
- 'Recovering the Art of Practical Wisdom (Prudence) for Environmental Decision-making'. Short paper. British Ecological Society Meeting, York, December 19, 2002.
- 'The Challenge of Biotechnology for the Environment'. Keynote address. *Christian Anthropology and Biotechnological Progress*, Orthodox Academy of Crete, September 26–29, 2002.
- 'Wisdom; A Voice for Theology at the Boundary with Science'. Keynote address. Ian Ramsey Centre Science and Religion Conference, July 2002.
- 'Life on a Threatened Planet: Genetic Controversy and Environmental Ethics'. Keynote address. Centre for Theology and the Natural Science, University of Berkeley, June 5–9, 2002.
- 'Wisdom, Justice and Environmental Decision Making in a Biotechnological Age'. Keynote address. *Colloquium on Environmental Decision Making in a Technological Age*, chaired by R.J. Berry, St George's House, Windsor, April 2002.
- 'The Logos as Wisdom: the Starting Point for a Sophianic Theology of Creation'. Keynote address. International Symposium on Panentheism, Windsor, sponsored by Humble Approach Initiative, John Templeton Foundation, December 8–9, 2001.
- 'Developing a Wisdom Ethic in a Biological Age'. Keynote address. Association for Teachers in Moral Theology, Leeds, November 10, 2001.
- With Robin Grove White and Bronislaw Szerszynski 'Genetically Modified Theology: The Religious Dimension of Public Concern over Agricultural Biotechnology'. Joint speaker and coordinator of one-day colloquium *ReOrdering Nature: Theology and the New Genetics*, sponsored by the Christendom Trust, Lancaster University, March 8, 2000.
- 'Theology and the Culture of the Sciences'. Keynote address. *The Responsibilities of Theology to Church and Society*, Catholic Theological Association, Trinity and All Saints College, Leeds, September 1–5, 1999.
- 'A New Earth? The New Genetics in the Light of Jürgen Moltmann's Eschatology'. Short paper. Theology and Ecology group on 'Eschatology', Society for the Study of Theology, Edinburgh, April 12–14, 1999.
- 'Wisdom: A Voice for Theology at the Boundary with Science'. Keynote address. John Templeton Science and Religion Workshop, Ian Ramsey Centre, Oxford, January 11, 1999.
- 'The Dawn of the Clone Age: Theological and Ethical Implications of the New Biotechnology'. Keynote address. Science and Religion Forum Annual Conference: *Genetic Technology*, University College Chester, September 15, 1998.

- 'Wisdom and the Future of Science'. Short paper. *The Uses of the Bible*, Catholic Theological Association, Trinity and All Saints College, Leeds, September 5, 1998.
- 'Sophia as a Metaphor for an EcoTheology', Keynote address. *Holy Wisdom in Christian Tradition*, Marian Study Centre, Sarum College, May 31, 1997.
- 'Science and Eschatology'. Reply to Fraser Watts, Society for the Study of Theology, Cambridge, April 17, 1996.
- 'The Two Horizons: Introducing Ecology into Theological Education'. *Religious Education and the Environment*, the first Int'l Orthodox Summer School in Theology and Ecology, Halki, Istanbul, June 18–30, 1994.
- 'Is there a Green Christian Ethic?' A reply to Michael Northcott. Society for the Study of Christian Ethics, Annual Conference, September 4–6, 1993.
- The Oxford Centre for Ethics, Environment and Society (OCEES), Mansfield College, Oxford University. Chair for conference on environmental ethics on October 2, 1992.
- 'Trinity and Ecology in Jürgen Moltmann's Doctrine of Creation'. Short paper. First international meeting of the Research Institute for Systematic Theology, Kings College, London, September 1990.

PEDAGOGICAL

- 'The Art and Science of Vocation: An Argument for Wisdom and Conscience as Companions on a Way', keynote address for *Education, Science and Religion*, ISSR international conference, Puebla, Mexico, 8–10 February 2017.
- 'The Theological Anthropology of *Laudato Si'*: Tracing the Interplay of Theology, Science and Ecology', keynote lecture for *Protecting our Common Home: Scientific Contributions & Religious Perspectives*, Duquesne University, Pittsburg, September 28-30th, 2016.
- 'Living Sustainably: Climate Change and Roman Catholic Social Teaching'. *Climate Change and the Common Good* Conference, University of Notre Dame, April 8–10, 2013.
- 'Human Identity in a Post-Darwinian World: Opportunities and Challenges'. Christians in Science Northern Conference on Human Nature, Edinburgh, March 19, 2011.
- 'Stem Cells: Theological Frameworks'. Keynote address. Global Consultation on Stem Cell Research in the Service of Life, World Council of Churches, Velos Academy for Theological Studies, Greece, November 8–12, 2009.
- 'Calamity for the Earth: A Theologian's View'. Keynote address. Fellowship of St. Alban and St. Sergius Annual Conference, St Alban's Centre, Colney, August 10, 2009.
- 'How can a Theology of Creation Contribute to our Understanding of Sustainability and Care for the Environment?' Keynote address. *God In The World: Theological Reflections On Livesimply and Catholic Social Teaching*. Roehampton University, CAFOD Progressio Theology Conference, September 5, 2008.
- Contributor to World Council of Churches, Global Consultation on Genetics and Biotechnology, Johannesburg, December 1–6, 2007.
- 'Scientific and Ethical Dimensions of Climate Change'. Respondent. *Ethics of Climate Change*, Blackfriars Hall, Oxford, November 17, 2007.
- 'Plumbing the Depths: Natural Law, Natural Wisdom and Evolutionary Purpose'. Keynote address. *Christians, Evolution and Creation*, Newman Association, St. Albans Christian Study Centre, June 2, 2007.
- 'Faith in Science'. Keynote address. Conference for Blackburn Diocese Board of Ministry, Clitheroe, October 30, 2006.
- 'How does Experiencing Wonder in Living Creatures Relate to a Theology of Wonder and Beauty?' Short seminar paper. C.S Lewis Conference: *Making all Things New: The Good, the True and the Beautiful?* August 4, 2005.
- 'Co-Creators or Manipulators? Discerning the Ways of God in a World of Rapidly Expanding Possibilities'. Keynote address. *Creation and the Environment in Christian Perspective*. Newman College, Birmingham,

February 19, 2000. Sponsored by the Faith and Culture Committee of the Roman Catholic Bishop's Conference of England and Wales.

'Science: Biotechnology: Implications for Theology and Ethics'. Keynote address. *Spirit, Science and Society* conference for Anglican Clergy of Diocese of Leicester, September 14, 1999.

'Seeking Wisdom: The Church and the New Biology'. Keynote address. *The Church in the Twenty First Century*. Annual Conference of the Fellowship of St. Sergius and St. Alban, Stourbridge, August 25, 1999.

Keynote address. Christian Theology Trust's Annual Conference for 'A' Level Teachers, Wistaston Hall, Crewe, June 28, 1999.

'The Greening of Jürgen Moltmann's Theology?' Conference launch for *Green Theology Group*, May 20, 1991.

INVITED PUBLIC LECTURES AND EXTERNAL ACADEMIC SEMINARS (THEOLOGY)

ACADEMIC SEMINARS

'Integral Ecology and the Common Good Scenario: A Theological Assessment' for A Letter from Rome: *Laudato Si'* as a Catalyst for Societal Transformation? Advanced Symposium, Institute for Advanced Sustainability Studies, Podstam, Germany. September 12–14, 2016.

Rethinking *Laudato Si'*, International Seminar on Science and Religion Cooperation for Environmental Care (ISSREC), June 20–22, 2016, Catholic Shrine of Torreciudad, Spain organized by Professor Emilio Chuvieco, Department of Geology, Geography and the Environment, University of Alcala, Spain. This was a high level seminar with representative religious leaders from all the major faith traditions and leading scientists. Seminar participants received a letter of personal greeting from Pope Francis and published a Joint Declaration, see <http://www.declarationtorreciudad.org/en/>.

'The CRISPR Challenge and the Beatific Vision: Recovering Practical Wisdom as a Guide for Human Flourishing', for advanced seminar on *Human Flourishing in an Age of Gene Editing*, May 16 -17 2016, organized by Erik Parens and Josephine Johnston, The Hastings Center, Garrison, New York. Paper will be developed into a chapter for the book project.

'The Origin and Future of Life: Theological Perspectives'. Advanced Seminar for early career Latin American scholars, Ian Ramsey Centre, Oxford. One of three lead keynote speakers and facilitators of workshops on *The Origin of Life*, San Christobel, Galapagos, August 17–22, 2015.

'Human Distinctiveness Seminar'. Joint three-week seminar on evolutionary anthropology and its engagement with theology for advanced scholars in theology, with Agustin Fuentes and anthropology team, May 27–June 17, 2015.

'Looking at Humans through the Lens of Deep History: A Trans-disciplinary Approach to Theology and Evolutionary Anthropology'. Paper for Interdisciplinary Consultation on *New Approaches in Theological Inquiry*, Center of Theological Inquiry, Princeton, May 6–8, 2015.

'Human Nature and Evolution'. Joint seminar for young scholars with Agustin Fuentes, Center of Theological Inquiry, June 2–6, 2014.

'Re: Imaging the Image of God: Human Nature, Evolution and Other Animals'. Public lecture. Lutheran School of Theology, São Leopoldo, Brazil, October 21, 2013.

'Are Animals Moral?' Lunchtime Seminar, Albertus Magnus Society, Dominican University, Chicago, November 16, 2012.

'God, Emergence of Human Freedom and the Animal'. Zygon Center Advanced Seminar, Chicago, April 30, 2012.

'Creation'. *Theology of Climate Change* Seminar, Manchester University and Lincoln Institute, Manchester, September 8–9, 2011.

- “Deep Incarnation between Balthasar and Bulgakov: The Form of Beauty and the Wisdom of God’. Expert Colloquium on *Is God Incarnate in All That Is?* organized by Niels Gregersen, Copenhagen, Denmark, August 25–28, 2011.
- ‘Gene Therapies: Future Prospects and Ethical Quandaries’. Seminar for Department of Theology, University of San Diego, October 20, 2010.
- ‘A Case for Collective Conscience: Climategate, COP-15, and Climate Justice’. Center for Catholic Thought and Culture, University of San Diego, October 20, 2010.
- ‘Religious Environmentalism’. Short paper for Pre-Council Meeting on *Trust and Accountability in Science*, California Council for Science and Technology, Irvine, October 18, 2010.
- ‘Mapping the Evolution of Conscience: A Theological Perspective’. Keynote address. JTF consultation on *Evolution of Conscience*, Santa Fe, New Mexico, April 28–May 3, 2010.
- ‘Feminist Quandaries in Reproductive Technologies and Genetics: A Case for a Virtue Approach’. Bioethics Interest Group, McMaster University, September 18, 2008.
- ‘A Response to Calamity: Developing an Ecological Eschatology’. Faculty Colloquium, Redeemer University College, Toronto, September 17, 2008.
- ‘Relating Christ and Evolution; Separation, Synthesis or a Stage?’ Redeemer University College: Biology Seminar, September 17, 2008.
- ‘Naming Environmental Justice and Ecological Justice as Virtue’. McMaster Postgraduate Philosophy Seminar, September 16, 2008.
- ‘Freedom, Conscience and Virtue: Theological Perspectives on the Ethics of Inherited Genetic Modification’. McMaster Divinity College, Toronto, September 16, 2008.
- ‘Living from the Sabbath: An Ecological Theology’. Wycliffe Seminars in Science and Religion, Oxford University, July 20, 2004.
- ‘To be or not to be? A Preliminary Analysis of Media Reporting of Stem Cell Research: A Theologian’s Perspective’. Contextual Theology Seminar, Manchester University, June 18, 2004.
- ‘Moltmann’s Theology of Creation’. Tyndale Society, Cambridge, July 1–3, 1992.
- ‘Biotechnology, Ecology and Wisdom’. Ian Ramsey Centre, Faculty of Theology, Oxford University, October 28, 1999.
- ‘Biology and Theology in Dialogue: Towards an Ecological Ethic’. Manchester University, Postgraduate Society, May 1, 1992.

PEDAGOGICAL PRESENTATIONS (including ministry formation)

- ‘Religious Leadership in the Public Sphere and the Challenge of Emerging Sciences’, July 5, for *Cosmology: The Beginning, the End and the Vast*, Colloquium for *Equipping Religious Leaders in an Age of Science*, organized by David Wilkinson, Durham University, July 4–7 2016.
- ‘*Laudato Si*: An opportunity and challenge’, panel presentation, April 5, *For the Planet and the Poor* Conference, Keough School of Global Affairs, University of Notre Dame, April 4–6 2016.
- ‘Collective Conscience and Environmental Ethics’. Philosophy and Religion Club, Rollins College, October 23, 2014.
- ‘God and Science: Busting Myths and Exploring Controversies’. Lecture for Christianity course, Rollins College, October 22, 2014.
- ‘Wonder and Creativity in Theology and Science’. Lecture for Innovate, Elevate course, Rollins College, October 22, 2014.
- ‘Evolution, Human Nature and Theology’. Keynote address. Summer Seminar Week joint with Agustin Fuentes, Postgraduate Fellows, Center of Theological Inquiry, Princeton, June 2–6, 2014.

- 'What the Scientist Should be saying to the Theologian and Vice Versa'. York Deanery Study Day, February 27, 2007.
- 'The Earth, Wisdom and the New Ecology'. Science and Religion seminar for teachers, University of Cork, March 23, 2002.
- 'Brave New World? Wisdom Ethics for the New Genetics'. Methodist Apologist Group, October 13, 2001.
- 'Creation Through Wisdom: Theology and the New Biology'. Newman Association, June 29, 2001.
- 'Biotechnology: The Challenge for Science and Theology'. Lecture, Aquinas College, Stockport, March 17, 1999.
- 'Genetic Engineering: The Science and its Applications in the Non-Human World' and 'A New Earth? Ethical Dilemmas Arising from the Genetic Manipulation of Life'. Guest lectures. Turvey Abbey, November 28, 1998.
- 'Playing God? Issues in the New Biotechnology'. *Training and Learning for Ministry*, Diocese of Leicester, St. Catherine's Church, Burbage, October 23, 1998.
- 'The "Integrity of Creation": Reflections on Gaia and Ethics'. *Justice and Peace Theme Week*, Luther King House, Northern Baptist College, Manchester, September 19, 1997.
- 'The Roman Catholic Church and Environmental Issues'. Seminar for Faith and Culture Committee, Roman Catholic Bishop's Conference of England and Wales, Archbishop's House, London, April 1997.
- 'Gaia: A Religious Perversion or a Marriage of True Minds?' Seminar for Continuing Ministerial Education, Portsmouth Diocese, June 23, 1993.
- 'Theology and Ecology: A New Fad or a New Frontier?' Seminar for Continuing Ministerial Education, Portsmouth Diocese, May 26, 1993.
- 'Religions and Ecology'. Joint ICOREC presentation to Manchester Student Union with F. Kahlid (Islam) and R. Prime (Hinduism), December 1992.

PUBLIC LECTURES (BY INVITATION)

- 'Being and Becoming Human: What Does Evolutionary Anthropology Contribute to Theology?', *Year of Reason Lecture* (Faith, Reason, Service series). Saint Martin's University, WA, March 28–30, 2017.
- 'The Challenge of *Laudato Si's* Theological Anthropology', 2016 Visiting Scholar in Catholic Thought, Benedictine University, Lisle, Illinois, November 1–3, 2016.
- 'Windows into Human Evolution: Tracing Our Shared Deep History', 2016 Visiting Scholar in Catholic Thought, Benedictine University, Lisle, Illinois, November 1–3, 2016.
- 'Tracing Our Shared Deep History: Evolutionary Anthropology and Theo-Drama'. *On Knowing Humanity* Lecture Series, Eastern University, October 28, 2016.
- 'In Praise of Creatures: Pope Francis' Message of Hope for a Fragile Earth'. Carey Baptist College, January 7, 2016.
- 'The Theological Tapestry of *Laudato Si'*: A Franciscan Vision for a New Earth'. Presidential Lecture. Assumption College, October 19, 2015.
- '*Laudato Si'*: A Call to Ecological Conversion'. Bellarmine University, October 7, 2015.
- 'Christ in All Things: A Call for Eco-Justice'. Milleret House, Assumption Religious, Kensington, London, July 21, 2015.
- 'In Adam All Die? Questions at the Boundary of Niche Construction, Community Evolution and Original Sin'. Leuphana Universität Lüneburg, May 15, 2015.
- 'Evolution, Humans and Other Animals: Engaging Theology and Anthropology'. Columbia Theological Seminary, April 15, 2015.

- 'Evolution, Humans and Other Animals: Questions at the Interface'. Martineau Public Lectures at Hobard and Launceston campuses, University of Tasmania, Australia, March 16–17, 2015.
- 'Evolution, Humans and Other Animals'. Public Lecture, Winter Park Institute, Rollins College, October 23, 2014.
- 'Evolution, Humans and Other Animals: Theology and Anthropology in Dialogue'. Saturday Scholar lecture, Notre Dame, October 11, 2014.
- 'Re-Imaging the Image of God: Human Nature, Evolution and Other Animals'. William Witherspoon Endowed Lecture, Center of Theological Inquiry, Princeton, May 8, 2013.
- 'Christ and Evolution as Theodrama'. William Shannon Chair Public Lecture in Catholic Studies, March 21, 2013.
- 'Human Uniqueness Reconsidered: Human Evolution and the Image of God.' Albertus Magnus Society Lecture, Dominican University, Chicago, November 15, 2012.
- 'Christ and Ecology: Deep Incarnation'. Chestnut Hill College, Institute for Religion and Science, October 25, 2012.
- Symposiast. Symposium on Spiritual Progress, Philadelphia, October 15–17, 2012, organized by Center of Theological Inquiry and sponsored by the John Templeton Foundation in honor of the centenary of the birth of Sir John Templeton.
- 'Christ and Evolution' and 'Deep Incarnation'. Cosmos and Creation Lectures, Loyola College, Maryland, June 8–10, 2012.
- 'Reimaging the Image of God'. Goshen College Lectures in Science and Religion, March 23–25, 2012.
- 'Christ and Evolution: A Drama of Wisdom? Boyle Lecture (New Series), St Mary, Bow, London, January 31, 2012.
- 'Christ and Evolution', Leicester Theological Society, Leicester, January 30, 2012.
- 'A Case for Collective Conscience: The Moral Challenge of Climate Change'. Raymond Zerby Lecture in Contemporary Religious Thought, Bates College, USA, November 30, 2011.
- 'Christ and Evolution: A Dramatic Interrogation'. Science for Ministry Lecture, Princeton Theological Seminary, September 22, 2010.
- 'Beyond Separation or Synthesis: Christ and Evolution as Theodrama'. Faraday Institute for Science and Religion, Cambridge University, February 17, 2009.
- 'Beyond Separation or Synthesis: Christ and Evolution as Theodrama'. Part of lecture series on Darwin and Evolution. Regent's Park College, Oxford Centre for Christianity and Culture, February 10, 2009.
- 'Genetic Futures and Our Search for Wisdom'. Public Lecture. Fr. Maddon Hall, St Michael's College, Toronto, September 15, 2008.
- 'Creation and Sustainability: Genesis, Romans and RCST.' Keynote address. *God In The World: Theological Reflections On Livesimply And Catholic Social Teaching*, Roehampton University, CAFOD/PROGRESSIO Public Conference, September 6, 2008.
- 'What is the Future of the Human? A Theological Interrogation of the Posthuman Perspective'. Public lecture. Teloglion Foundation of Art, Aristotle University of Thessaloniki, May 5, 2008.
- 'Christology and Evolution'. Public lecture, Lincoln Institute, Manchester University, February 4, 2008.
- 'Seeking Wisdom as Virtue for an Ethics of Genetics'. Public Lecture. Bioethics Series: *Practical Ethics: Life, Law and Environment*, York University, May 25, 2007.
- 'Recovering Practical Wisdom as Virtue for an Ethic of Genetics'. Liverpool Hope University, Theological Association, December 7, 2006.
- Study Day. *Sharing God's Planet*. St. Paul's Institute for 21st Century Ethics, London, November 24, 2006.

- 'Ecology, Wisdom and Beauty in Bulgakov, von Balthasar and Aquinas'. Holy Wisdom Study day, St Theosevia Centre, Oxford, April 2005.
- 'Genetic Interventions in Nature: Perspectives from a Christian Ethic of Wisdom'. Harris Manchester Lecture, Oxford University, July 22, 2004.
- 'Fabricated or Fabulous Humans?' *Genetics and the Christian Wisdom Tradition*, St Mary's University, Halifax, Canada, November 6, 2003.
- 'Wisdom, Ethics, and Human Genetics'. Portsmouth University, March 19, 2003.
- 'Living in the Sabbath: An Ecological Theology' and 'Earth, Air, Fire, Water, God'. Newcastle University, March 7, 2003.
- 'Navigating the Maze: Biology and Animal Ethics'. Science and Religion Forum, Edinburgh University, February 25, 2003.
- 'A Theology of Wisdom for a Biological Age'. Nottingham Theological Society, May/June 2002.
- 'Wisdom and The New Genetics'. Honan Lecture Series, University of Cork, March 22, 2002.
- 'Environmental Ethics and the New Ecology'. Leeds University, January 15, 2002.
- 'Pros and Cons of Genetically Modified Food: An Open Debate'. Royal Society for the Encouragement of Arts, Manufacture and Commerce, Reaseheath College, March 28, 2000.
- 'Genetic Engineering for a New Earth?' Friends of the Gardens Lecture Series, Ness Botanic Gardens, March 5, 2000.
- 'Genetically Modified Theology: The Religious Dimension of Public Concern over Agricultural Biotechnology'. Joint lecture with Bronislaw Szerszynski. *Colloquium on Genetic Engineering: Resources in the Christian Tradition*, sponsored by the Christendom Trust, London, January 8, 2000.
- 'Theology and Biotechnology: Implications for a New Science'. Centre for the Study of Theology, Essex University, May 8, 1998.
- 'Playing God? Environmental and Theological Issues in the New Biotechnology'. Lent Lecture Series on Issues in Church and State, Gloucester Cathedral, March 26, 1998.
- 'Theology and Biotechnology: An Introduction'. Guest Lecture for Open Day and Book Launch, St. Deiniol's Library, Hawarden, January 31, 1998.
- 'Ecotheology'. Guest lecture. Christian Ecology Link, Annual Conference, November 20–22, 1992.

POPULAR TALKS/RETREATS

- Pope Francis and *Laudato Si* Two-day course (three lectures). Gladstone's residential library, Hawarden, Wales, July 18–19, 2016.
- Pope Francis: *Laudato Si*. Lecture and workshop for Religious Life Institute, London, July 16, 2016.
- Pope Francis: *Laudato Si*. St Beuno's Centre for Ignatian Spirituality, North Wales, Lead retreat, July 11–14, 2016.
- 'Commencement Address: 2016 Graduation', Trinity School at Greenlawn, South Bend, IN, June 11, 2016.
- 'Christ and Ecology', Canton Club, Notre Dame Alumni Association, April 21, 2016.
- Pope Francis: *Laudato Si*. Talk and day retreat, Assumption Religious Sisters, London, July 24, 2015.
- 'Factory Farming Through a Different Lens'. Contribution to *Discerning a Catholic Response to Factory Farming* for the Roman Catholic US Bishops Annual Convention, Baltimore, November 13, 2013. Other panelists: John Berkman, Charlie Camoscy, Mary Eberstadt, Susan Kopp, Christine Gutleben (Humane Society). Eight Bishops attended. Sponsored by Humane Society of the United States.
- Contribution of interview to film on science and theology, *Closer to Truth: Consciousness, Cosmos God*, edited by Robert Kuhn, filmed in Copenhagen August 2011 and televised in USA, see <http://cope.colostate.edu/1ois/cla/Closer-Science-and-Religion.wmv>.

Numerous popular talks, addresses, and assisted in one retreat at Launde Abbey for local parish communities and supporters of CAFOD. Themes on environmental justice, theology of creation, Roman Catholic social teaching on environmental issues, human flourishing during secondment with CAFOD, July 2009–July 2010.

Two seminar papers on Creation for CAFOD representation at Charismatic Renewal Conference, Ilfracombe, April 15–18, 2009.

‘A Recovery of Practical Wisdom as Virtue for an Ethics of Genetics.’ St Albans Diocesan Clergy Study Day, February 7, 2009.

‘Roman Catholic Social Teaching and Environmental Justice’. CAFOD staff training day, November 20, 2008.

‘Sustainability from a Christian Perspective’. Day workshop. CAFOD, London, Brixton, May 12, 2008.

‘Paradise Lost? Scientific and Religious Perspectives on the Ecological Crisis’. Panelist (one of four). BA Festival of Science, City Programme, York University, September 11, 2007.

Keynote speaker, *Wisdom for the Earth*. Joint conference: Quiet Garden Movement and Centre for Religion and the Biosciences, Waltham Place, July 7, 2007, as part of *Green Grace* lecture series.

‘The Big Issues, What Can the Church Do?’ Lent Talks for session *Playing God? The Promise and Threat of Biotechnology*, Ellesmere Deanery, Shropshire, March 13, 2007.

Interview for Encounter programme, by Gary Bryson, for Australian Broadcasting Corporation (ABC) for programme on Virtue Ethics, October 21, 2006.

‘Seeking Wisdom and Finding Beauty/Wonder’. Keynote address. Bowden Deanery Chapter Meeting: *Environmental Issues*, September 18, 2006.

‘Seeking Wisdom and Finding Beauty/Wonder in the Context of Climate Change’. Au Sable Institute, USA, July 26, 2006.

‘Finding Wonder, Seeking Wisdom: Reflections at the Boundary of Science and Religion’. Catholic People’s Week: Dora Turbin Lecture, October 29, 2005.

‘In the Beginning: Reflections on the Origins of Life’. Sermon. Nuffield College, Oxford, February 2005.

‘A Banquet for All?’ Guest lecture. Catholic Earthcare Australia, Sydney, January 20, 2004.

‘On Wisdom and Prudence’. Contributor to Dean’s Breakfast talks, 2003.

‘Man Come of Age? Theology in Ecological Perspective.’ Guest sermon. Mansfield College, Oxford, November 26, 2003.

Two lectures on science and religion. Roman Catholic People’s Week, Penmaenmawr, August 23–26, 2003.

‘Living in the Sabbath: A Christian Response to the Environment’. Celebrating the Environment, Liverpool Cathedral, June 6, 2003.

Series of talks on theology/ethics of genetic engineering for the Othena Ecumenical Christian Community, Burton Bradstock, September 20–23, 1999.

‘A Bunch of Genes’. Interview for Program with National Australian Radio, presented and directed by Wendy Barnaby, summer 1999. Other speakers: Professor Stephen Rose and Sir Maurice Wilkins, with extracts from Professor James Watson, Sir Michael Swan, and Professor Francis Crick.

Short guest sermon and seminar. Lenten Series on Christianity and the Environment, St. Mark’s Anglican Church, Broomfield, Sheffield, March 7, 1999.

Interview for *Radio 4* program ‘Something Understood’, presented by Peter Hobday, and produced by Beverley McAinsh on ‘Wisdom and Knowledge’, August 1996.

Reflection weekend, ‘Sophia: Seeking Wisdom’, series of short talks and meditations entitled ‘Wisdom in Iconography’, ‘Sophiology in Russian Orthodoxy’, ‘Wisdom in the Old Testament’, ‘Wisdom in the New Testament’, and ‘Wisdom as the Divine Feminine’, Turvey Abbey, July 19–21, 1996.

AWARDS AND HONORS

- Elected Honorary Professor in Theology and Science, Durham University, UK, October 2012–15; 2015–18.
The Wisdom of the Liminal: Evolution and Other Animals in Human Becoming. Grand Rapids: Eerdmans, 2014.
Honorable Mention: B 21 Faith and Science, 2015 Catholic Press Association Book Awards.
- Nominated and selected for various biographical collections, including, for example, Who's Who in Catholic Public Life, *Great Women of the 21st Century*, *Woman of the Year*, 2006.
- Creation Through Wisdom nominated for the 2007 Louisville Grawemeyer Award in Religion, November 2005.
- Ethics of Nature and Re-Ordering Nature selected for Outstanding Books in Science and Religion series in 2004 and 2005, John Templeton Foundation.
- Elected Fellow of the Royal Society of Arts (FRSA) 2004–
- Elected St Deiniol's Library Honorary Fellow, 2004– (Became Gladstone's Library).
- Theology and Biotechnology nominated for the 1998 Templeton Prize for Outstanding Books in Theology and the Natural Sciences.
- Award winner for 1997 John Templeton Exemplary Essay prize in Humility Theology in the category of theology and the natural sciences for article, 'Genetic Engineering for the Environment: Ethical Implications of the Biotechnology Revolution', *The Heythrop Journal* (1995).

AFFILIATIONS

- American Association of Religion (AAR)
- Catholic Theological Society of America (CTSA). Science and Religion Topic Committee 2012-2015.
- Catholic Theological Society of Great Britain (CTA), Convener Theology and Science Interest Group, 2014–15.
- Science and Religion Forum (SRF) Chair, 2003–6.
- Founding Fellow: International Society for Science and Religion (ISSR) 2002-
- European Forum for the Study of Religion and Environment (EFSRE). Chair, 2011–present
- European Society for the Study of Science and Theology (ESSSAT)
- Association of Teachers in Moral Theology (ATMT)
- Society for Christian Ethics (SCE)
- Society for the Study of Christian Ethics (SSCE)
- Society for the Study of Theology (SST)

PERSONAL

- Married to Henry Paul Curtis. Two children: Sara Elisabeth Drummond-Curtis, born 12/11/00; Mair Clare Drummond-Curtis, born 06/12/05.
- Hobbies: Hill walking, cycling, swimming, and theatre.
- Eucharistic minister (EMHC) and reader (Lector) at local Roman Catholic Parish church in Granger.

APPENDIX – SCIENTIFIC ACADEMIC PROFILE AND RESEARCH PUBLICATIONS

Note: teaching responsibilities focused on undergraduate plant physiology courses at Cambridge University (Demonstrator) and Durham University. Details not listed here.

PAPERS INVITED AT SYMPOSIA AND CONFERENCES (SCIENCE)

- 'Sulphate regulation in pea plants'. Society for Experimental Biology, Southampton, January 1986.
- 'A new model for the regulation of nitrate uptake in plants through a substrate cycling mechanism'. International Symposium on Nitrate Nutrition in Plants, University of Groningen, April 1985.
- 'The regulation of ammonium influx using methylamine' (poster paper). International Symposium on Nitrate Nutrition in Plants, Prague, August 1983.
- 'The regulation of nitrate influx, pump and leak or $\text{NO}_3^-/\text{NO}_3^-$ exchange?' (poster paper). International Conference on Membrane Regulation in Plants, Prague, August 1983.
- 'The use of chlorate as an analogue for nitrate in Barley plants'. American Society of Plant Physiology, Quebec, June 1982.
- 'Nitrate uptake in plants'. Canadian Society of Plant Physiology, Victoria, February 1981.

INVITED LECTURES (SCIENCE)

- Professor W. Cram, Botany Department, Newcastle University, 1986.
- Professor E. Jacobsen, Genetics Department, University of Groningen, 1985.
- Baltic Sea Environmental Research Laboratories, Sweden, 1984.
- Professors J.R. Thayer & R. Huffaker, Microbiology Department, University of California – Davis, 1982.

CONSULTANCY AND COLLABORATION WITH OTHER SCIENTIFIC RESEARCH GROUPS

- Professor W. Cram, Botany Department, Newcastle University, 1986.
- Professor E. Jacobsen, Genetics Department, University of Groningen, 1985.
- Baltic Sea Environmental Research Laboratories, Sweden, 1984.
- Professors J.R. Thayer & R. Huffaker, Microbiology Department, University of California – Davis, 1982.

SCIENTIFIC PUBLICATIONS

Note: All publications were in refereed journals unless otherwise stated.

The following were written from research at *Durham University*:

- 'The regulation of sulphate uptake following growth of *Pisum sativum* L. seedlings in S nutrient limiting conditions. Interaction between nitrate and sulphate transport. *Plant Science* 50 (1987): 27–35.
- With P.G. Gates, 'A novel technique for the investigation of anion transport in cells and tissues using a fluorescent probe'. *Plant Cell and Environment* 10 (1987): 221–7.
- Review: 'Biochemical and physiological aspects of nitrate uptake and its regulation'. In *Nitrogen in Agricultural Science*, edited by Y.P. Abrol. New Delhi: Nark Associated Publishing Co., 1986 (by invitation).
- 'Some regulatory aspects of ^{14}C Methylamine influx into *Pisum sativum* L. Feltham First seedlings'. *Planta* 169.8 (1986): 8–15.
- 'Short communication A comparison of regulatory effects on chloride on nitrate uptake, and nitrate on chloride uptake into *Pisum sativum* L. cv Feltham First Seedlings'. *Physiologia Plantarum* 66 (1986): 115–21.
- 'Nitrate uptake into *Pisum sativum* L. cv Feltham First seedlings: commonality with nitrate uptake into *Chara corallina* and *Hordeum vulgare* through a substrate cycling model'. *Plant, Cell and Environment* 9 (1986): 41–8.
- 'A substrate cycling model for nitrate uptake by *Pisum sativum* L. seedlings - a key to sensitivity of response of net flux to substrate and effectors?'. *Plant and Soil* 91 (1986): 307–11.
- With E. Jacobsen. 'Characteristics of $^{36}\text{ClO}_3^- / ^{36}\text{Cl}^-$ influx into nitrate deficient mutant E1 *Pisum sativum* seedlings. Evidence for restricted induction by nitrate compared with wildtype'. *Plant Science* 46 (1986): 169–73.

With N.J. Chaffey. 'Characteristics of nitrate uptake into seedlings of pea (*Pisum sativum* L. var Feltham First) 1. Changes in net uptake following inoculation with Rhizobium and growth in low nitrate concentrations'. *Plant Cell and Environment* 8 (1985): 517–23.

The following were written from research at *Cambridge University*:

'Regulation of nitrate uptake into *Chara corallina* cells via NH_4^+ stimulation of NO_3^- efflux'. *Plant Cell and Environment* 8 (1985): 105–10.

'Nitrate transport into *Chara corallina* cells using $^{36}\text{ClO}_3^-$ as an analogue for NO_3^- . 3. Interaction between chloride and nitrate transport processes'. *Journal of Experimental Botany* 35 (1984): 1733–43.

'Nitrate transport into *Chara corallina* cells using $^{36}\text{ClO}_3^-$ as an analogue for NO_3^- . 2. Comparison with ^{14}C Methylamine fluxes at different pH_0 and $\text{NH}_4^+/\text{NO}_3^-$ interactions'. *Journal of Experimental Botany* 35 (1984): 1299–1308.

'Nitrate transport into *Chara corallina* cells using $^{36}\text{ClO}_3^-$ as an analogue for NO_3^- . 1. Interaction between $^{36}\text{ClO}_3^-$ and NO_3^- and characterization of $^{36}\text{ClO}_3^-/\text{NO}_3^-$ influx'. *Journal of Experimental Botany* 35 (1984): 1289–99.

'The apparent induction of nitrate uptake by *Chara corallina* cells following pretreatment with or without nitrate and chlorate'. *Journal of Experimental Botany* 35 (1984): 1182–93.

'Mechanism of nitrate uptake into *Chara corallina* cells. Lack of evidence for obligatory coupling to proton pump and a new $\text{NO}_3^- / \text{NO}_3^-$ exchange model'. *Plant Cell and Environment* 7 (1984): 317–23.

The following were written from research at the *University of British Columbia, Vancouver, Canada*:

With J.R. Thayer. 'Nitrate transport characteristics in *Hordeum vulgare* L seedlings using three different tracer techniques'. *Journal of Experimental Botany* 37 (1986): 429–39.

'Mechanism for $\text{NH}_4^+ / \text{NO}_3^-$ interaction during NO_3^- uptake by barley (*Hordeum vulgare*) plants: stimulation of NO_3^- efflux by NH_4^+ '. *Membrane Transport in Plants* (1984): 392–3.

'Mechanism of NO_3^- uptake into barley (*Hordeum vulgare*): pump and leak or $\text{NO}_3^- / \text{NO}_3^-$ exchange?' In *Membrane Transport in Plants*, edited by W.J. Cram, K. Janacek, R. Rybova, K. Sigler, 390–1. Praha: Academic Press, 1984.

With A.D.M. Glass. 'Compensatory changes in ion uptake in barley seedlings in response to differential root/shoot growth temperature'. *Journal of Experimental Botany* 34 (1983): 1711–19.

With A.D.M. Glass, Y.M. Siddiqi. 'A multichannel micro-computer-based system for continuously measuring and recording ion activities of uptake solutions during ion absorption by roots of intact plants'. *Plant, Cell and Environment* 6 (1983): 247–54.

With A.D.M. Glass. 'Short term studies of nitrate uptake into barley plants (*Hordeum vulgare*) L cv Betzes) using ion-specific electrodes and $^{36}\text{ClO}_3^-$. 2. Regulation of NO_3^- efflux by NH_4^+ '. *Plant Physiology* 73 (1983): 105–10.

With A.D.M. Glass. 'Short term studies of nitrate uptake into barley plants (*Hordeum vulgare*) L cv Betzes) using ion specific electrodes and $^{36}\text{ClO}_3^-$. 1. Control of net uptake by NO_3^- efflux.' *Plant Physiology* 7 (1983): 100–4.

With A.D.M. Glass. 'Studies of nitrate influx into barley roots by the use of $^{36}\text{ClO}_3^-$ as a tracer for nitrate. Interactions with chloride and other ions'. *Canadian Journal of Botany* 60 (1982): 2147–53.

With A.D.M. Glass. 'Nitrate uptake into barley (*Hordeum vulgare*) plants. A new approach using $^{36}\text{ClO}_3^-$ as an analogue for NO_3^- '. *Plant Physiology* 70 (1982): 50–4.

With A.D.M. Glass. 'Mechanisms for Nitrate Uptake into barley seedlings (*Hordeum vulgare*); use of $^{36}\text{ClO}_3^-$ as an analogue for NO_3^- '. *Plant Physiology* 67 S (1981): 131.

'Mechanism for nitrate uptake into barley (*Hordeum vulgare* cv. Fergus) seedlings grown at controlled nitrate concentrations in the nutrient medium'. *Plant Science Letters* 24 (1982): 79–89.

'Rapid Method for the preparation of $^{36}\text{ClO}_3^-$ from $^{36}\text{Cl}^-$ by electrolysis'. *International Journal of Applied Radiation and Isotopes* 32 (1981): 758–9.

The following were written from research at *Reading University and Letcombe Agricultural Research Station (Oxford)*:

With D.T. Clarkson. 'Thermal adaptation of nitrate transport and assimilation in roots? In *Nitrogen as an Ecological Factor*, edited by J.A. Lee, S. McNeill, and I.H. Rorison, 1983. The 22nd Symposium of the British Ecological Society, Oxford, 1981. Oxford: Blackwell, 1983.

'Nitrate reduction in barley plants'. Ph.D. Thesis, University of Reading, 1980.

With C.B. Johnson. 'Absence of nitrate reductase activity in San 9789 bleached leaves of barley seedlings (*Hordeum vulgare* Midas)'. *Plant, Cell and Environment* 3 (1980): 303–8.

With D.T. Clarkson and C.B. Johnson. 'The effect of differential root and shoot temperature on the nitrate reductase activity assayed *in vivo* and *in vitro* in roots of *Hordeum vulgare* (barley). Relationship with diurnal changes in malate and sugar'. *Planta* 148 (1981): 455–61.

With D.T. Clarkson and C.B. Johnson. 'Adaptation of nitrate reductase in barley roots to environmental temperature'. *Letcombe Laboratory Annual Report* 51 (1980) (not refereed).

With D.T. Clarkson. 'Nitrate reduction in barley roots'. *Letcombe laboratory Annual Report* (1979) (not refereed).

With D.T. Clarkson and C.B. Johnson. 'The effect of shoot removal and malate on the activity of nitrate reductase assayed *in vivo* in barley roots (*Hordeum vulgare* cv Midas)'. *Plant Physiology* 64 (1979): 660–2.