The next edition of Connect, ‘Being Human’ will be available online by the end of January at - connect.cis.org.uk/

2018 Southern Conference Report

Redland Parish Church, Bristol, hosted this conference on 10 November, which had the title “Being Human in an Age of Machines”. It began with a time of praise, worship, meditation and prayer, setting the tone for an excellent and thought-provoking day.

Three main themes were covered: What it means to be human (Prof John Wyatt), Machines that can do human-like tasks (Prof Peter Robinson), and Human enhancement and transhumanism (Rev Dr Justin Tomkins) – although the talks and discussions did not break down along strictly these lines. The day ended with a very useful epilogue by the Rt Rev Dr Steven Croft (Bishop of Oxford, and House of Lords Committee on AI) on the ethics of Artificial Intelligence (AI) including proposed guidelines for the application of this technology.

John Wyatt pointed out that our understanding of what it is to be human has long been discussed in terms of analogy to the
technology of the time – e.g. Diderot’s clock analogy of over 200 years ago. Now, some thinkers consider that, with the application of technology, our present brains (and maybe bodies) are brief transitional states on the road to more powerful and long-lasting “life” forms more suitable for exploring the cosmos. We as scientists tend to be rather careless with our definitions, and we need to distinguish carefully between basic descriptions (i.e. actuality) and metaphors – e.g. the body is machine-like but isn’t just a machine, nor the brain a computer. Anthropomorphism is dangerous and often unconscious, and is used both ways – we liken our bodies to machines, and machines (robots) to humans. Machines are made (and are not persons), so we can control them, whereas people are begotten. (Question: Is it morally wrong to torture a robot? Answer: Yes – not because of harm to the robot, but because it can desensitise us.) People are not just bodies of matter and energy, but have personhood which is not divisible. The Holy Spirit is a person but has no physical body. Christ was born (begotten) not made (Nicene Creed). In Christ’s resurrection God is saying “Yes” to the original model of humanity; this is the Christian’s glorious and certain hope for the future.

Peter Robinson began by referring to Darwin’s 1872 book “The Expression of the Emotions in Man and Animals”, and he went on to give fascinating examples of the modern application of AI in this area. A computerised game has been devised to help autism-spectrum individuals to recognise human emotions. Signs of distress in sheep can be detected from their facial expressions using AI, helping vets to identify animals needing attention. While considerable efforts have been made to produce robots that look and behave like people, we are a long way from producing one that comes close in appearance (with body language) as well as just speech. Peter went on to consider modern (useful) robots, which usually look nothing like people: anything that can detect something in the world and then respond and influence it is robotic. Many of the “robots” in the world today are largely invisible, e.g. worldwide computer systems, automatic trading systems, and military drones with the potential to recognise a target and attack it autonomously. However, real (“human”) relationships with robots are impossible. And only we humans have the hope of restoration of broken relationships.

Justin Tomkins tackled the somewhat controversial area of human enhancement – augmenting human capacities and abilities “beyond what is normal or healthy”. This is more than simply repairing or healing, although this distinction is far from clear-cut. This field is in its infancy, illustrated by examples where subcutaneous implants of small devices enable the user to open doors or activate gadgets - such are currently in use in Sweden.

The bigger question is: what is the vision for the future? He commented on three areas being promoted by secular thinkers – (1) Ending aging (Aubrey DeGrey reckons that some people alive today will live to be 1000); (2) Remaking Eden (cloning and beyond, as advocated by the molecular biologist Lee M Silver, leading to two groups, the “naturals” and the “gen-rich” who in time might become separate species); and (3) “The Singularity Is Near” (book by Ray Kurzweil, who claims that by the 2040’s we won’t be able to distinguish between men and machines). However, none of this is remotely similar to the Christian hope and ambition for better people, and for this Justin referred us to Philippians 2 vv 5 -11.

After enjoying lunch and the short CiS annual members’ meeting, Nick Higgs presented the 2018 Oliver Barclay Lecture. As he is now based in the Bahamas where he is Assistant Director of the Cape Eleuthera Institute, he was contacted...
live via Skype. In the event, this proved a little tricky, but the actual lecture had been prepared and recorded in advance, with the title “A little lower than the angels’ How evolution informs our view of suffering and the human condition”. He revisited the theme of the 2015 CiS Southern conference, “The problem of suffering in the world”, beginning with popular culture as portrayed in the widely-acclaimed 2011 film “The Tree of Life”. The film is about a grieving family, and opens with quotations from Job 38, with God’s answers to Job’s “Why?” questions. He drew particular attention to “Who is this that darkens my council without knowledge?” (Job 38:2) – God is accusing Job of ignorance. Yet we do now have partial answers to some of these questions – in the physical realm at least. This does not constitute a theodicy (justification of suffering when we have a good and all-powerful God), but it gives a scientific perspective on some of these “Why?” questions. “Evolutionary medicine” (consideration of evolution from a medical point of view, as in publications by RM Nesse and GC Williams) provides instances where net benefits arise in spite of a large cost, for example trade-offs where some mutations can be advantageous in some circumstances while being deleterious in others, and evolution takes place too slowly to keep pace with changes in the world. Cancers are often due to random mutations in the course of cell replication, yet this is an essential mechanism for making evolution possible. While it may look as if God is indifferent to our suffering and removed from our world, Jesus came to share our sufferings and even, as Hebrews 2 points out, was made perfect through suffering.

After the lecture, the CiS chairman Andrew Halestrap “presented” Nick with his certificate online and on-screen, to eager applause at the Bristol end!

Attendees had the opportunity to participate in two discussion-group sessions, chosen from the topics of the three morning talks, and also from two workshops, “Can We Be Optimistic About the Future of Technology?” led by Roger Tucker, and “Faith in the Lab” led by Rhoda Hawkins.

Bishop Steven Croft in his closing epilogue drew on his considerable experience from the House of Lords Committee on AI. At the outset he made it clear that his chief concern is about what is happening now, never mind future developments. The general public is very behindhand in appreciating what AI technology is already doing. There is international concern and co-operation in some areas with the UK well-positioned to take a lead, but we are unfortunately holding back in one key area (weaponisation). It is vital for AI to be ethically driven, and Steven proposed some guiding principles which included: for the common good and benefit; intelligibility and fairness; the right to be educated and to enable flourishing; and preservation of data rights and privacy. The Beatitudes (Matthew 5) along with contemplation, compassion and courage represent a profound definition of what it is to be human, and so should act as a good guide for us.

The talks are available on the CiS web site. This will enable many more people to benefit from this really helpful conference in addition to those of us who were able to attend in person.

Report by Hugh Reynolds

(Conference talks are available at - http://www.cis.org.uk/conferences/past-conferences/southern-conference-2018/)
Which historical aspect of the relationship between science and religion do you think has been the most significant?

“Nothing has come to characterize modern science more than its rejection of appeals to God in explaining the workings of nature”.

Professor Ronald L. Numbers – historian of Science

When talking historically about the most significant aspect of the relationship between science and religion, one may naturally revert to the scientific revolution in which biblical principles laid down the foundations for the new experimental method in the 16th and 17th century giving rise to modern science as we know it today. As positive and monumental as this event was, there is another aspect which is much less positive, often misunderstood and/or completely overlooked by the general public that I would consider much more significant. That is the shift from theistic to naturalist science within the 19th century in which theistic implications were slowly purged from scientific discourse.

The Western world today is largely infused with the idea that scientific work should only base its methods of explanation on naturalistic accounts (this is known as methodological naturalism); this means that scientific explanations cannot invoke supernatural entities such as God as an answer. Due to this modern assumption, we often hear claims such as: science and religion are at war, or, as science develops religion will die out. Both of these claims are not new but rather trace back to the 19th century. In America two hugely influential popularisers of science, Andrew Dickson White and John William Draper, argued that science and religion had constantly been at war and that science always eventually triumphed, and around the same period French philosopher Auguste Comte suggested that societies pass through three stages: religious, metaphysical and lastly scientific.

Modern historical research however, reveals to us that science was previously embedded not only with theism but biblical theism. God was a natural part of scientific discussion. (This was the case prior to and after the rise of modern science). Well established names such as Newton, Copernicus, Galileo and Leibnitz would frequently discuss God freely as part of their scientific endeavours utilizing ‘natural theology’ - the act of studying nature in order to reason towards the existence and attributes of God – as an extension of their ‘natural philosophy’, what we know today as science.

This practice continued well into the first half of the 19th century with leading Christian scientists such as Maxwell, Faraday and Hershel. So what changed in the 19th century? It may be easy to assume that Charles Darwin’s theory of evolution was the sole cause of this shift, however, historians of science have shown that this is not an accurate representation. When the Origin of Species came out in 1859, a man named Thomas Huxley took the opportunity to utilize the book to his advantage. Huxley was a scientist and populariser of science who did not accept the framework of his time in which the Church had control over scientific education. Whilst he was not against religion itself, he certainly did not want dogmatic theology or the idea of God infused within scientific practice and so he formed a private dining group in London named the X Club which included nine men in total all in various and prominent positions within science, philosophy or the media. The X Club were devoted to one central aim, ‘science, pure and free untrammelled by religious dogma’. According to historian Matthew Stanley “The naturalists’ [Huxley’s team’s] strategy was to rewrite the history of their discipline to erase the long tradition of theistic science” and the eventual effect of this was that “virtually all scientists… whether Christians or non-Christians, came by the late nineteenth century to agree that God-talk lay beyond the boundaries of science.”

To go into detail regarding the complex events of the 19th century would far exceed the
space I have here, however, the main point for us to understand is that far from science naturally progressing forwards as it slowly abandoned its theological ties, theological concepts were an integral and complimentary part of science for centuries until ‘God-talk’ was purposefully forced out of scientific practice - particularly in Britain and America in the 19th century. As shown above, Draper, White, Huxley and the X Club are the names hugely responsible for our current and popular naturalistic narrative upon which science is frequently used as a weapon against Christianity. Furthermore and contrary to belief, Darwin’s theory of evolution - by itself - was not the coup de grâce for Christianity, however, In the hands of Huxley, Draper and White, Darwinian evolution became a highly effective tool used to successfully promote their agendas.

So what might this tell us about the relationship between science and religion? Firstly, for the majority of scientific history, science and Christianity have not been at war, rather they have co-existed in harmony. This is the same today as recent sociological studies have revealed. Secondly, naturalistic science still relies on theological principles - even if the current community are reluctant to admit this. For example, the idea that there are laws of nature regulating the universe stems from the bible (Jeremiah 33:25). The ‘uniformity of nature’ i.e. the idea that the future will resemble the past is an idea that, as the scottish philosopher David Hume correctly noted, cannot be justified on naturalism. only on Christian theism does uniformity make sense and make science possible (Genesis 8:22).

The media tends to enable atheists such as Richard Dawkins to narrative to us a history in which science progressively erodes religion away. Ironically sociological studies have suggested that these colorful histories by Dawkins and co themselves border on religion, presenting us with a fully-fledged alternative to the traditional Christian faith. In reality, science is - and has historically been - a tool given to us by God in order that we might come to see His revealed glory more and more. As the Psalmist says, ‘The heavens declare the glory of God; the skies proclaim the work of his hands.’

References
7) In Isaac Newton’s General Scholium (the appendix to his more famous work The Mathematical Principles of Natural Philosophy) he wrote that “This most elegant system of the sun, planets and comets could not have arisen without the design and dominion of an intelligent and powerful being: […] He rules all things, not as the world soul but as the lord of all. And because of his dominion he is called Lord God Pantokrator”
15) Psalms 19:1
Interview with our new Development Officer
– Abigail Patterson

How did you become involved in CiS?
I became involved with CiS in the summer of 2017, when I decided as a graduate student to enter the student essay competition. I won second prize, so it was a good decision! Joking apart, I have greatly enjoyed getting involved with CiS ever since. When I attended the student conference in 2018, I was overjoyed to find a group of Christians who understood how it feels to be a biologist with faith. At the time, I was a graduate student in evolutionary biology, and was feeling quite isolated both at church and in the department. Christians in Science was an answer to prayer, and I returned from that conference absolutely buzzing! This experience inspired me to start up a CiS student group in Oxford, and to apply for this job!

How or when did you become interested in your area of science?
I have loved nature for as long as I can remember. I grew up in the rural Kentish countryside and spent every summer in the Scottish Highlands. Both places were paradise to me (still are, although sadly Kent becomes more urbanised every day). I think my Mum spent most of my childhood desperately trying to get me out of muddy wellies! As a teenager, my love of God grew with my fascination for animals, plants, fungi and lichen. I had a strong sense that God was calling me to use my passion for living things towards caring for and protecting them in a world of environmental injustice and exploitation. This led me to study biological sciences at Oxford.

My specific interest in the ecology and conservation of British ancient woodlands was influenced not only by my own childhood experiences, but by my close friend James, who I met in Oxford. We spent much of the Oxford vacations in his native Northern Ireland, exploring sites and looking at plants, discussing the latest research and thought in woodland ecology and conservation. Unfortunately, in the excitement of becoming a graduate student, I allowed myself to be persuaded down avenues that were very far removed from my passions and interests, which was never going to end well! I decided to take a break from academia and am enjoying this opportunity as I work with Christians in Science to remind myself why I studied biology in the first place!

How has your science-faith journey unfolded?
My Mum and grandmother are/were Roman Catholic, and thus I was brought up in this tradition and attended a Catholic state secondary school. No one ever said I couldn’t be a biologist and a Catholic, so I didn’t see a conflict. However, when I went up to Oxford to study biology, my faith was severely challenged. I distinctly remember sitting in lectures being shown videos that mocked Young Earth Creationists and having to write essays with titles such as “Why does Darwin’s theory of natural selection remove the need for a God?”. I became convicted of this rhetoric, and for the 2nd and 3rd year of my undergraduate degree, I would have publicly declared myself an atheist. Privately I think I knew deep down that there was something more.

Moving onto graduate studies, this sense that God was calling me became stronger and stronger, until it could no longer be ignored. Realising I didn’t agree with a lot of Catholic theology I’d accepted as a teenager, I returned to the faith as an evangelical Protestant. At the time, I met another graduate Christian scientist, a physicist, who was the first scientist I’d ever sat down to read the Bible with. I threw myself into understanding how I could be a Christian who took the Bible seriously and accepted evolutionary theory, which began my interest in science and faith. The Christian physicist I read the Bible with was Matthew. We were married last August!

You have a planned trip to South Africa in January. How did this come about?
When I was 17, I decided to enter a Young Environmentalist competition a few hours before the competition closed and the night before my French AS oral exam. Spontaneity sometimes pays off, as I got an A in French and won this competition! As a result, I spent several weeks volunteering as a research assistant on a game reserve in South Africa, all expenses paid. I would never have been able to do something like this without that funding, and those weeks in South
Africa were some of the most inspiring and formative of my life. God was definitely at work, and still is, because a few weeks ago the reserve manager offered the opportunity to return to South Africa. Of course, I have always dreamed of going back, and when the manager confirmed my husband could come too, the date was set! For reasons beyond our control, my husband and I had to cancel our planned honeymoon to South Africa last summer, so that made this surprise extra special.

What do you do for fun? What are your major interests outside of work?

The outdoors is where I am happiest; I try to spend at least an hour outside every day being active. This takes different forms, but I am a keen runner, walker/hiker, cyclist and horse-rider. I greatly enjoy exploring ancient woodlands and “botanising”!! My love of nature and interest in science and faith has led into an exploration of environmental stewardship and ethics, and I recently enrolled on the Christian Rural and Environmental Ethics course with the John Ray Initiative. I love spending time with my fluffy house rabbit, Aspen, my chaotic Jack Russell, Cleo (she lives with my parents)...and my husband, Matthew, of course! We both enjoy visiting Matthew’s family in Northern Ireland as regularly as we can for traybakes, endless supplies of tea and explorations in the Mournes and along the north coast.

What challenges have you come across/do you see in the science-faith world?

The creation-evolution debate pervades the science and faith world. I believe this is with good reason; if we are to take our Bibles seriously, evolution does raise difficult questions that Christians need to engage with. We need to be respectful on all sides, but also recognise that contentions on this issue cause people to leave the faith or prevent them from coming to faith altogether. This is a very sad situation. It is essential that we sensitively engage with Christians across denominations and traditions with accessible explanations of science and a strong grounding in the theology of science and faith.

However, I also believe the science and faith world needs to move beyond the creation-evolution debate and become more vocal on issues such as environmental stewardship, bioethics and AI. This is certainly happening, but we could do more. As Christians, we have a strong ethical framework from which we can contribute to these challenges, and I believe God has given us gifts and talents so that we can and should be leaders in these areas. From my perspective, I would like to see more young people, men and women, from a greater diversity of cultural, ethnic and spiritual backgrounds, becoming engaged with these issues and moving the conversation forwards. It is my prayer that I can contribute to forming this next generation of science and faith communicators in my position as Development Officer.

Details of all events are also available on the CiS App and at www.cis.org.uk/events.

If you wish to start a Local Group in your area, please get in touch with Abigail, our Development Officer, at do@cis.org.uk

BRISTOL

For more information, including locations, please contact Christina Biggs - cmmbiggs@gmail.com

Discussion groups – first Friday of every month.

Friday 25th January, 7pm for 7.30pm: Caring for the Earth 2. Speakers: Dr Martin Hodson and Rev Margot Hodson. Sustainable agriculture
issues, population increases and climate change

Friday 15 March, 7pm for 7.30pm: Caring for the Earth 3. Speaker: Revd Dr John Weaver - Sustainable energy, renewable resources, nuclear and fracking.

CAMBRIDGE
For details of events in Cambridge please go to http://www.faraday.st-edmunds.cam.ac.uk/

DUNDEE
For more details on Dundee events please contact christiansinsciencedundee@gmail.com

HARROW
For details of future events in Harrow please contact Revd Lyndon North - revlnorth@aol.com

HUDDERSFIELD – students
For details please contact Omololu Fagunwa on fagunwaomololu@yahoo.com.

IPSWICH
For more information about future events please contact Dr John Ling - jjing@btopenworld.com

IRELAND
Three evenings will be scheduled in the new year to discuss “Test of Faith” material. Please contact Dr Neville Cobbe - neville.cobbe@yahoo.co.uk for more information.

LEEDS
Further details of meetings please contact John Lockwood at jglockwood1@me.com

LONDON
For more details about the London group please email cins.london@gmail.com

MANCHESTER
For more information please contact the Secretary on sec.cismanchester@yahoo.co.uk

NORWICH
Monday 25th March, 7:30 - 8:45 pm: Biohacking and human dignity. Location: Trinity Meeting Place, Essex St., Norwich NR2 2B. Please contact sfnorfolk1@gmail.com for more details.

OXFORD
For more information, please contact Diana Briggs at diana.briggs@wolfson.oxon.org

OXFORD - Students
For details please contact Matthew Patterson - matthew.patterson@physics.ox.ac.uk

READING
For information on Reading events please email Dave Law at cisreading@yahoo.com

SHEFFIELD
There is a monthly meeting for staff at Sheffield University, on the 1st Wednesday of every month at 11am, in “Coffee Revolution” in the Students’ Union. Please contact Dr Rhoda Hawkins on rhoda.hawkins@sheffield.ac.uk for more detail

SHEFFIELD - Students
For details please contact Rory Mcbride - rmcbride1@sheffield.ac.uk

SOUTH WEST
For more information on events please email cissouthwest@gmail.com

SOUTHAMPTON
For information about the group please email Peter May (southampton@cis.org.uk)

ST ANDREWS
For details on the Undergraduate group please contact Dr A Torrance (abt3@st-andrews.ac.uk), Joshua Sharp (jas29@st-andrews.ac.uk) or Laura McCullagh (ism4@st-andrews.ac.uk). Postgraduate group, please contact Dr Rebecca Goss (rjmg@st-andrews.ac.uk).

SURREY
Tuesday 26th March, 6 pm for 7pm: ‘Genes, Free Will & Human Identity’ Speaker: Prof Keith Fox
Location: Christ Church, between 861-863, Brighton Road, Purley, Surrey, CR8 2BN. For more details please contact Joy Perkins at joyeperkins@googlemail.com

SURREY HEATH
Tuesday February 12th, 7 for 7.30 pm: “Chaos, Chance and the Character of God” Speaker: Professor Paul Ewart
Venue: St Paul’s Church, Camberley
For more details please contact John Russell at chynoweth.jw@gmail.com

TYNESIDE & NORTHUMBERLAND
For information on Newcastle events, please contact Bill Clegg at bill.clegg@ncl.ac.uk

UCL - Students
If you are interested in joining the group, contact Marta Berbel Gallego on cisucisloc@gmail.com

WEST MIDLANDS
For more information please contact Godfrey Armitage on g.n.armitage@warwick.ac.uk

WORCESTER
For more information please contact Jim Smith on jgsmit29@aol.com

YORK
For more information please email christiansinscienceyork788@gmail.com