

Curriculum vitae: Christopher Charles Benedict Southgate

Education: BA (Cantab) 1974, MA PhD (Biochemistry, Cantab) 1978, Cert Theol (Exon) 1989, GMC (Church of England) (DipTh equivalent) 1991.

Academic Appointments:

Research Associate, Dept of Biochemistry, University of North Carolina 1978-9

Research Officer, Pharmaceutical Chemistry, Bath University 1979-81

University of Exeter: Lecturer on annual contracts 1993-2007

Director of Modular Studies 1997-2001

Research Fellow (0.5) 2007-10

Lecturer (0.2) 2010-12

Senior Lecturer (0.2) 2012-16

Associate Professor (0.2) 2016-

Also at South West Ministry Training Course: Staff Tutor 2001; Dean of Studies 2005; Vice-Principal 2010; Principal 2013-17.

A. Research

Research Field: 1) Exploration of the role of semiosis in the origin of life. A theoretical framework for this was spelled out in Southgate and Robinson (2010) and Robinson and Southgate (2009). Initial computer modeling results providing proof of concept followed in Lui et al (2010). Further criteria for detecting semiosis at its most basic have been devised. Preliminary experimental results in a real molecule, a ribozyme from *Tetrahymena*, have shown that a version of this molecule has this property of 'interpreting' its environment, and furthermore that the property is evolvable (Lehman et al, 2014). Our contention is that this represents a whole new research programme in origin of life research. This programme will be taken forward in a new grant from the John Templeton Foundation to look at the potential interaction of interpretation with cooperation in proto-life.

2) My main theological focus in recent years has been the problem of suffering in evolution, on which I have now published a monograph, three peer-reviewed articles, a book chapter, and a chapter for the relevant *Cambridge Companion*. My work on the so-called 'only-way' argument remains a focus for debate.

3) This work on theodicy has led me into the study of divine glory, on which I gave the Sarum Lectures in 2014 and on which I have already placed two peer-reviewed articles. This combines my interest in theology that takes the science of the natural world seriously, with my interest in the contribution of poets and mystics to a contemplative theology that seeks to 'bear reality' (to paraphrase Eliot). I have a contract for a monograph on this from Cambridge University Press (pubn date 2018). This focus on suffering finds practical application in the project 'How can congregations be helped in times of tragedy?' (www.tragedyandcongregations.org.uk)

4) Having published on the relationship between T.S. Eliot and Emily Hale, I plan to visit Princeton in 2020 as soon as the poet's letters to Hale are released.

Grants: The grants on which I have been a principal investigator since 2007 are three from the Science and Transcendence Advanced Research Series. 150 scholars attended the initial conferences in Mexico., and 20 groups gained first-phase funding. Mine was one of only two groups in the world to win all three rounds of funding (\$20,000 US in June 2007; \$100,000 in December 2007; \$200,000 in December 2008). This work culminated in our presentation to the International Society for the Study of the Origin of Life in Japan in 2014.

I was a named participant in the two AHRC projects 'Eating and Believing' (£151,000) and 'Uses of the Bible in Environmental Ethics' (£196,000).

I am PI on the projects 'How can congregations be helped in times of tragedy' (£155000 for Templeton World Charities Foundation, Inc.) and 'Cooperation and Interpretation in the Origin of Life' (\$630000 from the John Templeton Foundation).

The University of Exeter has also been awarded one of the 'St Andrews Fellowships' under a two-year post-doctoral scheme to promote scholarship in science and religion.

B. Teaching

Modules presently taught:

THE1077 God, Humanity and the Cosmos: An Introduction to the Science-religion Debate

THE2152/3152 Evolution, God and Gaia

Recent modules

THE2143/3143 God and the Physicists

THEM102 The Human Animal

I was also involved in teaching the innovative bioethics module convened to respond to the requirement for ethics in the biology curriculum.

Recent nominations for Student Guild teaching awards: Best Lecturer (x2), Best Supervisor, Innovative Teaching, Research-Inspired Teaching.

My seminar-leading has been particularly commended in student feedback and I have used that to help graduate students on their training to teach programme organized by the LTHE group at Exeter.

Grants for teaching purposes

1996 Templeton Foundation Award for a course in the area of Science and Religion,
1997 Grant from JTF to develop a textbook in science and religion,
1999 Templeton Foundation Course Development Award,
2015 'Seedcorn' grant from Durham University to lead a project for the development of science and religion teaching in Anglican theological education.

External Examining:

a. taught courses: Oxford University – MSt in Science and Religion 2005-7. Edinburgh University MSc in Science and Religion 2013-16; London School of Theology/Middlesex University BA 2010-14; South East Institute for Theological Education/Canterbury Christ Church University DipTh/FdA 2015-16.

b. research degrees: PhD – Liverpool Hope University; Griffiths University (Australia); Oxford Brookes University, Durham University, University of Edinburgh; MLitt – Cambridge University.

c. assessment of courses at other universities: External Assessor for proposed Masters' programmes at University College Chester, Edinburgh University. Re-validation of the West of England Ministry Training Course for the University of Gloucestershire.

Postgraduate Personnel: I have supervised four PhD's to completion, one MPhil, one MbyRes.

I recruited, and directed the work of, a one-year postdoc computer modeller on the STARS grant, Dr L.T. Lui.

Two of my research students have won College Scholarships to come and work with me, one of them from Canada. I am also co-supervising a research degree with the Director of Creative Writing in the Dept of English.

External recognition:

Hawthornden Fellowship awarded 1999.

Trustee, Cumberland Lodge, Windsor 2001-9 and chair of the Academic Consultative Committee.

Visiting Scholar, Graduate Theological Union, Berkeley 2005

Reuters' Visiting Fellow, St John's University Minnesota 2013

Sarum Lecturer, Salisbury Cathedral, 2014.

Elected member of the International Society for Science and Religion 2007.

Member of the Science and Religion Forum (on Committee since 2003), and Christians in Science.

Six interviews on Science and Theology issues with Robert Kuhn were filmed for PBS in 2011 (available on closertotruth.com).

Keynotes etc: 2000 presented seminar in the Senior Seminar series, Ian Ramsey Centre, Oxford.

2002, 2003, 2009, 2011 Invited Speaker, Science and Religion Forum Annual Conference.

2005 Invited contributor, high-level Vatican Observatory/CTNS Conference on Theodicy, Castelgandolfo, Italy. Preached on science and faith in Quincentenary Series at Christ's College, Cambridge.

2006 Keynote speaker at the International Congress on Science and Religion, Tehran, Iran.

2007 Opening speaker at Colloquium on 'Vegetarianism as Spiritual Choice', University of Exeter. Invited contributor, Colloquium on Animal Theology, St Deiniol's Library. Presented seminar to the Theology Dept at Durham University.

2008 Respondent to three reviewers of my monograph at the Graduate Theological Union at Berkeley. Accepted paper, European Society for the Study of Science and Theology, Sigtuna, Sweden. Invited paper, Conference on Environmental Ethics, Chania, Crete. Guest preacher at St John's College, Cambridge. Presented paper at the Society of New Testament Studies.

2009 Keynote addresses at the International Society for Science and Religion, Cambridge; Laidlaw College, New Zealand; Copenhagen University; the Society of St Alban and St Sergius, and the American Academy of Religion, Montreal. Science and Religion Discussion Group at Christ's College, Cambridge.

2010 Poster at the American Association for the Advancement of Science. Keynote addresses to the Society of Ordained Scientists and Christians in Science. Invited response at the American Academy of Religion, Atlanta.

2011 Invited contributor, high-level Templeton Colloquium on Deep Incarnation, Elsinore, Denmark. Invited speaker at the Society of Biblical Literature, San Francisco.

2012 Invited respondent and presenter of accepted paper, ESSSAT, Tartu, Estonia.

2013 Guest Preacher, Westminster Abbey. Invited contributor, colloquium on the Incarnation at Copenhagen University. Invited keynote, Christian Faith and the Earth Conference, Stellenbosch, South Africa. Invited seminar presenter, Faraday Institute, Cambridge. Accepted paper at the

'Power of the Word' conference on poetry and prayer, Senate House, London.

2014 Accepted paper, ESSSAT, Assisi. Co-authored paper to the International Society of the Study of the Origin of Life, Nara, Japan. Keynote at the Robert Grosseteste Conference at Grosseteste University College, Lincoln. Chaired session for the International Society for Science and Religion. Presided at session of the American Academy of Religion.

2015 Seminar, King's College, London (for the 50th anniversary of the death of TS Eliot). Invited paper at the International Society for Science and Religion, Vienna. Accepted paper for the ISSR meeting in Atlanta.

2016 Invited paper at the Glory of God conference, Durham University. Accepted paper on glory for the American Academy of Religion, also a joint presentation there on pedagogy in science and religion. Gowland Lecture to the Science and Religion Forum on science and poetry. Invited seminar, Catholic University of Lyon.

2017 Invited seminar, Centre for Catholic Studies, Durham University, Invited lecture to Truro Theological Society.

2018 Invited keynote, European Society for the Study of Science and Theology, Lyon, France. The September 2018 issue of the journal *Zygon* will be devoted to my work.

Consultative work:

External assessor, Council for the Humanities of Netherlands Organization for Scientific Research. Assessment of a senior scholar for the Government of South Africa. Member of Advisory Panel, Science, Technology and Religion Group, American Academy of Religion. Reviewed manuscripts for Oxford University Press, Cambridge University Press, Routledge, Bloomsbury, and journals including *Zygon*, *Astrobiology*, *International Journal of Molecular Science*, *Neotestamentica*. Grant assessor for the John Templeton Foundation, the Templeton World Charities Foundation, and the Faraday Institute, Cambridge. Consultant on ancient texts for a major public sculpture project by Peter Randall-Page RA.

Editorial boards:

Editor *Reviews in Science and Religion* 2005-10, Editorial Board *Ecotheology* and *Zygon*.

Conference Organiser:

2004 Organiser, Science and Religion Forum Annual Conference; 'Reweaving the Rainbow' – poetry and science event in the Annual Festival of the British Association for the Advancement of Science; OxfordPoets 2004 tour for Carcanet Press.

2008 Organiser of an invited colloquium on 'Interpretation and the Origin of Life', Berkeley, California.

2009 Convenor of a panel at the American Academy of Religion;

2010 Organiser of a workshop for early-career scholars (with senior mentors in the field), Berkeley, California.

2011 Organiser of an invited colloquium on semiotics and faith, Cambridge.

Visiting lectures to taught courses:

2000 Faculty Member, CTNS-Templeton Science and Religion Workshop, St Anne's College, Oxford.

2000, 2002, co-presented Summer School on Green Faith, Sarum College, Salisbury

I have also taught sessions in two bioethics workshops for biology lecturers organized through the High Education Academy.

I have participated in a series of sessions for schoolteachers on issues in science and religion and environmental ethics (part of the AHRC-sponsored follow-up to 'Uses of the Bible')

Also lectures to classes at Princeton Theological Seminary, Wayne State University, New York University, Columbia University, Newman University College, Southern Theological Education and Training Scheme, Faraday Institute Summer School, Cambridge.

Montgomery Trust lecturer since 2006. This and other invitations have led to wide dissemination of my research outside strictly academic circles, e.g. on the origin of life to 'Christians in Science', Bristol group.

Host to Professor Holmes Rolston III on the Exeter leg of his Templeton Prize tour of the UK.

Publications:

Monographs

Southgate, Christopher, *Glory and Longing: theology in a suffering world* Cambridge: Cambridge University Press – under contract, forthcoming 2018.

Horrell, David, Hunt, Cheryl, and Southgate, Christopher, *Greening Paul: re-reading the Apostle in a age of ecological crisis* Waco, Tx.: Baylor University Press, 2010 [co-authored monograph]

Southgate, Christopher, *The Groaning of Creation: God, Evolution and the Problem of Evil* Louisville: Westminster John Knox Press, 2008.

Southgate, Christopher, *A Love and its Sounding: explorations of TS Eliot* Salzburg: University of Salzburg Press, 1997.

Edited books

Southgate, Christopher (ed.) *God, Humanity and the Cosmos: a textbook in science and religion* London: T&T Clark/Continuum 3rd edn 2011, previous edns 1999, 2005.

Horrell, David, Hunt, Cheryl, Southgate, Christopher and Stavrakopoulou, Francesca (eds), *Ecological Hermeneutics* London and New York: T&T Clark/Continuum, 2010.

Chapters in books

Southgate, Christopher, 'Free-Process and Only-Way Arguments' in *Evolution and Theology* ed. Stanley P. Rosenberg, Grand Rapids, Mi.: Brazos Press, forthcoming.

Southgate, Christopher, 'Cosmic Evolution and Evil' in *The Cambridge Companion to the Problem of Evil* ed. Paul Moser and Chad Meister Cambridge: Cambridge University Press, 2017.

Southgate, Christopher, 'Science and Evil' in *The History of Evil, Vol. 5*, ed. Victoria Harrison, Durham: Acumen Press, forthcoming.

Southgate, Christopher, 'The Orientation of Longing' in *Issues in Science and Theology" Do Emotions Shape the World? (Proceedings of ESSSAT Conference, Assisi, 2014)* ed. Dirk Evers et al (Dordrecht: Springer, 2016), 73-86.

Southgate, Christopher, 'Depth, Sign and Destiny' in *Incarnation: on the scope and depth of Christology* ed. Niels Gregersen Minneapolis: Fortress, 2015, 203-23.

Southgate, Christopher, 'Does God's care make any difference? Theological reflection on the suffering of non-human creatures' in *Christian Faith and the Earth: Current Paths and Emerging Horizons in Ecotheology* ed. Ernst Conradie, Sigurd Bergmann, Celia Deane-Drummond and Denis Edwards, London: Bloomsbury, 2014, 97-114.

Southgate, Christopher, 'Ecology and Natural Theology' in *The Oxford Handbook of Natural Theology* ed. Russell ReManning and Fraser Watts, Oxford: Oxford University Press, 2013, 459-74.

Southgate, Christopher, 'Looking East at Sunset' in *Inspiration in Science and Religion* ed. Michael Fuller, Newcastle-upon-Tyne: Cambridge Scholars Press, 2012, 43-52.

Southgate, Christopher and Eaton, Heather, 'Science and Theology Discourse' in *Creation and Salvation, Vol. 2* ed. Ernst Conradie, Zurich and Munster: LIT Verlag, 173-214.

Robinson, Andrew and Southgate, Christopher, 'Semiotics, evolution and theology' in *Darwinism and natural theology: evolving perspectives* ed. Andrew Robinson, Newcastle-upon-Tyne: Cambridge Scholars Press, 2012, 126-44.

Southgate, Christopher, 'Parasites and Pangloss' in *Creation, Environment and Ethics* ed. Rachel Humphreys and Sophie Vlacos, Newcastle-upon-Tyne: Cambridge Scholars Press, 2011, 61-74.

Southgate, Christopher, 'A Look to the Future' in *God, Humanity and the Cosmos* ed. Christopher Southgate London: T&T Clark/Continuum, 2011, 441-8.

Southgate, Christopher, 'The new atheism' in *God, Humanity and the Cosmos* ed. Christopher Southgate London: T&T Clark/Continuum, 2011, 315-28.

Southgate, Christopher, 'A test case – divine action' in *God, Humanity and the Cosmos* ed. Christopher Southgate London: T&T Clark/Continuum, 2011, 274-311.

Southgate, Christopher and Michael Negus, 'Some resources for theological thinking on God and the world from outside the Christian tradition' in *God, Humanity and the Cosmos* ed. Christopher Southgate London: T&T Clark/Continuum, 2011, 255-72.

Southgate, Christopher, 'Some resources for Christian theology in an ecological age' in *God, Humanity and the Cosmos* ed. Christopher Southgate London: T&T Clark/Continuum, 2011, 225-53.

Andrew Robinson, Christopher Southgate and Michael Negus, 'Theology and Evolutionary Biology' in *God, Humanity and the Cosmos* ed. Christopher Southgate London: T&T Clark/Continuum, 2011, 162-202.

Christopher Southgate and Michael Poole, 'Introduction' in *God, Humanity and the Cosmos* ed. Christopher Southgate London: T&T Clark/Continuum, 2011, 3-42.

Christopher Southgate, '*Religion, Science and Naturalism* – introductory essay' in *A Companion to the ISSR Library of Science and Religion* Cambridge: International Society for Science and Religion, 2011, 53-4.

Christopher Southgate, '*The Work of Love* – introductory essay' in *A Companion to the ISSR Library of Science and Religion* Cambridge: International Society for Science and Religion, 2011, 147-8.

Andrew Robinson and Christopher Southgate, 'Intelligent Design and the Origin of Life' in *Intelligent Faith* ed. John Quenby and John Macdonal Smith, O Books, 2009.

Southgate, Christopher, 'The new days of Noah?' in *Creaturely Theology* ed. Celia Deane-Drummond and David Clough, London: SCM Press, 2009, 249-65.

Southgate, Christopher, 'Protological and eschatological vegetarianism' in *Vegetarianism as a Spiritual Choice* ed. Rachel Muers and David Grumett London and New York: T&T Clark/Continuum, 2008, 247-65.

Southgate, Christopher, 'Kenosis – divine and human – as a resource in ecological theology' in *Creation's Diversity: Voices from Theology and Science, Issues in Science and Theology 5*, ed. Willem B. Drees, Hubert Meisinger and Taede A. Smedes, London and New York: T&T Clark/Continuum, 2008, 58-77.

Southgate, Christopher, 'Creation as 'very good' and 'groaning in travail: an exploration in evolutionary theodicy' in *The Evolution of Evil* ed. Gaymon Bennett, Martinez Hewlett, Ted Peters and Robert Russell, Gottingen: Vandenhoeck and Ruprecht, 2008, 53-85.

Southgate, Christopher and Robinson, Andrew 'Varieties of Theodicy: An Exploration of Responses to the Problem of Evil based on a Typology of Good-Harm Analyses' in *Physics and Cosmology: Scientific Perspectives on the problem of evil in nature*, ed. Nancey Murphy, Robert J. Russell, and William Stoeger SJ, CTNS and Vatican Observatory: Berkeley, Ca. and Vatican City, 2007, 67-90.

Southgate, Christopher, 'Stewardship and its Competitors' in *Stewardship: An Environmental Handbook* ed. R.J. Berry, Edinburgh: T&T Clark International, 2006, 185-95.

Southgate, Christopher 'From the bison at Niaux to the Kyoto Protocol: a journey in human nature' in *The Evolution of Rationality: Festschrift in honour of J. Wentzel van Huyssteen* ed. F. LeRon Shults, Grand Rapids, Mi. and Cambridge: Eerdmans, 2006, 183-96.

Southgate, Christopher, 'Environmental Ethics and the Science-Religion Debate: A British Perspective on Barbour' in *50 Years in Science and Religion: Ian Barbour and his Legacy* ed. Robert J. Russell, Aldershot: Ashgate, 2004, 239-48.

Southgate, Christopher 'Response' in *Reordering Nature: Theology, Society and the New Genetics*, ed. Bron Szercynski and Celia Deane-Drummond with Robin Grove-White, Edinburgh: T&T Clark Ltd, 2003, pp. 39-42.

Southgate, Christopher, 'Reconsidering Phlebas: Faith in the Life and Work of T.S.Eliot' in *English Literature, Theology and the Curriculum*, ed. Liam Gearon, London: Cassell, 1999, 221-28.

Southgate, Christopher, 'Introduction to Environmental Ethics' in *Bioethics for Scientists* ed. John Bryant *et al.* New York: Wiley, 2002, Ch. 3.

Southgate, Christopher, 'The Use of the Rain-forest as a Test-Case in Environmental Ethics' in *Bioethics for Scientists* ed. John Bryant *et al.* New York: Wiley, 2002, Ch. 4.

Southgate, Christopher, and Aylward, Alex, 'Environmental Ethics: Further Case-Studies' in *Bioethics for Scientists* ed. John Bryant *et al.* New York: Wiley, 2002, Ch. 5.

Papers in journals

Southgate, Christopher, 'Science and Religion in the UK – A Personal View on the Contemporary Scene', *Zygon* 51 (2) 2016.

Southgate, Christopher, 'God's Creation Wild and Violent, and our Care of Other Animals', *Perspectives in Science and Christian Faith*, 67, 245-53 (2015).

Lehman, Niles, Bernhard, Tess, Larson, Brian, Robinson, Andrew, and Southgate, Christopher, 'Empirical demonstration of environmental sensing in catalytic RNA: evolution of interpretive behavior at the origins of life', *BMC Evolutionary Biology* 14 ARTN 248 Dec 4 2014 (online).

Southgate, Christopher, 'Divine Glory in a Darwinian World', *Zygon* 49(4), 784-807, 2014.

Southgate, Christopher, 'Re-reading Genesis, John and Job', *Zygon* 46 (2) 365-90, 2011.

Robinson, Andrew and Southgate, Christopher, 'Incarnation and Semiotics: A Theological and Anthropological Hypothesis: Part II – Semiotics, Anthropology and Religious Transformation' *Theology and Science* 8 (3) 283-302, 2010.

Robinson, Andrew and Southgate, Christopher, 'Incarnation and Semiotics: A Theological and Anthropological Hypothesis: Part I – Incarnation and Peirce's Taxonomy of Signs' *Theology and Science* 8 (3) 265-82, 2010.

Robinson, Andrew, and Southgate, Christopher, 'Broken Symbols? Response to F. LeRon Shults' *Zygon* 45(3) 733-8, 2010.

Robinson, Andrew and Southgate, Christopher, 'Semiotics as a Metaphysical Framework for Christian Theology', *Zygon* 45 (3) 689-712, 2010.

Robinson, Andrew, Southgate, Christopher and Deacon, Terrence, 'Discussion of the Conceptual Basis of Semiotics' *Zygon* 45 (2) 409-18, 2010.

Southgate, Christopher and Robinson, Andrew, 'Interpretation and the Origin of Life', *Zygon* 45 (2) 345-60, 2010.

- Robinson, Andrew and Southgate, Christopher 'Introduction: towards a metaphysics of meaning', *Zygon* 45 (2), 339-44, 2010.
- Lui, Leong Ting, Yang, Zhao, Robinson, Andrew, and Southgate, Christopher, 'Interpretation and the Origin of Life', *Biological Theory* 5 (2) 112-16, 2010.
- Robinson, Andrew and Southgate, Christopher, 'A General Interpretation of Interpretation and its Application to Origin of Life Research', *Biology and Philosophy* 25(2) 163-81, 2009.
- Southgate, Christopher, Hunt, Cherryl, and Horrell, David 'Ascesis and Assisted Migration: responses to the effects of climate change on animal species', *Eur. J. Science and Theology* 4, 99-111, 2009.
- Horrell, David, Hunt, Cherryl, and Southgate, Christopher, 'An Environmental Mantra? Ecological interest in Rom. 8.19-23 and a modest proposal for its narrative interpretation', *Journal of Theological Studies* 59, 546-79, 2008.
- Southgate, Christopher, 'Can God act in the World Science Describes?', *Dialogue* 31 32-36, 2008.
- Horrell, David, Hunt, Cherryl, and Southgate, Christopher, 'Appeals to the Bible in Ecotheology and Environmental Ethics', *Studies in Christian Ethics* 21, 219-38, 2008.
- Southgate, Christopher, 'Not Reading Derrida in Tehran' in *Reviews in Science and Religion* 48,12-15 (2006).
- Southgate, Christopher 'Taking Evolution Seriously' *The Bulletin of the Anglican Society for the Welfare of Animals* Feb 2003.
- Southgate, Christopher, 'God and evolutionary evil: theodicy in the light of Darwinism' *Zygon* 37, 803-24, 2002.
- Southgate, Christopher, 'Time Travel', *Science and Spirit*, 12 (6) 20, 2001.
- Notarianni, Lidia, Oldham, Harriet, Bennett, Peter, Southgate, Christopher and Parfitt, Robert, 'Epoxides from paracetamol: a possible mechanism for paracetamol toxicity', *Adv. Exp. Med. and Biol.* 136, 1077-83, 1982.
- Bennett, Peter, Notarianni, Lidia, Oldham, Harriet, Parfitt, Robert, and Southgate Christopher, 'Metabolic Intermediates of Paracetamol which may explain its Mechanism of Toxicity', *Pharmacology* 75, 60P, 1982.
- Wolfenden, Richard, Andersson, Lars, Cullis, Paul, and Southgate, Christopher, 'Affinity of Amino Acid Side Chains for Solvent Water', *Biochemistry* 20, 849-55, 1981.
- Wolfenden, Richard, Cullis, Paul, and Southgate, Christopher, 'Water, Protein Folding and the Genetic Code', *Science* 206, 575-77, 1979.

Wolfenden, Richard, Andersson, Lars, Cullis, Paul, and Southgate Christopher, 'Transition-State Analog Binding and Enzyme Catalysis in a Watery Environment, *Abstr. Am. Chem. Soc.* 86-88, 1979.

Southgate, Christopher and Dixon, Henry, 'Phosphonomethyl Analogues of Amino-acyl adenylates', *Biochemical Journal* 175, 461-65, 1978.

Editorship of journals

Reviews in Science and Religion 2005-10

Guest editor, *Ecotheology*

Guest editor, *Zygon: journal of religion and science*.

Other Publications

Six interviews on Science and Theology issues with Robert Kuhn were filmed for PBS in 2011 (available on closertotruth.com).

Research through Practice

I am the author of eight collections of poetry, and have won various awards for same including a commendation in the National Poetry Competition. This has led to significant commissions, e.g. to celebrate the 50th anniversary of the NHS in Devon (involving research on the mental health wards at Wonford Hospital), to celebrate the rededication of the chapel of King's College, London by the Archbishop of Canterbury, and to celebrate the 400th anniversary of the King James Bible, involving research at Lambeth Palace and elsewhere. The KJV poem was commissioned by the NIDA institute in collaboration with the American Bible Society, and read at the Abbott Lecture in Westminster Abbey and the International Society of Biblical Literature, King's College London. (The poem was later quoted by Archbishop Rowan Williams in a sermon at the Abbey in the presence of the Queen.)