

PréCis

Help Graduates flourish

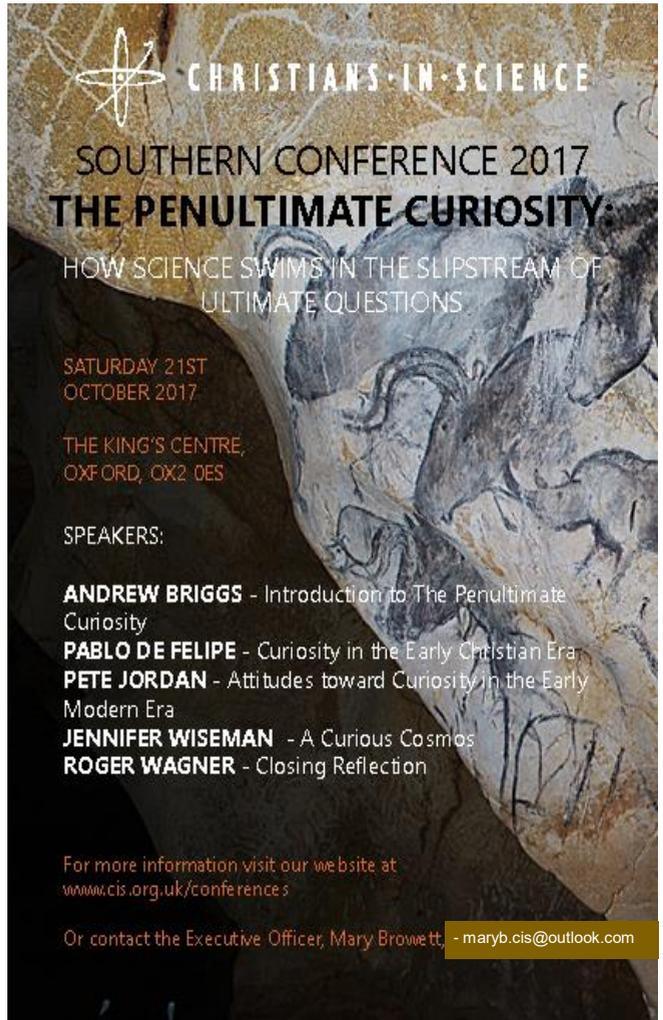


Details on how to be a Mentor are available on our website www.cis.org.uk/mentoring/
Or contact Emily on do@cis.org.uk for more details.

The Christians in Science Oliver Barclay Lecture 2018

**Nominations are
now open**

**More details - please see
page 6**



 CHRISTIANS IN SCIENCE

SOUTHERN CONFERENCE 2017
THE PENULTIMATE CURIOSITY
HOW SCIENCE SWIMS IN THE SLIPSTREAM OF
ULTIMATE QUESTIONS

SATURDAY 21ST
OCTOBER 2017

THE KING'S CENTRE,
OXFORD, OX2 0ES

SPEAKERS:

ANDREW BRIGGS - Introduction to The Penultimate Curiosity
PABLO DE FELIPE - Curiosity in the Early Christian Era
PETE JORDAN - Attitudes toward Curiosity in the Early Modern Era
JENNIFER WISEMAN - A Curious Cosmos
ROGER WAGNER - Closing Reflection

For more information visit our website at www.cis.org.uk/conferences

Or contact the Executive Officer, Mary Browett, - maryb.cis@outlook.com

For the Autumn PreCiS, we thought we'd look at some of the changes that have occurred in areas of science during "our" life time. We have started with Biochemistry, and listed answers from 3 CiS members from across a few generations. To keep it anonymous, we have used just their initials.

Similarities AND differences in Biochemistry

Approximately how long ago did you graduate in Biochemistry?

DB - 50+ years

CL - 10 to 20 years

DP - Less than 10 years

A brief description of your personal background.

DB - From 7 to 26, I lived in London with my parents and younger sisters in a 'faith' mission, then headquartered in the suburb of Norwood. I was the first in my family to attend university, although my father had graduate-equivalent accountancy qualifications.

CL - I grew up in the south east of England in a small town in Bedfordshire, the daughter to a computer scientist and a music teacher (who spent my early years as a full time mother to me and my elder brother).

DP - I was born in South Africa, and moved with my family to West- Yorkshire as a teenager. I studied Biochemistry at Oxford, followed by a DPhil in neuroscience. I now work as a program officer for a private foundation which funds science research.

Why did you choose Biochemistry?

DB - I chose Chemistry over Physics or Maths

for my (first) undergraduate degree because I was best at it in A-Levels. However, I was drifting towards the Life Sciences because of my understanding of the Christian scriptures and so I took the option of Supplementary Biochemistry.

CL - At school I studied Music, Chemistry, Biology and Maths at 'A' Level and wanted to pursue a career as a performing musician, with Tuba as my instrument of choice. Since Music College decided it wasn't for me, I switched to choosing Biochemistry, mainly because I couldn't decide between Chemistry and Biology! I was very lucky to be well supported in all my choices as I was growing up.

DP - I was interested in human behaviour and how biological mechanisms work. Unsatisfied with the abstract explanations of psychology and the predominantly reductionist focus of physics and chemistry, I chose biochemistry.

What was it like at University?

DB - I was awarded a State Scholarship and a College Scholarship (to the same total) including tuition fees and a maintenance grant (£300 p.a., liveable in the late 1950s) Oxbridge had single-sex colleges, a small minority female, represented among the chemistry students. I lived in College for my first two years and in a bedsit 5 minutes walk away for the second two years.

CL - I loved university, living with friends and starting my own adult life. I did pay fees – the £1000 per year seeming very little in today's market.

As a student at Imperial College, there were significantly more men than women – about 3:1. Biosciences definitely attracted more women and I believe that still to be the case.

DP - University was fun but very busy. I did pay a fee. I think about 60% of students were male. I stayed onsite for the first year and then rented accommodation for the rest of my time there.

What was a typical annual starting income after graduation?

DB - The pay for a research assistant in London in 1959-60 was £525. In 1966 a fellowship was £1000 pa. By 1972 academic salaries had shot up / caught up to about £3000.

CL - Most students went on to study for a Masters or PhD. I think the starting income after a Masters fell into the category of £15k to £25 k.

DP - Probably above £25k

During your career has there been an increase in females in your work place?

DB - In Psychology university departments, men were in the majority among staff and students until the mid-1970s. A decade later, female students were a 70-80% majority but women were still a small minority on staff. By 2000, staff were about equally men and women, including professors. This is in science-oriented psyc depts.

CL - I think in general the number of females in Biochemistry is increasing.

DP - I haven't been around long enough to know. The lab where I did my DPhil was probably about 80% female. At the foundation where I work, most employees are female.

At the start of your career, what was the prevailing attitude of Christian churches to science?

DB - In the 1950s, ignorance tinged with fear. The natural sciences were tainted by biological evolution and ancient universe cosmology in most ordinary members' minds. Psychology (and modern philosophy) were feared/loathed as hotbeds of atheism, thanks largely to Freud (and Bertrand Russell) – N.B. Both famed from the interwar years and largely discounted in British academia by the 1950s.

CL - At the start of my career I was not a practising Christian – I never had an anti-Christian attitude but it wasn't something I

thought about or discussed.

DP - At the time, and still now it seems, Christian churches are generally either uninformed or ill-informed about science. Most people don't really think that much about science – although increasingly, and perhaps more alarmingly, people are being drawn to pseudoscience and outdated research. Simple and catchy explanations prevail over complex ones, which is a problem because it requires quite a bit of effort to understand the leading scientific explanations.

This leaves an interesting challenge. It's important for Christians to appreciate the value of science as a method to uncover truth and explore creation. On the other hand, bad science offers so much distraction that enthusiasm without the correct information can be detrimental.

Would you recommend a career in Biochemistry?

DB - Yes, especially if seen as the molecular science core of an interdisciplinary career in one or more of many fundamental and applied fields of bioscience and biotechnology.

CL - My career in Biochemistry has been very enjoyable and I would thoroughly recommend it. A science career is definitely a vocation – the hours can be long and the work is quite unstable.

DP - Absolutely

What is/was life in the lab like?

DB - Fun, while experiments were working. That applies to psychology too, though fairly early in my career, assistants did the hard graft 'at the bench' and I kept in touch by covering for them when necessary and insisting on interpreting raw data, even when they were written up by the assistant / student. As in some parts of molecular bioscience, in psychology the 'bench' can be the 'field', and that can be much more productive despite less control.

CL - Working in a lab is great fun. I work at the

UK national synchrotron in Oxfordshire and there are a lot of technical toys to play with!

DP - I found the lab work a bit boring and repetitive, but I did it because the theory and experimental results were interesting. Consequently, I no longer work in a laboratory but I still use science in my job and learn new things every day. The people I know who enjoyed the lab also seemed to enjoy tinkering with the expensive equipment and trying out new experimental setups. If that's your kind of thing then I'm sure you'll have a great time in the lab.

What have been the biggest pressures on balancing work/family/church life?

DB - Managing their convergences, given the blessing of family, friends and colleagues who allow me to separate clearly the parts of my time between home and work, and to fit in church activity (and CiS, CAN, BACiP) where I feel I can be most useful.

CL - My biggest pressure to balance my life is that I tend towards perfectionism. I like my work to be correct and perfect as possible. I have the same expectations at home and I use the same drive in relation to my church life. That means I would benefit from there being more hours in every day. I always try to give all of myself to every task.

DP - There is a huge amount of pressure to perform and produce new and interesting results. This is especially true for young scientists because the field is fiercely competitive. From my (limited) experience, only about 10% of PhD graduates pursue a lifetime career in the lab. Many others use their scientific training in other sectors, some of which allows for a more balanced work/family/church life.

What advancement in Biochemistry has been the most significant during your career and research?

DB - 1) The small number of cures of rare diseases 50 years later proves the point. Only with the flowering of genomics ('functional' rather than 'structural' genetics) are we beginning to make inroads into the amelioration of some major diseases.

2) Synthetic antagonists and agonists have identified many receptor subtypes but understanding of neural pathways in the brain and something of each part's function(s) are being elucidated by a tracing techniques, optogenetics etc.

3) Now atoms can be seen (just) and models of molecular structure can be tested by a huge array of techniques, in enzyme reactions, ion channels, synaptic receptors, RNA and protein synthesis etc etc.

CL - The most significant advance in my field is the improvement in X-ray detectors. Those who are five years ahead of me would have required photographic film, scanners and perhaps 4 days to carry out one experiment. At the start of my career this was more like 4 hours and now that same experiment might take as little as 4 seconds.

DP - Definitely CRISPR (Clustered Regularly Interspaced Short Palindromic Repeats)

What has your involvement with CiS been like?

DB - I have attended the London / Southern meeting regularly from 1960, in the early days contributing to and presenting group papers and once speaking about psychological science.

CL - I have been involved in CiS for a couple of years – I particularly enjoyed the autumn conference in Oxford last year looking in to science and miracles.

DP - I joined CiS when I was a student. I haven't had much involvement since leaving the UK, but I still enjoy learning about CiS events and activities in the newsletter.

CiS Southern Conference 2017
Saturday 21st October 2017
Book today

Physics and Faith:

Exploring the Interface



Day Course, 25 November 2017
Darwin College, Cambridge

How do the latest findings in cosmology and particle physics inform theology? What does quantum physics tell us about the nature of reality? What are the ethical and theological implications of nanoscience and nanotechnology? What does physics tell us about evolution?

Find out more at this one-day course. Open to both scientists and non-scientists.

For more details including speakers and fees see

www.faraday-institute.org

or call +44 (0)1223 748 888



The Christians in Science Oliver Barclay Lecture 2018

Nominations are now open

Christians in Science sponsors an annual "Oliver Barclay Lecture" in memory of Dr Oliver Barclay who was the driving force behind the establishment of The Research Scientists Christian Fellowship, the predecessor of CiS, and who was keen to encourage the next generation of effective communicators on Science and Faith.

The lecture is awarded to a promising young individual, usually under the age of 35, who has demonstrated an ability to communicate effectively on issues relating to Science and Faith. The chosen individual, who will normally be an active UK-based scientist, will present a short lecture on the topic of their choice at the annual Southern (Autumn) Conference. We hope they will also present their lecture the following year, at the Student and Northern (Spring) Conferences. He/she will receive travel expenses for each conference they give the lecture, and one honorarium equivalent in value to that given to other established conference speakers.

Nomination Criteria

1) Nominations for the award will be sought each year from members of CiS with a closing date of midnight 14th February.

2) Prior to submission, the nominator should ensure that the nominee is available to attend the CiS Southern Conference (usually the last Saturday in October or first in November). The nominator must also ensure that 2 referees will send an assessment of the

candidate's suitability for the award by 28th February.

3) Nominations should be sent to the Executive Officer together with an up to date curriculum vitae of the candidate and details of the two referees.

Nominations will be considered in March by a selection committee appointed by the CiS Executive Committee, and a recommendation made to the Trustees in April.

Nominations, and any further questions, should be sent to Mary, CiS Executive Officer (maryb.cis@outlook.com)

CiS Student launch Lunches

Preparations are underway for this term's events. We are organising launches at:-

- ◇ *Plymouth - 12th October*
- ◇ *Newcastle/Northumberland - 24th October*
- ◇ *Other locations are in the pipeline, lookout for news in monthly CiS Updates*

If you know student pastors or university science students in these areas, please send contact details to Emily.do@cis.org.uk

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



LOCAL GROUP NEWS

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

ABERDEEN, GLASGOW, EDINBURGH, NOTTINGHAM AND DURHAM

These groups need a few people to assist with organising events a couple of times per year or help run a discussion group. Please contact Emily on do@cis.org.uk

BIRMINGHAM

If you would like details of future events in Birmingham please e-mail cis@guild.bham.ac.uk or join the Birmingham CiS Facebook group at www.facebook.com/groups/ciscbirtingham

BRISTOL

Wednesday 18th Oct, 7:30 pm: “Planets, Stars, Galaxies, and Life: Investigating a Fruitful Universe” Speaker is Dr Jennifer Wiseman.

Location: All Saints Church Pembroke Road BS8 3ED

Friday 3rd Nov, 7:30 pm: Discussion Group.

Friday 17th Nov, 7:30 pm “Science and the Historicity of the Bible” Speaker is Professor Sir Colin Humphries.

Location: Christ Church Clifton, Bristol BS8 3BN
No need to book – just turn up. Refreshments

provided including homemade cake and tea. No entrance charge, but opportunity to give donation, suggested £4, to cover costs.

For more information or discussion group locations, please contact Christina Biggs

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

This is a new CiS student group at Huddersfield University. For more details please contact hadassah15ezekiel@hotmail.co.uk

IPSWICH

For more information about future events please contact Dr John Ling (jjling@bopenworld.com).

IRELAND

Details about the upcoming events in Ireland can be found at www.cis.org.uk/ireland or contact Dr Peter van der Burgt (peter.vanderburgt@nuim.ie)

LEEDS

Further details of meetings please contact John Lockwood at jllockwood1@me.com

LONDON

For more details on events for CiS London contact Benjamin Chang on cins.london@gmail.com

MANCHESTER

Wednesday 8th Nov, 6 pm. “How do Science and the Kingdom of God interact – and what does that mean for us?” Our guest speaker, Michael Vine, an engineer, will be leading a discussion.

Location: St Peter’s House, Oxford Road, M13 9GH

For more information on up coming events please contact the Secretary on sec.cismanchester@yahoo.co.uk

NORWICH

Monday 6th Nov, 7:30pm: “*Caring for the weakest: Ethical challenges in managing sick and premature babies.*” Speaker: Dr Amanda Ogilvy-Stuart, Clinical Director of Rosie Hospital Cambridge and Senior Member of St Edmunds College Cambridge. Venue: Trinity Meeting Place, Essex St, Norwich. NR2 2BJ. Please contact sfnorfolk1@gmail.com for more details.

OXFORD

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

READING

The Reading group meet bimonthly in central Reading. For more information please contact Simon Peatman at simon.peatman@sky.com

ROYAL HOLLOWAY

For more information please contact Oliver Edy at oliver.edy.2012@live.rhul.ac.uk

SHEFFIELD

For more details join their Facebook group at www.facebook.com/groups/shefuni.cisc or email shefuni.cisc@gmail.com

As well as the student group, there is a monthly meeting for staff at Sheffield University, on the 1st Wednesday of every month, in Coffee Revolution in the Students' Union. If you are interested in joining, feel free to turn up, or contact Dr Rhoda Hawkins on rhoda.hawkins@sheffield.ac.uk

SOUTHAMPTON

For information on meetings please contact Peter May on petergeorgemay@gmail.com

SOUTH WEST

Thursday 23rd Nov, 7:30pm “*Can a scientist believe in miracles?*” Speaker: Professor Sir Colin Humphreys, Professor and Director of Research, Department of Materials Science and Metallurgy, University of Cambridge. Location: Lecture Theatre 2, Roland Levinsky Building, Plymouth University. For more information on events in the South West, please contact Prof David Huntley on dhuntley@plymouth.ac.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 (lsm4@st-andrews.ac.uk). Postgraduate group, please contact Dr Rebecca Goss (rjmg@st-andrews.ac.uk).

SURREY

Tuesday 21st Nov, doors open 6:00pm, 7:00pm start, “*Cosmology, Stephen Hawking and God*” Speaker: Rev'd Dr Rodney Holder. Venue: Christ Church, between 861-863, Brighton Road, Purley, Surrey. CR8 2BN.

For more details please contact Joy Perkins at joyeperkins@googlemail.com

SURREY HEATH

(Name change - formerly 'Three Counties Borders')

Tuesday 17th Oct, 7:30: “*God and the brain: what neuroscience can teach us about people and God*” Speaker: Professor Alasdair Cole an academic neurologist in Cambridge UK, and an ordained priest in the Church of England Venue: High Cross Church, Knoll Road Camberley, GU15 3SY Free admission. Parking readily available.

For more details please contact John Russell at chynoweth.jw@gmail.com

TYNESIDE & NORTHUMBERLAND

Wednesday 8th Nov, 7:30 p.m “*The rise of the intelligent machines – friend or foe?*” Dr Kim Stansfield (Warwick) Venue: Queen Elizabeth High School Hexham NE46 3JB

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

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 jgsmith29@aol.com