

## Afternoon Parallel Tracks

### Science & Engineering – “Bringing Christianity To Bear On Science & Engineering”

Christianity transforms all areas of life. So, presumably, that includes transforming that part of our life which we spend in the lab. But what can it mean for Christianity to transform a task as methodical, objective, and secular as science and engineering research? This track brings together scientists, engineers, and theologians; from Europe and Asia; from academia and industry. We will consider what Christianity brings to science and engineering research, particularly in the present context of Hong Kong.

### Living in a connected world – internet of things, smart sensors and autonomous vehicles

**Irene Fan, SCALE InnoTech**

Every Industrial Revolution brings along new learnings and challenges. Humans crave efficiency and maximum returns yet often forgo sustainability, harmony and even ethics for the society in the midst. The development of the internet, globalization, and digital economy has connected the world in all aspects. The Fourth Industrial Revolution (I4.0) brings along the Internet of Everything, Smart Cities with intelligent sensors everywhere, and Autonomous Vehicle (AV). How shall we live in this connected and “smart” world? How shall we value and use our human intelligence?

*Irene obtained her Master and Bachelor degrees in Industrial Engineering from the University of Toronto, MTS from Tyndale Seminary, and her PhD in Industrial and Systems Engineering from the Hong Kong Polytechnic University. She started her career with the first mobile network Cantel in Canada, and was named DMTS (Distinguished Member of Technical Staff) at Lucent Technologies/Bell Labs. She managed the innovation strategy and the Digital Living Lab at the Hong Kong ASTRI. She is a researcher and practitioner of knowledge and innovation management, focusing on the ICT, education, NGO, and government sectors.*

### The calling of a Christian academic in science

**Ard A. Louis, University of Oxford**

What does our calling to be disciples of Christ mean for our academic vocation (whether temporary as students or longer term as a career)? What are some of the promises and pitfalls of the scholarly life? How can academics and postgraduate students serve and relate to the wider body of Christ (the Church)?

*Ard is professor of Theoretical Physics at the University of Oxford, where he leads an interdisciplinary group of researchers. Recent interests include the physics of biological evolution, self-assembly, and theories of why deep learning works so well. He also writes and speaks widely on science and faith, for which in 2013 he was elected a member of the International Society for Science and Religion. He recently made the four-part documentary Why Are We Here with David Malone and appeared in The Story of God with Morgan Freeman, giving him an Erdős–Bacon number of 6. Together with his wife, Mary, he helps lead the Developing a Christian Mind conference series in Oxford. He was born in the Netherlands, but grew up in Gabon.*

## **Examining the possible insufficiency of the principle of Non-overlapping Magisteria**

### **Vincent Chan**

It is commonly agreed that there are four primary types of methodologies for handling the dialogue of science and religion: models of conflict, independence, dialogue, and integration. Proponents of the independence model often argue that it is better to isolate science and religion into two “non-overlapping magisteria” (NOMA) – the factual and the ethical magisteria – to avoid any “false” conflict between science and religion through minimising their interaction with each other. While it may seem at the first glance that NOMA provides some degrees of peace to the dialogue of science and religion, it is crucial to question whether such peace is consistent and, more importantly, whether it is at all authentic.

My talk focuses on examining the possible insufficiency of the principle of NOMA: how it is impossible to systematically allocate enquires into independent magisteria. Moreover, if there is any conflict between science and religion, it actually does not occur due to their interaction in the way that NOMA suggests. NOMA therefore fails to achieve its original purpose to function as a “conflict resolver”. Consequently, the peace that NOMA promotes seems to lack both consistency and authenticity.

*Vincent received his Bachelor degree in Actuarial Science at Texas A&M University, before returning to Hong Kong where he spent several years working in a large international church as a pastor. Vincent then received his Master of Divinity at The Chinese University of Hong Kong in 2019. He is now studying for his PhD in the research area of Science and Religion at Hong Kong Baptist University, where he also serves as a member of the Senate and committee member of multiple academic taskforces. Vincent is a founding executive committee member of The Society for Science and Religion in Asia (SSRA). He also serves as the associate pastor of a local church, one of the board directors of Tuen Mun District Christian Churches Union, and the ministry advisor of Youth with a Mission.*

## **Human gene modification: playing God?**

### **Keith Fox, Southampton University**

The last 30 years have seen dramatic advances in our understanding of biology, with major discoveries in molecular and cellular biology. We can move genes from one species to another, altering the genetic make-up of plants and animals as well as bacteria, producing genetically modified organisms (GMOs). We know the sequence of the human genome and can use this information to predict susceptibility to some diseases, as well as to give information about our ancestry. Recent advances now enable us to manipulate (edit) our genomes with potential for curing or preventing some genetic diseases and even enhancing human capabilities. We may even be able to make synthetic “life”. In this talk, I will examine each of these discoveries and explore their ethical implications, considering the different responses that people adopt. These scientific advances raise questions about what it means to be human, what is “normal”, what is “healthy” and what it means to be made in the image of God. Some people suggest that we are in danger of “playing at God”, though what does that mean? These issues, and others, will be discussed from scientific and Christian viewpoints, to help us to develop informed opinions on these complex issues.

*Keith is Director of The Faraday Institute for Science and Religion in Cambridge and Professor of Biochemistry at Southampton University. He studied Natural Sciences in Cambridge, specialising in Biochemistry and completed a PhD in the Department of Pharmacology in 1980. He moved to Southampton in 1987 as a lecturer in Biochemistry and Pharmacology and became Professor of Biochemistry in 2000. His research interests concern DNA structure and its recognition, and his scientific work has been published in over 200 papers and articles. He is Senior Executive Editor of Nucleic Acids Research. He is a former chairman and trustee of Christians in Science and is Editor of Science & Christian Belief. He has special interests in bioethics, creation/evolution, and genome modification. He is a licensed lay minister (Reader) in the Church of England. His book with Alexander Massmann Modifying Our Genes: Theology, Science and "Playing God" was published in March 2021.*