

Developing Positive Science-Faith Engagement Across the Anglican Communion

EQUIPPING
CHRISTIAN
LEADERSHIP in an
AGE of
SCIENCE

Introduction

The Lambeth Conference brings Anglicans together from around the world to pray, reflect, and dialogue in community. The theme of “God’s Church for God’s world – walking, listening, and witnessing together” invites us to ask how we can respond to the needs of the world. Those needs include matters of climate, poverty, and pandemic recovery. Science is key to addressing those needs, and will be the subject of one of the Lambeth Calls emerging from the Conference.

Equipping Christian Leadership in an Age of Science (ECLAS) has created this guide for Lambeth Conference 2022. It includes resources for bishops and clergy seeking a better relationship with science as they support and listen to the scientists in their diocese and further afield. This guide combines messages and ideas from scientists and theologians as well as senior church leaders and policy specialists. Many of the suggestions have come from conversations with scientists around the world. We hope this guide will help the church – locally, regionally, and globally – to appreciate and celebrate the work of scientists. And we hope, too, it can help scientists know they have the prayerful support of their faith community as they work to serve their neighbours. We know from experience that exploring science together can lead to wonder, awe, and a deeper sense of God’s presence in this world that God has made.

About Equipping Christian Leadership in an Age of Science

Equipping Christian Leadership in an Age of Science has nine years’ experience bringing together senior Church leaders with scientists to foster dialogue and enrich faith perspectives. We are an ecumenical research project based at St John’s College, Durham University with the University of York and the Church of England. ECLAS equips Church leaders and congregations to celebrate science as a gift from God through conferences, funding programmes, policy work, and original research.

<https://www.eclasproject.org/>

About the Anglican Communion Science Commission

The Anglican Communion Science Commission will launch at the Lambeth Conference 2022. Composed of scientists, theologians and church leaders from around the world, the ACSC aims to resource the whole Anglican Communion for courageous and confident spiritual leadership in issues involving science.

Members of the ACSC joined us in a short film which accompanies and informs this resource: [‘How Can the Anglican Communion Support Scientists?’](#) We are particularly grateful to Dr Derrick Aarons, The Most Revd Linda Nicholls, the Rt Revd Emily Onyango, the Rt Revd Dr Renta Nishihara, the Rt Revd Dr Richard Cheetham, and their interviewees Mrs Tameika James Green, Stephanie Furtado, Margaret Nyakeno, Prof Mao Minoura and Dr Nicholas Heavens.



HOW CAN THE ANGLICAN COMMUNION SUPPORT SCIENTISTS?

Watch here: <https://youtu.be/4tNOkdtars>

Why should the Church support scientists?

Scientists are already part of the Church, sitting in pews and preaching in pulpits. Yet many Christian leaders feel unequipped to talk about science as a vocation and a gift from God. This can leave scientists of faith feeling ignored or out of place in the church. It can also prevent them from seeking pastoral care and guidance when working on projects that are difficult or morally troubling.

Pastors need not be experts in science, but they can do important ministry when confident about basic scientific ideas and willing to engage. Discomfort and concerns about training can be addressed through conversations with scientists, theologians, and church leaders already working in this area. This work can empower them to help scientists explore their own beliefs and the teachings of the Church. It can also witness to the world the presence of Christ in Creation and the presence of the Church in the world.

The Rt Revd Dr Richard Cheetham, Bishop of Kingston in the Diocese of Southwark in London, England, co-director of Equipping Christian Leadership in an Age of Science, and member of the Anglican Communion Science Commission, said:

Engaging deeply with science is a vital part of the Church's mission in the 21st century. For that reason, it is very encouraging that science is a major theme of the Lambeth Conference 2022 and will be the subject of one of the Lambeth Calls.

Science has profoundly shaped both our understanding of our lives and the cosmos, and has an enormous impact on how we live -- including issues such as climate change, the pandemic response, artificial intelligence, agriculture, and beyond.

The work of ECLAS over many years has effectively engaged with senior Church leaders to ensure that we are well equipped for science-faith engagement. Having been developed mainly in a UK context with some links elsewhere, ECLAS is now looking to explore how these issues are worked out in different contexts around the world.

The Anglican Communion Science Commission has provided a superb opportunity to build networks around the Anglican Communion to develop this work more widely. These resources are offered in the hope that they will prompt ideas for how to develop science-faith engagement in different contexts around the world.

What follows are some practical examples of how the Church can engage with science and with scientists in their communities and through their worship. We include suggestions from conversations with scientists around the Anglican Communion, and case studies from our own work with churches and senior leaders in the UK.

ECLAS has also contributed to the Lambeth Conference's briefing sheet on science which will inform many of the conversations leading up to the Lambeth Call on science.

For more information about how to support scientists and begin exploring science and theology, visit our website www.eclasproject.org, or get in touch with our team at eclas.admin@durham.ac.uk.

Speaking up

“Sometimes there’s this perceived opposition between science and faith. I think that because we don’t necessarily speak up as a faith community, then we get lumped in with other faith communities that are more vocal about their opposition.

“By not being as vocal about our inclusion and understanding of how God works through us as humans, through our knowledge, science and understanding, then people assume that everyone of faith has these very different visions and values than I have experienced as a member of the Anglican church in Canada.”

Nurse Stephanie Furtado, Canada

There are some branches of Christianity and other faith communities where scientific progress is opposed in some form. There are dangers to this: a risk of misinformation relating to medical care and vaccines; potential harm and stigma for people experiencing mental health difficulties.

For the Anglican Communion, it is not enough to be silent on this issue. Church leaders should speak up about the gift of science and be explicit that scientists are welcome to bring their whole selves to church. As misinformation around vaccination, climate change, and other topics is rife, church leaders can act as beacons of truth and reliability in their communities by engaging with the evidence and welcoming discussions into these subjects.

Revd Jennifer Brown, a former Science Missioner in the diocese of Oxford, England, said:

“We should be celebrating the gift of God that is science – the human intelligence and creativity that allows us to explore and understand the natural world and our place within it.

“One simple way to do that is to include science and scientists in our prayers, giving thanks for what they bring to us and asking that they might be guided by right motives in their work. Another is to find those moments when we can bring science into our preaching, whether that’s talking about Luke or Thomas, or using harvest as an opportunity to help our congregations engage with the issues around climate change, or considering what the incarnation and the Eucharist can teach us about the value of the material world, and how science has revealed just how complex and intricate that material world is, or any other topic that seems to be relevant to what we want to say.

“Whatever the approach, bringing science into the mix can only enrich the conversation.”

Read more: [Is There a Place for Science in our Preaching?](#)

Prayer

Prayer is a vital tool for supporting scientists. In addition to the challenges inherent in all work, scientists can struggle with frustrating research results and insecure funding. There is also the significant challenge of working in a field where technology may progress faster than society's ethics can keep up.

Scientists are at the forefront of developing solutions for some of humanity's greatest challenges. As the climate crisis worsens, give thanks for scientists who are working on drought-resistant crops, clean energy, and other potential adaptations. Praise God for the human endeavour and creativity which led to the creation of multiple Covid-19 vaccines, saving many lives.

Grace Wolf-Chase is a Senior Scientist and Senior Education & Communication Specialist with the Planetary Science Institute, serves as Vice President of the Center for Advanced Study in Religion and Science (CASIRAS) Board of Directors, and is a member of the Evangelical Lutheran Church in America. She writes:

“How often do we pray for the wisdom and know-how to fulfil our duties as God’s stewards of the Earth, rather than pray for God to affect changes we’d like to see in the world? In my church, we often pray for wisdom in applying science and technology to mitigate the climate crisis, to care for the environment and Earth’s biodiversity, to facilitate social justice, and to conduct ethical medical research, while at the same time expressing our humble gratitude for being part of an awesome, diverse, and very good, creation.”

Read more: [Praying for Wisdom as ‘Created Co-Creators’](#)

Prayer points

- Thank God for the gifts of human creativity and curiosity, and for all that has been achieved through scientific endeavour. Pray for scientists themselves, that they serve God through their work with all their heart, mind, soul and strength.
- In the context of the Covid-19 pandemic, pray for fair access to lifesaving vaccines, and for wisdom and courage to tackle misinformation when it comes to vaccination.
- Climate change disproportionately affects the poor and vulnerable. In the 21st century, climate scientists are vital truth-tellers shining a light on how human activity is harming the planet. Pray for their work, and for those in power to hear and act on their warnings. Help us to change the habits we know are unsustainable, as an act of love and sacrifice.

- Acknowledge the sometimes unethical use of new discoveries and technologies. As scientific developments accelerate, pray for opportunities to engage in discussions about the ethical applications of new technologies.
- Thank God for the opportunity that the Lambeth Conference provides for bishops to wrestle with questions of science and faith. Pray that we can use this time and space to build genuinely global support and understanding around this theme.

Mentoring and scholarship

Research suggests that many young people of faith are put off a career in the sciences due to a mistaken sense that they have to choose between God and science. There is much work to be done on all levels to banish this notion, but a promising start would be to partner young scientists or students with more experienced scientists in their field -- creating space for questions, encouragement, and mentorship.

For scientists early in their careers or from backgrounds under-represented in the sciences, mentorship is an especially useful tool. From building confidence, to learning new skills, to providing a vital gateway to professional networks, a productive mentoring relationship can bring benefits to both parties.

With its strong presence in communities, the Church could act as a platform to pair willing scientists in each congregation to learn from and encourage one another. This could be done on an informal basis or through Bible study groups, by forming links between the church and a local university or hospital, or other means.

Dignity in work

Dr Nicholas Heavens, a research scientist studying Martian weather and Earth climate patterns, worships in the diocese of Southwark in London, England. For Dr Heavens, the best way to support scientists is for the Church to look at the issue of work and dignity more broadly.

“I feel like the environment in which we do science is getting worse, especially for younger members of the scientific community. And I feel that what the Church can do is try and shift the conversation about work generally, not just for scientists but for everyone, so that it looks at the dignity of every worker and provides the resources that every worker needs so they can flourish. If the Church could do that, the problems I’ve been facing as a scientist would take care of themselves.”

Dr Heavens points to the work of 20th-century English writer and theologian Dorothy Sayers, who wrote and spoke widely on work and vocation. In *Letters to the Diminished Church* (1942), Sayers wrote:

“Work is not, primarily, a thing one does to live, but the thing one lives to do. It is, or it should be, the full expression of the worker’s faculties, the thing in which he finds spiritual, mental and bodily satisfaction, and the medium in which he offers himself to God.

“It is the business of the Church to recognize that the secular vocation, as such, is sacred. Christian people, and particularly perhaps the Christian clergy, must get it firmly into their heads that when a man or woman is called to a particular job of secular work, that is as true a vocation as though he or she were called to specifically religious work.”

Valuing the dignity of all work, and rejecting the idea that only some work is worthwhile or vocational, is a vital way that the Church can support all working people. For scientists in particular, the Church can affirm their vocation and celebrate science as a way of serving and glorifying God.

Incorporating science into the life of the Church

There are many ways to incorporate science into the daily rhythm of our prayer and worship. Look out for occasions to incorporate science into sermons, whether that’s celebrating saints’ days relating to science, worshipping God for the wonders of the natural world, or thanking God for scientists in the congregation in the same way as healthcare workers and others.

As well as Christian festivals, there are important moments in the history of science that can be commemorated. These might include the anniversary of the birth or death of a notable scientist, the anniversary of the publication of a key scientific theory, or you might choose to commemorate or celebrate a particular event or achievement.

Prof Tom McLeish is a physicist, co-director of Equipping Christian Leadership in an Age of Science, and lay reader in the Church of England. He finds saints’ days a helpful calendar moment.

“Festival days of great natural philosophers, like Bede or Robert Grosseteste, or of saints who cared for the natural world, like Francis, can be celebrated by preaching science as a gift of God, to be returned ten or a hundredfold.”

Read more: [Celebrating science all year round](#)

Focusing on an individual’s story and impact can be an inspiring lens through which to reflect on our own lives and the particular scientific breakthroughs or ethical questions of the time we are living through.

Experiments in Faith: Lessons from Scientists in Congregations



Since 2014, ECLAS has funded churches and cathedrals to partner with scientists in their congregations and communities to create spaces of engagement, build confidence and competence around scientific issues, and foster thoughtful, prayerful communities working in the world.

We have now distributed £750,000 to over 80 churches, and the resulting projects have sparked conversations, led to new ways of thinking, and nurtured deeper insights into God and Creation.

But it doesn't require a large budget to pilot something similar in other dioceses. Many projects have made the resources they have produced readily available for others to adapt. Please go to www.eclasproject.org for more information.

Or to start a creative project yourself, first identify scientists in your congregations and invite them to teach you about their area of expertise, bring in displays or posters, and reflect together on how it can inform faith perspectives. Invite young people to talk about the science they're discovering in school – does it excite them or challenge them? What can it tell us about the world and the creatures God has made? Finally, invite others to participate from beyond the congregation itself. By holding a community event or outreach activity, it will help spread the knowledge that science has a place in church.

Case study 1: Messy Church Does Science

Messy Church is a programme created by the Bible Reading Fellowship that develops resources for all-age creative worship in churches and is now present in 20 countries.

Messy Church Does Science received funding from the ECLAS Scientists in Congregations programme in 2017. They received further funding in 2021 and 2022 to develop an outdoors, environmental-focused resource, Messy Church Goes Wild.

The project directors said: “Our family focus means we can inspire scientists of the future. We can teach them some basic scientific skills and influence their attitudes and expectations towards science and faith. We can help train a generation to see no dichotomy between science and faith, but rather how the two can fruitfully exist side by side.”

The 2017 grant was used to develop materials to help Messy Church leaders use science to explore aspects of the Christian faith and demonstrate that faith and science are complementary. The project provided Messy Churches with 100 safe and simple scientific activities to try in church and to demonstrate that anyone can get involved in science. [These have since been made into a book.](#)

Messy Church Does Science helps the exploration of science become an accepted and expected part of worship and learning; a means by which we can meet God and learn to love the natural world.



Watch here: <https://youtu.be/M-M9iHKZJZk>

Case study 2: Take Your Vicar to the Lab

In 2016, St Albans Cathedral in England ran a 12 month programme called 'Take Your Vicar to the Lab'. This initiative linked up clergy with laboratories to engage with science and come back inspired and informed. Similarly, scientists visited local churches to help the congregation think through the same issues. Over six visits, clergy looked at topics including genetic engineering, the manufacture of everyday pharmaceuticals, and particle physics – which involved a visit to CERN in Switzerland. Two conferences where clergy shared their experiences attracted around 70 members of the congregation.

The participating clergy members found the experience incredibly positive and inspiring, and felt better equipped to make links between science and their faith.



Watch here: <https://youtu.be/8IJYgh4IWoo>

Case study 3: Ely Cathedral Science Festival

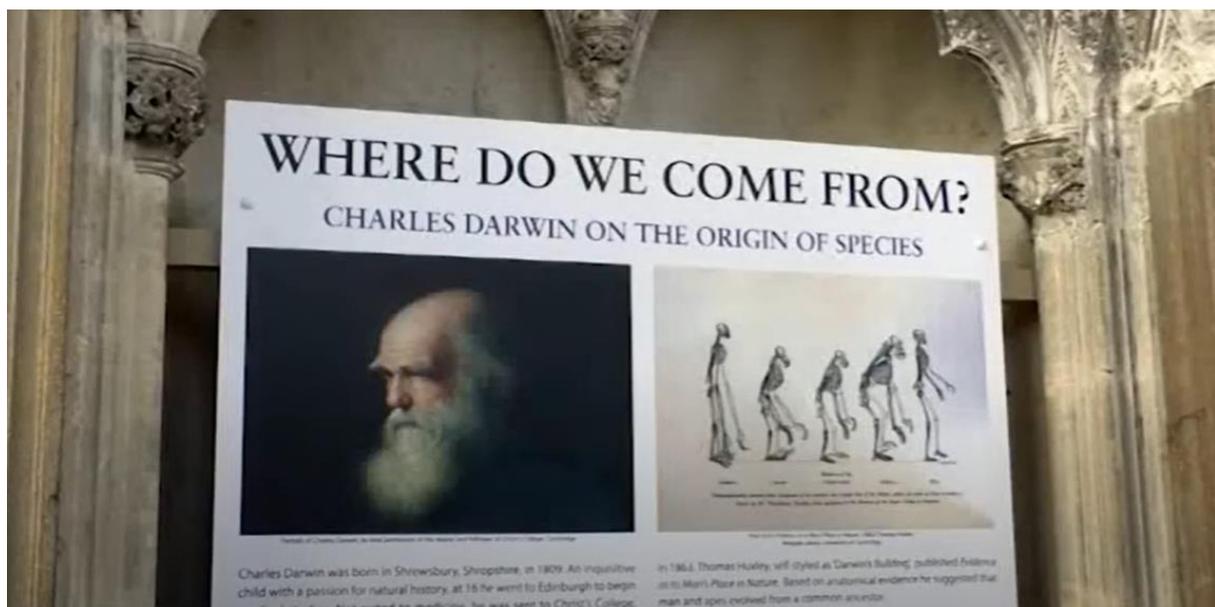
In 2017, Ely cathedral in the East of England received funding for a science festival.

The festival 'Dinosaurs to DNA' celebrated Science, Technology, Engineering and Medicine through arts, music, lectures, live experiments and worship. Ely Cathedral Science Festival was an intentionally missional project, aiming to reach out to new and diverse audiences, particularly families, children, and working-age people. It also aimed to respond robustly to those who perceive the church to hold negative views about science and technology and connect with people who wish to explore faith in contemporary culture. There were displays and talks by the Cambridge Science Centre, an ethical discussion and panel debate about DNA technology, and a series of lectures by leading scientists exploring medicine, genetics, astronomy, engineering and climate change.

A major exhibition aimed to highlight key moments in the history of science and included an original copy of Charles Darwin's *On the Origin of Species* as well as dinosaurs, fossils and other items of scientific significance.

Over the course of the festival the cathedral welcomed over 1700 local school children and thousands of families and visitors. They also held 'Night at the Cathedral' events, where over 1500 people experienced hands-on science with interactive displays and exhibits, and families enjoyed hunting for mini-beasts in the cathedral grounds.

The people who built the cathedral, itself a marvel of medieval engineering, were questioning and seeking answers about existence and our place in the world. The very design of the Cathedral was meant to represent life here on earth as well as in the world beyond and has helped people through the years ask the questions: where do we come from? Of what are we made? And where are we going?



Watch here: https://youtu.be/57z1n4B_4uY

Facilitating Dialogue – Lessons from Senior Leadership Conferences

ECLAS works with senior Christian leaders and scientists to provide a space for learning and open discussion with the aim of nurturing science-engaged theology. Our senior leaders' conferences are open to Bishops of any Christian denomination, by invitation. From the vast galaxies and black holes of cosmology, to neuroscience and discussions of the soul, our conferences explore cutting-edge questions of science and ethics, featuring some of the world's leading scientists and theologians.

We welcome Bishops from the Anglican Communion to join us at future online events. You can register interest and receive further details by emailing eclas.admin@durham.ac.uk.

Case study: Changing the Conversation around Artificial Intelligence

Revd Dr Kathryn Pritchard is an ECLAS co-director who leads on work with the Church of England's public policy team, including helping to inform behind-the-scenes thinking about AI and Robotics and related technologies.

She says: "People are often surprised and encouraged when I tell them about the work the Church of England policy team and its bishops are doing in the areas of Artificial Intelligence (AI) and Robotics. Yet until 2016 the Church of England was not formally involved in this area. Then, thanks to some synergistic happenings, AI and Robotics arrived firmly on the Church of England's radar.

"One of these happenings was a 2016 ECLAS conference at the University of Durham. There, bishops and other senior church leaders were immersed for two days in the world of AI and Robotics. The delegates met research scientists in their labs and saw the painstaking work that goes into machine learning. They saw the 'raw' 'training' of machines to accurately perceive distances and objects while in motion, for use in technology to support driverless cars. Our church leaders were delighted to meet and interact with robots. Later, together with scientists, ethicists and theologians, they reflected on big questions emerging from the event. By the end of the conference, if they hadn't been already, delegates were convinced that it was vital for the Church to engage with AI."

Read more: [Why The Church Of England Is Talking About Artificial Intelligence](#)

Moving forward

The examples we have given so far are all, necessarily, based on our experience of working with churches in the UK. The context and content of engagement with science will rightly vary across the Anglican Communion. We encourage you, if you're considering introducing some or more science content into your church service or worship time, to think through some of the following questions.

- How can science be further explored through church in your area? The composition of your congregation will help to inform you – would it be possible to run an all-age or family service? Are there people with experience in medical or science industries who you could invite to talk about their work?
- What are some of the advantages to introducing science, or exploring it further, as a church? How can you actively affirm science as a vocation?
- What might some of the challenges be?
- What kind of scientists are present in the congregation and community? If there is not a university nearby, is there a hospital, training college, or high school where science is part of daily life?
- What kind of questions do people in the congregation have about science? What do people talk about over refreshments or in their small groups? How can you help them think through these topics in a fruitful way?

Further resources

There are many helpful books and articles exploring how science and faith can enrich and inform one another. Some suggestions, including from the ECLAS team, are:

- *When I Pray, What Does God Do?* David Wilkinson, 2015
- *Faith & Wisdom in Science.* Tom McLeish, 2016
- *Human (Animal).* Amanda Rees and Charlotte Sleigh, 2020
- *Thinking Fair.* Lucas Mix, 2016
- *The Territories of Science and Religion.* Peter Harrison, 2017
- *Divine Variations.* Terrence Keel, 2019
- *Why Science and Faith Need Each Other.* Elaine Ecklund, 2020
- *Science and Religion Around the World.* John Hedley Brooke and Ron Numbers (ed), 2011
- *Living With Science and Miracles.* Bankole Falade, 2017
- *Science and Religion: Some Historical Perspectives.* John Hedley Brooke, 2014
- *The Spirit of Creation.* Amos Yong, 2011
- *Creation or Evolution* (2nd ed). Denis Alexander, 2008
- *God, Evolution, and Animal Suffering.* Bethany Sollereeder, 2020.
- *The Nature of Creation.* Mark Harris, 2013
- "Science Vs. Religion: Beyond The Western Traditions", Adam Frank, [NPR](#)

Networks

Anglican Communion Science Commission – A new network due to launch at the Lambeth Conference in 2022, the ACSC aims to resource the whole Anglican Communion for courageous and confident spiritual leadership in issues involving science.

<https://anglicancommunion.org/community/commissions/anglican-communion-science-commission.aspx>

The Anglican Communion's Mission on Global Health - Through the Anglican Communion Office at the United Nations, provinces, dioceses and Anglican agencies have access to information and opportunities to develop and strengthen relationships with key UN organisations such as the World Health Organisation (WHO), United Nations Population Fund (UNFPA) and the Joint United Nations Programme on HIV/AIDS (UNAIDS). ACOUN's work on global health is currently focused on supporting the work of churches in rolling back the tide on HIV/AIDS.

<https://www.anglicancommunion.org/mission/at-the-un/global-health.aspx>

The Anglican Communion Environmental Network – Officially recognised in 2002. Providing reports, resources, events and Lent challenges concerned with the environment.

<https://acen.anglicancommunion.org/>

Green Anglicans is a movement started by the Anglican Church of Southern Africa which is focused on empowering, encouraging and holding the church accountable in caring for the Earth. It now has a presence in Central Africa, Kenya, DRC and Portugal. They offer resources for schools, youth groups and churches. www.greenanglicans.org

BioLogos in North America host a podcast and a forum for discussing science and theology. They authored a Christian Statement on Science for Pandemic Times which has been signed by more than 8,000 Christians. <https://statement.biologos.org/>

Society of Ordained Scientists (S.O.Sc) - The Society originated as a community of scientists within the ordained ministry of the Anglican Communion. Its goals are to express the commitment of the Church to scientific and technological enterprise and to serve the Church in its relation to science and technology. www.ordsci.org

Equipping Christian Leadership in an Age of Science, based at Durham University in the UK, exists to change the conversation around science and faith by resourcing bishops and other senior church leaders to engage with science and theology. Senior leadership conferences on topics such as gene editing and AI and robotics bring together bishops and leading scientists; many of these take place online so please message us at eclas.admin@durham.ac.uk to express interest. Visit our website www.eclasproject.org to find more information.