



# PréCis



## 2020 Student Essay Competition

**Now Open**

The Student essay competition is designed to encourage promising young thinkers and writers to explore different science-faith topics.

The competition is open to undergraduate or postgraduate students.

For details of topics, closing date etc please see page 7



From left: Dr Tim Cockerill and Dr Gavin Merrifield

## Interview with CiS Committee member - Dr Gavin Merrifield

**When did you become a Christian and did this change your view of science in relation to God?**

I grew up in a Christian household where my father became a church minister by the time I was a teenager and I made a fairly early personal commitment to Christ. Similarly, I have always been fascinated by science. Understanding the world and universe around us as God's creation helped to nurture this interest as I grew up.

Unfortunately when I was a teenager I fell for the

particular vision of both science and theology presented by Young Earth Creationism (YEC). I think this was mainly because I was never presented with an alternative understanding of how science and the Bible can come together in the church circles I was involved in.

This all changed at university, when I came across **Christians in Science** and the resources it provided for my thinking. I was also challenged by the example of particular professors at my university who were passionate about their faith, but who had very different ideas on how science and faith come together to me.

These ideas were not just new to me, but intriguing, as they didn't involve constant fighting against or rejecting what I was coming to realise was good, established science. That gets very tiring after a while, especially when you begin to realise how unnecessary it is!

### **Which field of science interests you and what sparked this interest?**

I have the problem of being interested in too many fields which has both helped and hindered me at times. I grew up on farms in the dark, Devon countryside and developed a love of astronomy and anything space related there. After an undergraduate physics degree at

university I worked in biomedical research in Scotland for many years running preclinical Magnetic Resonance Imaging (MRI) studies with rodents.

Later I developed new ways to apply many of these techniques to a much wider range of species including zebrafish and spiders to give new insights into their general biology.

Gavin and Tim loading the MRI



I also did my PhD in the area of brain imaging during this time, which was fascinating. If there is one underlying theme behind my interests, it is probably the possibilities of life here on Earth and beyond. I love its diversity and delight in how it constantly surprises me.

More recently I have enjoyed reading, writing and thinking on 'future' forms of life, such as artificial and extra-terrestrial intelligence and how they intersect with Christian faith.

## **What has been the most interesting thing you have discovered or worked on in your research career?**

The first time something new goes into an MRI scanner is always a wow moment for me. You never quite know what to expect no matter how much preparation you do.

The first time I made an MRI movie of a spider's heart beating was possibly the strongest spiritual experience I have had. It was something nobody had seen before and it was beautiful. I could feel

After meeting Ruth Bancewicz in her CiS Development Officer days, I got involved in the local CiS group in Edinburgh and helped organise events and some of the Northern conferences there.

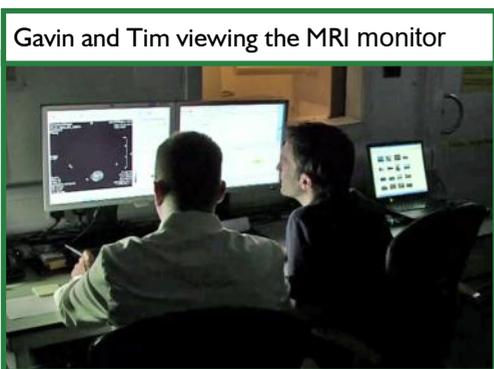
It was a very exciting time, as it came soon after my YEC period and showed me that science still had something powerful and important to say to the church to deepen our theology and to equip it for mission.

Since then I have spoken at some CiS events, represented us at other Christian events and have written material for our journal every now and then. I am now involved with the Manchester local group and have recently joined the national committee.

## **Where would you like to see CiS in five/ten years' time?**

I would like us to be in some ways much as we are. A community of like minded folk supporting each other and exploring new ideas about science and faith. But I would also like to see us taking a more proactive and visible role in guiding the wider Church in these areas.

We have an important message to deliver, that science and Christian faith are not just compatible but can enrich each other and thrive together. We have the body of experts to present that



God's delight in the hidden intricacies of that amazing creature and that we could now share in that through our technology.

## **How long have you been involved with CiS and how has this involvement progressed?**

I have been involved with CiS for about 15 years now in one form or another.

# Leaving a Legacy to CiS

The reality of the modern age is that for CiS to continue the work we have undertaken does require funds, whether this is simply for the day to day running costs of maintaining the CiS website and paying our 2 staff members, or for particular projects like creating new pamphlets in the “Thinking about.....” series or the “Being a Christian in.....” series. Both of these have proved to be extremely popular with individuals and churches alike.

We would like to continue to offer prizes for the annual Student Essay competition, to provide bursaries for students to attend CiS conferences and to have a CiS presence at other Christian or Science events. The list of things we do each year goes on - please see the annual members' reports normally sent out during October each year.

If you are creating a will for the first time, or updating an existing one, please consider leaving a Legacy to CiS in your will. If you would you like more information about how to include a gift to Christians in Science in your will, please contact Roger Tucker, CiS committee member, on [roger.tucker@gmail.com](mailto:roger.tucker@gmail.com)

message credibly.

In recent years we have started to reposition ourselves to do this, so I am looking forward to where God leads us in this. I would like to see more distinctly theological input and presence in CiS, whether that is through partnerships with other organisations or broadening the appeal of CiS membership.

**You were awarded the prize for best oral presentation at the British Chapter ISMRM conference 2015, for your research developing cardiac MRI of zebrafish models of cardiovascular disease. How did you develop this method or idea?**

A research group in a building across from our MRI facility had been studying zebrafish and the total regeneration of hearts after injury (amazing!).

They had been studying it in newly hatched fish but also wanted to study it in juvenile and adult fish. Freshly hatched zebrafish are transparent and can be observed under an optical microscope, but juveniles upwards are covered in silvery scales with black lines (hence their name).

At this stage you need a new way to see inside the fish. They had heard about my work in MRI of unusual species and wondered if we could apply MRI to adult zebrafish. Of course I

enthusiastically assured them that, in principle, of course you could, what a great idea, it would be no trouble... Famous last words..! It turned into a massive but fascinating challenge that I worked on for a few years after my PhD. We managed to accomplish enough to create a stir in the MRI community (scanning 1mm<sup>3</sup> sized moving hearts with 1000x less signal than normal) and in the zebrafish community (working up a 60 minute sedation protocol and demonstrating MRI in live zebrafish). Ultimately though we ran out of time and funding to nail everything as much as we wanted. Such is the nature of academic research unfortunately.

### **What challenges, if any, have you come across as a Christian and a Scientist?**

The first challenge I encountered was that of creation and evolution, which I am happy to say I have resolved in my thinking. That's not to say evolution doesn't pose interesting questions for the Christian - it does! But these are questions now of consequence rather than conflict.

Conflict between the two is still a challenge for parts of the wider church and undermines attempts to produce a

fruitful understanding of science in our churches.

This is a challenge that we must meet as new, more immediate challenges from science and technology are constantly emerging for Christians to grapple with. I hope and pray that we can help build a church that looks forward to these new challenges, rather than being constantly distracted by those from the past.

We must ensure that good science and good attitudes to science are a part of the conversations shaping our faith into the future. This will mean a culture change for many of our churches and Christians.

### **Where is life taking you now?**

Definitely on to new adventures. The biggest of which is my wife and I are expecting our first child in early June. That is both exciting and terrifying in equal measure!

I am also continuing to develop a



programme of events called 'Wonder Days' which are community science days hosted in local churches. The idea of them is to get churches 'doing' some science, while giving something to their local communities. Hopefully this then enhances the science capital of both.

Our first event was last summer, when over 400 people came to the church I attend. We had a lot of fun over the day and everyone who came got the message that science and the church do mix.

The idea has gained interest from other churches, but also from several non-Church organisations who want to get involved alongside us. That's a real opportunity to show many of these organisations that they don't have to be afraid to suggest it is okay to be religious and a scientist in their wider work.

If you'd like to find out more check out <https://youtu.be/8A5qMHq484E>

We have two more Wonder Days scheduled and I am always wanting to hear from more churches who would like to host one.

I'm also looking forward to the next Northern Conference on Digital Theology and the Church. We had to postpone it this year due to the COVID-19 epidemic, but we have a great selection of speakers ready for this



Wonder Days - Manchester 2019

highly relevant topic. Everyone seems to be talking about churches online, streaming services and meeting digitally. It will be interesting to take a look at all this from the perspective of the other side of the epidemic. The conference has also received a lot of interest from Christians beyond the usual sphere of CiS, which is quite exciting and is an opportunity for us to lead and inform the Church.

#### **Acknowledgement:**

All the MRI images of Dr Tim Cockerill and Dr Gavin Merrifield are from filming a segment for the programme '*The Spider House*'. This was filmed by Windfall Films for the BBC in 2014.

# 2020 Student Essay competition

Essays of no more than 1000 words to be on one of the following titles:

- ◆ Future challenges for Christians in the sciences
- ◆ Can Science explain Religion?
- ◆ A Christian response to pandemics
- ◆ How can Science and Scripture inform ethics?

**£500 First prize    £250 Second prize    £100 Third prize**

Submissions close at MIDNIGHT on 30th August 2020. Please read full details at <https://www.cis.org.uk/students/essay-competition/>

The first prize will be announced at the 2020 Southern conference, and the essay will be published in the PreCiS.

## COVID-19

**Due to the current regulations concerning COVID-19, many CiS events, both National and local, have been either postponed or cancelled. Please check the CiS website for event details.**

*If you wish to start a Local Group in your area, please get in touch with Steph, our Development Officer, at [steph.cis@outlook.com](mailto:steph.cis@outlook.com)*

***Details of all events are available on the CiS App and on our website [www.cis.org.uk/events](http://www.cis.org.uk/events)***

### **BRISTOL**

For more information, please contact Christina Biggs - [cmbbiggs@gmail.com](mailto:cmbbiggs@gmail.com)

## **LOCAL GROUP NEWS**



### **CAMBRIDGE**

For details of events in Cambridge please go to <https://faraday-institute.org>

### **DUNDEE**

For more details on Dundee events please contact [christiansinsciencedundee@gmail.com](mailto:christiansinsciencedundee@gmail.com)

### **EDINBURGH**

For more information please email [cisedinburgh3@gmail.com](mailto:cisedinburgh3@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 - jlling@btopenworld.com

## **IRELAND**

For details on meetings please contact Dr Neville Cobbe - neville.cobbe@yahoo.co.uk

## **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**

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**

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 (lsm4@st-andrews.ac.uk). Postgraduate group, please contact Dr Rebecca Goss (rjmg@st-andrews.ac.uk).

## **SURREY**

For details on meetings, please contact Joy Perkins at joyeperkins@googlemail.com

## **SURREY HEATH**

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

## **TYNESIDE & NORTHUMBERLAND**

For 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

## **YORK**

For more information please email christiansinscienceryork788@gmail.com

## **Gentle Reminder - Annual CiS Membership renewal**

All membership renewal notices are posted during January and February. If you have any questions, please email David Scott, our membership secretary, on membership@cis.org.uk

**Prompt responses to the annual renewal notices would be much appreciated.**