

Thirty Years of Dialogue: Science and Christian Faith in Australia

A History of ISCAST 1987–2017

John Pilbrow, March 2018



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Preface

As the thirty-year anniversary of the establishment of ISCAST fell in December 2017, it seemed a good time to stand back and reflect on what has contributed to ISCAST as we find it today. It is hoped that this modest history of ISCAST will be a valuable document, not only in reflecting on and recording much of the thinking over the past thirty years, but also to show what has been achieved during that time.

This particular document arose out of email correspondence between Richard Gijsbers, Chris Mulherin and me late in 2016 when I was asked if I could produce a short history for the ISCAST website. It soon became apparent that there was a need to go back through the archives, in particular Board and AGM minutes, and also other documents, in order to trace the development of ISCAST from an idea to a reality.

While I had been deeply involved in the Research Scientists' Christian Fellowship (RSCF) in Melbourne from 1965 to 1978 and had attended RSCF meetings in Oxford between 1961 and 1964, I did not become involved with ISCAST until 1991. Looking back, it is regrettable that there had been a long gap without any obviously coordinated activity at the faith–science interface in Australia. ISCAST has contributed immeasurably to remedy the situation.

While this history may seem to labour the points regarding the genesis of the ideas at the heart of ISCAST's activity, it seemed important to me to trace their development over the full thirty years. ISCAST archives held at Stockdale ACS were incomplete and I am indebted to my predecessor as ISCAST President, Professor John White, for initially providing copies of many of the missing Board minutes and, more recently, for locating further files in his possession that are now part of the ISCAST archives here in Melbourne. While I have sought to be as accurate as possible with regard to specific dates, gaps in the archives have meant that at some points I have had to report only in general terms.

There is a certain amount of necessary repetition of material so as to ensure the internal coherence of particular sections. Titles have been used where appropriate but, for the most part, people are referred to by their names.

My thanks go to a great many people who provided information and recollections from their past experience within ISCAST, and also to those who read and commented on an early draft. These include Peter Barry, Graham Buxton, Jonathan Clarke, James Garth, Alan Gijsbers, Richard Gijsbers, David Goldney, Ian Hore-Lacy, Helen Joynt, Chris Mulherin, Patsy Robertson, Stephen Spence, John White and Mark Worthing. In particular, I am deeply grateful to both Helen Joynt and Peter Barry for the extensive records they provided regarding ISCAST Vic and ISCAST NSW respectively (see Appendices). If I have inadvertently overlooked anyone, I can only ask their forgiveness!

I have counted it an enormous privilege to have been involved with ISCAST for much of its history. Equally, I have been humbled by the dedication of so many members that has been strongly reinforced as I have delved into the archives covering the past thirty years.

One reader of an early draft described it as “exhaustive and exhausting!” So be it. But this is the story that unfolded.

John Pilbrow

Foreword

ISCAST owes much to John Pilbrow and his contribution to ISCAST and the science and Christianity discussion. I still have the notes of a lecture he gave over half a century ago to high school students at a science camp under the auspices of the Research Scientists' Christian Fellowship. He spoke on cryophysics and how electrical conductance in solids changes with temperature. A number of scientists who were Christians gave unstintingly of their time at that camp, to enthuse the next generation of students, not only about science but also about the role of science as service and worship. At a previous Scripture Union leadership conference I had picked up Bernard Ramm's *A Christian View of Science and Scripture*, and these had set me on a path of fearlessly integrating the best that science has to offer with rigorous Christian theological and pastoral reflection. As a medical student at the University of Melbourne I encountered Allan Day's passion for both physiology and Christian theology. It has been a joy to follow in the footsteps of John and Allan. These mentors have passionately and critically interacted with me in the overall dialogue between science and the Christian faith. Their passion has shaped ISCAST, and their interactions and leadership have made me a better Christian practitioner and scientist.

This book is the story of that shaping. It is one thing to encounter brilliant individuals, but it is another to develop a body of people who collectively can educate and inspire each other in their pursuit of excellence in this area, and then service the community. Brilliant scientists are not necessarily good organisers, nor do they necessarily effectively set strategic directions to an organisation. John's history of ISCAST tells the rocky road we travelled, perhaps treading lightly on the frustrations between various chapters and the Board as we sought to develop and implement meaningful strategies.

This history tells the story of what went on. We owe a lot to volunteers who have given unstintingly to this service. Robert Stening, Richard Gijsbers and Peter Barry come to mind quickly, but there are others who have each contributed in their own way to communications, the website and raising ISCAST's profile.

With the appointment of Rev. Dr Chris Mulherin as our executive director we have taken a leap forward as an organisation, entering more publicly into the dialogue between science and the Christian faith. We have achieved a lot and he will be able to see and achieve more because he is standing on the shoulders of the giants of this story. There are high school students, university students, scientists, science teachers, philosophers, theologians, people in the pews, the media and academics formally engaged in the dialogue, all of whom would benefit from ISCAST's insights.

The ongoing challenge to Christian researchers at the forefront of their profession is to take time out and reflect *theologically* on what they are doing. What extra comes from being a follower of the Light of the World? He calls us to follow him, so that we will know the truth and that the truth would set us free. Then how do we take the light which enlivens us into the world of darkness, ignorance and evil? That is the ongoing challenge to ISCASTians both as individuals and as a body.

I thank John for his careful and faithful documentation of the first thirty years of ISCAST. This is a hard act to follow, but other contributions to the history of ISCAST from other perspectives are welcome.

Alan Gijsbers, ISCAST President

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Chapter 1 Introduction

The Institute for the Study of Christianity in an Age of Science and Technology, or ISCAST, was established on the 29th of December 1987 as a Limited Liability Company in NSW. It is an association committed to a biblical theological perspective whose members take for granted the need for dialogue, not only in the science–faith area, but in all areas of human enquiry.

As a Christian organisation committed to ongoing exploration of Christianity, particularly in the light of developments in modern science, ISCAST also seeks to counter anti-intellectual tendencies in both the church and the wider community, again through dialogue and conversation, not confrontation. Known originally as ISCAST Ltd., it is now simply called ISCAST or, more fully, ISCAST–Christians in Science and Technology.

An earlier somewhat informal organisation at the faith–science interface was the Research Scientists’ Christian Fellowship (RSCF), modelled on the UK organisation of the same name. RSCF in Australia functioned in both Melbourne and Sydney for about twenty years until 1978. Notable visitors who met with RSCF Members in Melbourne and Sydney during the late 1960s included the late Professor Donald Mackay (Professor of Communication and Neuroscience, Keele University), Professor David Ingram (Professor of Physics, Keele University) and Professor (later Sir) Robert Boyd (University College London). Professor Malcolm Jeeves also made several presentations in Melbourne during the same period before returning to the UK in 1969, acquainting many of us with developments in neuroscience. Professor Allan Day, who had belonged to the Oxford RSCF in the mid-late ‘50s, refined his understanding of the relationship between faith and science through his long friendship with Professor Jeeves while they were both on staff at the University of Adelaide.

For about a decade from the late 1950s until around 1967, in both Melbourne and Sydney, RSCF collaborated with the Scripture Union in running annual Science Weekends for senior secondary students. Similar events also took place in Perth. It is noteworthy that our current President, Alan Gijsbers, acknowledges his debt to the two RSCF/SU Science Weekends he attended as a schoolboy in 1965 and 1966.

The founding of ISCAST in 1987 filled the void at the faith–science interface that had existed for some nine years since 1978. Now, thirty years later, the ISCAST brand is well-known and ISCAST is deemed to have recognisable credibility.

A major reason that organisations such as ISCAST need to exist is because there is a perceived tension between science and religion. Behind the scenes, many non-religious thinkers believe that religion has little to say to the sciences and believe there is no basis for dialogue. Some within our own Christian communities believe science is at best a peripheral issue and, at worst, idolatrous and that dialogue and/or conversation on these issues is not a priority. It is not despite, but precisely because of these persistent views in many segments of society that ISCAST remains convinced of the need to establish and maintain dialogue.

ISCAST's founding documents are the Memorandum of Association¹ and the Articles of Association.² The items of most relevance to this history are to be found in the powers and objects from the Memorandum of Association. The foundational statement that defines what ISCAST stands for is found in clause 4 of the memorandum which reads:

In view of the need firstly to integrate the views of the world, as revealed in the Holy Scripture, with discovery, and, secondly to foster the responsible use of knowledge and technology for right and proper purposes, therefore, the additional objects for which the organization is established are:

Representative items from the sub-clauses of Memorandum 4, particularly relevant to our historical evaluation, are listed below:

- b. To promote, encourage and extend an understanding of the world which takes into account the principles of the Christian faith;
- c. To establish a centre and learning facilities for the study of the relationship between science, technology and the Christian faith;
- e. To establish and conduct school seminars, lectures courses and other forms of education;
- f. To teach, train and instruct persons and promote education in areas of Christian theology and scientific technology;
- h. To promote, encourage and support the dissemination by all means including lectures, printing, records and transmission by radio and television of knowledge and information;
- j. To make known and further the objects and activities of the organization by the publication and distribution of papers, journals and other publications by advertising in any medium and by any other means thought desirable;
- s. In furtherance of the objects of the organization: to employ and engage persons whose services may be deemed necessary or desirable for the purpose of the operations of the organization.

ISCAST was envisaged by its founder, the late Professor Lawrie Lyons FAA, to be an academy of Christians who were established scientists and scholars. Thus the original membership, consisting only of fellows, is reflected today in that decision making continues to reside with them and is delegated to the Board consisting of up to seven fellows.

The official name, the Institute for the Study of Christianity in an Age of Science and Technology, has been a handicap in some ways simply because it is something of a mouthful. In spite of that, the acronym ISCAST has become a recognised brand. What has always been clear is that ISCAST was to be an organisation committed to searching for meaning in science and looking for appropriate connection between modern science and Christianity. The current president, Alan Gijssbers, provided the following insight into the origin of the ISCAST name:

¹ <http://www.iscast.org/documents/ISCAST%20Memorandum%20of%20Association.pdf>

² <http://www.iscast.org/documents/ISCAST%20Articles%20of%20Association.pdf>.

My understanding is that Lawrie Lyons adopted the name as a play on the idea that “the die is cast” (*alea jacta est*³) and his belief that the time was right for senior Christian scientists to take a stand regarding evolution and fundamentalism, that had considerable support in Queensland, on the one hand, and Christian liberalism on the other. It would appear that the name, Institute for the Study of Christianity in an Age of Science and Technology, was retrofitted by Lawrie to fit the acronym.

As a way of getting around the long name, the shorter subtitle, Christians in Science and Technology, has proved helpful in recent years in quickly conveying what we are about. However the original name has an important twist. The presence of ‘study’ in the full ISCAST name implies a broader mandate than simply the interface between science and Christianity. It further implies that ongoing effort will always be required in addressing the issues that arise, especially at the faith–science interface. And there is no claim that ISCAST has all the answers.

The first cluster of fellows were dominantly from the physical sciences but, over the years, the focus of ISCAST has broadened to include social, political, medical and ecological disciplines as well as specialists in technology, theology and philosophy, for example. Lawrie Lyons certainly recognised that fellows needed to exhibit very high academic standards, particularly when they were writing about or speaking into contemporary issues. ISCAST continues to be committed to the need for scientific and Christian thinking to be integrated into the daily lives of those Christians who are engaged in the various sciences.

In 1990 the Board encouraged the establishment of local chapters. These were to be self-supporting and, of course, self-funding. The most active chapters have been those in Melbourne and Sydney, though the Queensland Chapter flourished in Brisbane under Lawrie Lyons’s leadership for many years. In Canberra, during the 1990s, a few meetings were held at John White’s home, but they were infrequent. At the end of the ‘90s, when John was Science Policy Secretary of the Australian Academy of Science, the group was enlarged to work on a Christian response to cloning and stem cell research that was presented and accepted by the Anglican Diocese of Canberra and Goulbourn. (There were also parallel actions from the academy to government and the public.) Small chapters have also existed more recently in Gippsland and Bathurst-Orange, while in Adelaide there has been an informal link between ISCAST and the now defunct Graeme Clark Research Institute (GCRI) at Tabor College. The smaller chapters have functioned more as vehicles for individuals to host gatherings and discussions.

Chapters have provided opportunities for ongoing discussion amongst members and supporters to encourage deep reflection on our professional lives in the light of our faith. Annual ISCAST lectures in Melbourne and the regular ISCAST lectures in Sydney have assumed increasing importance.

It became apparent early on that there was a need for a membership category for those who did not satisfy the requirements for fellowship, or who themselves felt that they were not of the standard required of fellows. Thus the category of ‘associate member’ (later shortened to ‘associate’) was instigated followed later by, ‘corporate associate’, ‘supporter’, ‘family’ and ‘student member’. There is no membership test for associates and the other categories since

³ Said by Caesar as he crossed the Rubicon.

introduced as there is for election to fellow as outlined in the later chapter on membership. It is acknowledged that many associates have contributed significantly to the life and work of ISCAST.

While its roots are evangelical, ISCAST events attract Christians from other traditions looking for a forum to explore issues of current importance. For many, ISCAST provides the only environment for scholarly consideration of the issues. It should be no surprise that the issues identified particularly at the faith–science interface are common to all Christians who engage with them. In more recent times, ISCAST’s membership has expanded to include not only Protestant scientists and theologians but a small number of Roman Catholics as well.

In 1998 the Board became concerned that the ISCAST theological position was not clearly defined and this led to further ongoing discussion about what ISCAST is really about. In consequence, a new by-law regarding Scripture and evangelical belief was adopted in 2000 as applying to fellows (see the chapter on membership).

While the book by Bernard Ramm, *The Christian View of Science and Scripture*,⁴ and Charles Coulson’s *Science and Christian Belief* were influential in the late 1950s and the early 1960s, it was the publication of *Issues in Science and Religion* in 1966 by Ian Barbour that stimulated the massive growth in the number of scientists and scientist-theologians, particularly, who have done a great deal to address the impact of modern scientific paradigms on theology. The healthy debate to which they contribute is evidence that the conversation is necessarily ongoing. Many of the questions posed and issues faced do not have simple answers. This is true of science itself where theories and levels of understanding are often tentative and capable of being improved upon or even replaced. This is evident even more so in the science–faith area. A very extensive literature now exists running into the thousands, including a number of specialist journals.

The faith–science landscape looks rather different today from what older members of ISCAST would recognise from fifty or more years ago when they were students. The emphasis then was more about demonstrating the reasonableness of faith and that science and Christian faith were not enemies. While these considerations remain important for apologetics, nowadays there is interest in investigating the extent to which insights from modern science might assist us in probing the divine agenda and in reflecting how theology can help us understand the direction of science (*Faith and Wisdom in Science* by Tom McLeish, for example). The genesis of the ISCAST ethos has been an ongoing process, as reflected in even the earliest Board minutes. The first major attempt to refine the aims occurred in 1992. Perusal of Board minutes over the following decade and a half shows that consideration of aims and goals was ongoing.

During his term as president, John Pilbrow conducted brainstorming meetings in the major capitals between March and November 2006. This identified many challenges as well as opportunities. In particular, he found there was strong support for the appointment of a full-time CEO, but funds were not available at that time. In the follow-up to the brainstorming process, six ISCAST core values were written down; these are highlighted on the ISCAST

⁴ Current President Alan Gijssbers has commented, “I cut my teeth on Bernard Ramm’s *The Christian View of Science and Scripture*, recommended at an SU Leadership Training Conference while I was in High School (1964)”!

website homepage. Then in 2015, the State of Play Conference reworked the major issues likely to be of major importance for ISCAST over the next decade or so. Finally, the Board meetings in December 2016 and in February 2017 sought yet again to articulate the operating principles of ISCAST, the latter leading to a longer forward-looking document. In considering the findings from the brainstorming process, it was recognised that scientific and consequent technological advancements are causing our lives to change faster than ever before (see also the discussion in chapter 3). There are three common reactions to this state of affairs:

- a scientific fundamentalism that eschews religion, demanding that we mindlessly keep up
- a religious fundamentalism that rejects scientific advancement and with it the insights about creation that that brings;
- and a dynamic dialogue as advocated by ISCAST holding both the scientific and theological perspectives seriously and exploring the tensions between the two.

In response to these kinds of reactions, ISCAST seeks to serve three groups:

- scientists in their own professional contexts, providing pastoral support, mentoring and encouragement in their personal and professional challenges;
- churches, as they struggle with the apologetic challenges posed by the rapid developments in science and technology;
- and the wider community, as the insights that this dialogue generates are offered humbly to our society as it progressively tackles more complex problems.

ISCAST has come a long way since its foundation. Biennial Conferences on Science and Christianity (COSACs) are now well-established. The website is well-regarded and since 2009 it has hosted the ISCAST online journal, *Christian Perspectives on Science and Technology* (CPOSAT). The ISCAST Bulletin, that ran through 54 issues and served to provide a national identity from 1989 to 2007, has been superseded by the Digest since 2009 (see the later chapter on communications for more details).

An important step forward in the management of ISCAST occurred through contracting ISCAST administration to Stockdale ACS in Melbourne in 2007 (see chapter 2). This was furthered through the appointment in 2014 of the Rev. Dr Chris Mulherin as Executive Project Officer one day per week. Chris continued in 2015 and 2016 nominally 40% full-time equivalent as Executive Officer, and then from February 2017 as Executive Director at 60% FTE, with his new title better reflecting the role.

ISCAST has a responsibility to contribute to scholarship in the science–faith area through journal articles and books that reflect theologically on the best science. The online journal (CPOSAT) contains many fine contributions from fellows, associates and others. In addition, some fellows have also contributed to the journal, *Science & Christian Belief*. Perhaps the most notable contribution has been Allan Day’s lengthy article, “Adam, Anthropology and the Genesis Record: Taking Genesis Seriously in the Light of Modern Science”.⁵

⁵ *Science and Christian Belief*, 10(2) 1998, 115–143.

ISCAST has benefited enormously from lectures and informal discussions over the past 28 years by Malcolm Jeeves, Gareth Jones, John Polkinghorne, John Bryant, Colin Russell, John Houghton, Bob Russell, Sam Berry, Owen Gingerich, George Ellis, Darrel Falk, Alister McGrath, Richard Colling, Simon Conway Morris, Nancey Murphy, Denis Alexander, David Wilkinson, Bob White and Tom McLeish. They have all, in different ways, challenged us to think outside our comfort zones and to be prepared to tackle big issues.

As we look to the future, it is important to acknowledge those who founded ISCAST 30 years ago, as well as those who played a significant role in its ongoing evolution. These include Lawrie Lyons, the founder of ISCAST; Board members; John White, president from 1992 to 2006 and Robert Stening, secretary/treasurer from 1994 to 2009; chapter committees in Melbourne, Sydney and Brisbane; COSAC organisers; the Communications Working Group (CWG) that oversaw ISCAST publications; *Bulletin* editors; *Digest* editors; those who developed and manage the website, and the editor and associate editors of the online journal.

Recruitment of younger members and women as well as more established scholars and scientists who feel they are too busy to be involved is a major challenge. Given Australia's cosmopolitan and multicultural society, increasingly represented in science and academia, it is obvious that ISCAST membership and participation should also represent the cultural diversity seen in the wider community.

Finally, in 2017, a new category of fellow, namely 'distinguished fellow', has been introduced as well as the appointment of one of Australia's most prominent scientists, Professor Graeme Clark AC FAA FRS, as the inaugural Patron of ISCAST.

Chapter 2 Toward a National Identity

ISCAST, as a company limited by guarantee, is managed by a Board of directors elected from among the fellows. A brief summary of some key steps in the emergence of ISCAST gleaned from Board minutes over the entire period 1986–2017 follows.

The first meeting of what became the Board occurred on January 15, 1986 under the chairmanship of Emeritus Professor Lawrie Lyons. The Archives report no further meetings until mid-January 1987. There were six meetings of this informal committee during 1987 prior to the incorporation of ISCAST as a limited liability company in NSW on December 29, 1987 (ISCAST Ltd.). The inaugural Board meeting of the legal entity occurred on December 30, 1987. The founding Board members were: Professor Lawrie E Lyons (President), Mr Ian Burnard, Rev. Dr J A Friend (Vice-President), Dr Stephen Judd⁶ (Secretary/Treasurer) and Prof John White. The witness was Mr G R Christmas.⁷ A list of Board members from 1987 to the present is in Appendix 1.

As required by company law, annual general meetings have received and adopted annual reports and audited accounts and elected Board members from among the fellows for the following year. Changes to company law regarding audits have led to necessary recent changes to both the Articles and the Memorandum of Association.

2.1 Management from 1987 to 2009

The official management of ISCAST business from 1987–2009 was handled by the Board, much of it undertaken by the secretaries to the Board. Additionally from 1990, local arrangements were delegated to chapters as they were established.

The early years from 1987, from the foundation of ISCAST up to 1992, represents a period when successive Boards grappled with the question as to what ISCAST ought to achieve and how it should go about its business. A major step forward occurred in 1992 through the development of the ISCAST Aims; these are reproduced in full in Section 4.1. This represented, for the first time, articulation of an ISCAST ethos that expanded on the statements in the Memorandum of Association (See clause 4 and sub-clauses listed in the Introduction).

Though originally known as “ISCAST Ltd.”, in February 1990 the Board resolved that, henceforth, the organisation would be known simply as ISCAST, dropping “Ltd”. from the title.

In the early years, the Board operated the only official ISCAST bank account, but during 1994, chapters in Sydney and Melbourne were authorised to open their own accounts (see Section 5). A policy followed by successive Boards up to the present day is that ISCAST events should be self-funding. Progress towards a national administration including financial management was slow and it would be another decade or so for before a national administration with a single national fee structure would be realised.

⁶ A PhD in history. Since 1995 he has been CEO of Hammond Care for the Sydney Anglican Diocese. He is also a founding member of New College, UNSW.

⁷ A prominent Sydney Solicitor and Christian layman.

The Hugh Lyons Memorial Fund was established by Professor Lawrie Lyons and Mrs Alison Lyons, in memory of their son Hugh, who died young in unfortunate circumstances. Early suggestions concerned using funds for scholarships and a building fund administered by the Board. A Board meeting on November 2, discussed the possibility of establishing an ISCAST resource centre, associated with St Barnabas Church, Broadway, on long-lease land next to the University of Sydney. Promoted by Lawrie Lyons, the hope was that scholars could spend part of a sabbatical in a quiet place, with others, thinking about the impacts of recent developments in science. While the parish council was supportive, the proposal did not eventuate. ISCAST first accessed the funds in 2011 to subsidise attendees (especially students) coming to COSAC 2011. Since then, the funds have been used every two years to provide scholarships to COSAC as well, in one case, to enable an ISCAST member to attend a Faraday Institute Course in the UK. More recently the Board decided that the funds could be used in website development during 2016 and 2017.

2.2 Precursor to National Administration

During the mid-1990s the Victorian Chapter established the position of executive officer that carried a modest remuneration. The first appointee was Professor Allan Day, later succeeded by Dr Helen Joynt. In the light of the benefits to ISCAST Victoria of that appointment, Allan Day put a proposal to the Board for a national budget, uniform subscriptions and the appointment of an executive secretary. Further discussion of Professor Allan Day's proposal occurred at Board meetings on November 24, 1997 and January 19, 1998 but Allan's proposal was not adopted as policy at that time. Minutes of the Board meeting on June 24, 1998 report that Allan Day had declined the invitation to become executive secretary of ISCAST. In the event, Robert Stening continued as ISCAST secretary/treasurer and as a member of the Board for another eleven years.

Not all was lost, for on November 15, 1999 the Board discussed a national budget while on December 20, 1999 the idea of a national levy was considered. Finally, following the Board meeting on December 4, state chapters were authorised to send out subscription notices.

Enter Stockdale ACS (StACS), a company founded by Richard and Glenys Gijsbers in 2002 to manage the administration of professional societies. Richard, a forester by profession and a former senior Victorian public servant had already been working as a consultant in helping organisations with strategic planning and how better to use the Internet. His wife, Glenys had been helping not-for-profits with their administration. In 2003, Stockdale ACS was engaged by ISCAST Victoria to take over its administration in view of the retirement of Helen Joynt as executive secretary.

During the period 2003–2007, ISCAST Victoria was run largely independently of the national body. In addition to fellows and associates, a category of family membership was added. It produced a newsletter (VISCAS News), held its own AGMs, elected office bearers and so on. ISCAST Victoria also charged membership fees and so had its own revenue source in addition to events revenue. With these it paid for its secretariat. Stockdale ACS's role was essentially to organise events (Fires in the Belly, Thinkings, lectures, and field trips; see Section 5.1 and Appendix 4). StACS also managed the finances, committee meetings, Science and Christian Belief subscriptions and memberships for all ISCAST members.

The attendance of Richard and Glenys Gijsbers from Stockdale ACS at COSAC 2005 in Canberra turned out to be an important part of the journey towards a national administration.

What they observed during that conference convinced them that with good and consistent administration, COSACs would provide significant intellectual input to Australian Christianity.

Other initiatives during this time included work on the ISCAST website (see section 8.4) and establishment of the Communications Working Group (CWG), answerable to the Board, which, though initially an ISCAST Victoria entity, contributed significantly to ISCAST nationally over many years (see section 8.3).

2.3 Administration from 2007

Stockdale ACS took over national administration in 2007 in time to assist with COSAC 2007 where Alister McGrath was the main speaker. By then it was already managing the administration for more than a dozen professional societies. The benefit to ISCAST of this arrangement was that it took advantage of Richard's administrative/governance skills based on his previous work as a senior Victorian public servant in the Department of Forestry, and later as a business consultant, as well as Glenys' administrative abilities in administering conferences and membership lists. The four years during which Stockdale ACS had administered ISCAST Victoria had acquainted Richard and Glenys with the wide range of activities then occurring under the ISCAST umbrella.

Late in 2007, Richard developed the first version of the ISCAST vision, mission and Core Values, compiled as Strategic Directions for ISCAST. This resulted from several months of deliberations in response to the 2006 Brainstorming (see section 4.2). This document and its successive updates are a tribute to Richard's capacity as a business consultant and strategic thinker. The ISCAST Vision, Mission and Core Values from the Strategic Directions Document are displayed prominently on the ISCAST home page.

Another step on the way was the Board decision to establish uniform annual subscriptions. During September and October of 2009, invoices were sent to all contacts as follows: fellows (\$150), associates (\$50), families & corporates (\$70). ISCAST also collected subscriptions to *Science and Christian Belief* (\$50).

On December 14, 2009, the Board resolved that the treasurer should be a member of the Board. Eventually Michael Wong was nominated for the position of treasurer at the Board meeting on October 10, 2011. The Board meeting on February 2, 2010, resolved to appoint Richard Gijssbers to succeed Robert Stening as secretary to the Board, as Robert had stepped down after fifteen years. Richard was formally appointed to the Board *ex officio* on May 17, 2010 but as a non-voting member.

Over the next four years, the strategic planning continued through ongoing exploration of where ISCAST should be going and what its priorities should be. However, the lack of an executive officer continually stymied the process. Fortunately, the Board decided that it would "bite the bullet" and seek to make an appointment initially for one day per week and to see if this would generate the support, prayer and funds required.

2.4 Contribution of Presidents

ISCAST has been served by just four presidents: Emeritus Professor Lawrie Lyons FAA 1987–1992; Professor John White AO CMG FAA FRS 1992–2006; Emeritus Professor John

Pilbrow FAIP FInstP 2006–2009; and Associate Professor Alan Gijsbers⁸ FRACP FACHAM DTM&H 2009–present.

Professor Lawrie Lyons, a distinguished Professor of Physical Chemistry at the University of Queensland, had a vision of an Academy of Christian Scholars; hence the emphasis on fellows as the only membership category initially. As he explained to the writer in 1994, he was strongly motivated by the need to counter the fundamentalism and creationist teaching prevalent at the time, particularly in Queensland.

Professor John White, who served as president for 14 years, is a very distinguished Professor of Physical and Theoretical Chemistry at the ANU. John came to the task after a long involvement at the faith–science interface having served as convenor of the Oxford Research Scientists' Christian Fellowship (RSCF) for many years during the 1960s. Early in his presidency, a small leaflet outlining ISCAST's role and mission was printed. This listed ISCAST projects up until October 1992 including reviews, talks and correspondence. John's tenure saw the inauguration of the Biennial Conferences on Science and Christianity (COSACs), beginning in 1997, which have provided a welcome and necessary coming together of the membership from around the country and beyond. COSACs have also contributed to high-level conversations on many issues of contemporary importance. His presidency also involved continuance of a quite intentional policy of promoting invitations to notable international scholars to come to Australia on lecture tours. Some of the speakers from the UK were funded, or partially funded, by the British Council. Further, in his capacity as policy secretary of the Australian Academy of Science, John also made informal presentations to ISCAST meetings about the emerging fields of stem cell research and cloning (for example in Melbourne in 1997).

Emeritus Professor John Pilbrow⁹ came to the task in 2006 early in his retirement from thirty-six years in the Physics Department at Monash University where he had been HOD for nine years (1991–1999). During his presidency, John conducted brainstorming sessions with fellows and associates around the country from March to November, 2006 (full details may be found in Section 3.2). His President's address to COSAC 2007, "To Whom Much is Given, Much Will Be Required", was the culmination of the brainstorming process in 2006 and in many ways proved to be a catalyst that opened up wider discussion regarding the challenges and opportunities that lay before ISCAST.

Our current president is Associate Professor Alan Gijsbers, Honorary Clinical Associate Professor in the Department of Medicine and Medical Director of the Addiction Medicine Service, Royal Melbourne Hospital, University of Melbourne. He comes into the role with a strong sense of the importance of ISCAST and a determination for it to become a recognised resource for the community, particularly among students, the church and for scientists and professionals who are seeking to make their work an expression of their Christian faith. Upon taking over as president during COSAC 2009, Alan stated that in order to respond to these challenges, the Board needed a new secretary to replace Robert Stening, funds were needed for an ISCAST CEO and he sought our prayers. His take-home message at COSAC

⁸ Alan Gijsbers is also a past Chairman of the Christian Medical and Dental Fellowship of Australia and is currently President of HealthServe Australia.

⁹ President of the Australian Institute of Physics (1999-2000) and of the International EPR Society (1999-2002)

2009 was therefore: we have a cause, we have the gifts, so let's organise ourselves to serve our Creator and put these into practice as we have been called to do. Two years later at COSAC 2011, Alan reported that the Board continued to face many challenges: funds were needed in order to recruit an executive officer; ISCAST needed to develop a research program with research related to the central message of the Christian faith; chapters needed our support (including the newest chapters in Bathurst-Orange and Gippsland). He also expressed the hope that the two chapters in Victoria would be able to mount a thoughtful and mature response to the next Atheists Convention in Melbourne in 2012. He also reported that the Board had decided to amalgamate the oversight of all ISCAST funds nationally for auditing purposes. Alan has recently reflected on the fact that ISCAST has transitioned from being an informal fellowship of Christian academics to a professionally run organisation facilitating the public dialogue between science and faith in Australasia. Generating ideas, debating these and then disseminating them is the essence of ISCAST in his view.

2.5 Secretaries to the Board

The ISCAST Board has been served well by just five secretaries:

Dr Stephen Judd 1987–1988, resigned on February 13, 1988. Lawrie Lyons acted as secretary/treasurer until Alan Friend became secretary in 1989.

Rev. Dr Alan Friend 1989–1992. Alan, formerly Professor of Chemistry at the University of Trinidad, returned to Australia where he became an ordained Anglican minister. In 1994 he took up the position of Master of Christ College at the University of Tasmania.

Ian Burnard¹⁰ 1992–1994.

Dr Robert Stening 1994–2009. Although Robert offered to be Board (i.e., company) secretary for twelve months at a Board meeting (March 21, 1994), he remained in that position until 2009 and for some years also doubled as ISCAST treasurer. His position as secretary was confirmed at Board meeting on May 2, 1994. An Associate Professor of Physics at the University of New South Wales (UNSW), Robert also pioneered a science and religion course at UNSW that continued as an online course after his formal retirement until the year before his death (for more details see section 10.3). There is a tribute to Robert in Section 5.2.

Richard Gijbbers 2010-present: Richard is Principal of Stockdale ACS. For twenty-five years Richard worked in the Victorian Public Service as a field forester and in policy development and planning. Formerly a visiting research fellow at both Melbourne University and ANU, he has also been involved in community forest development in Nepal, India and Cambodia. As consultant, his expertise involves assisting organisations with strategic development and information management, conducting change management and advising on the use of information technology.

¹⁰ Ian Burnard served for many years as General Secretary of the Intervarsity Fellowship (now known as Australian Fellowship of Evangelical Students) before moving on to an administrative role in the Colleges of Advanced Education Sector.

2.6 Executive Director Appointment

The report “On Appointing a CEO”, as a PowerPoint presentation, was prepared by Richard Gijssbers with input from Professor Michael Knight. The job description was approved and the Board committed to finding the \$35,000 it would cost to appoint an executive project officer (EPO), rather than a CEO, initially for one year. The decision was announced at COSAC 2013 in Adelaide whereupon a donor immediately offered \$15,000 towards the project. On November 12, 2013, the Board took this as a sign to go ahead and, after advertising the position, Rev. Dr Chris Mulherin was duly selected and appointed to start work from March 2014.

To appreciate the evolution of the Rev. Dr Chris Mulherin’s present appointment as executive director (ED) of ISCAST, President Alan Gijssbers’ letter to members in June 2013 regarding ISCAST executive project officer team support, is reproduced here in full:

At the last ISCAST Board meeting we decided to appoint an executive project officer to help us advance our mission. Rather than rely on outside funding, we decided that it would be better if we sought funding from the members on a team support basis. The EPO will

- visit and support ISCAST chapters, encouraging them in their annual programs,
- represent ISCAST to the wider community through media comment, input into various blogs and the ISCAST website,
- develop ways that ISCAST might contribute intelligently, with wisdom and through strategic alliances to issues that relate to science and Christianity in the Christian community.

Initially the Board decided to fund the position for one day a week for one year. This together with support to permit travel and other expenses means that we will have to raise \$35,000 for one year. Our prayer is that this will be an ongoing and expanding project.

We are therefore starting a team support plan to be formally launched at COSAC 2013. We have about one hundred core supporters. Therefore we will be looking to members to consider paying \$300 each for the one year to support this position.

We have prayerfully set ourselves down this path and seek confirmation from God that this is the right way forward. Would you please pray about this position and consider how you could help ISCAST take the next step in its development. Please also fill out the form below with your commitment to support this initiative.

A/Prof Alan Gijssbers, ISCAST President, June 2013

Chris Mulherin’s role was threefold, building on the three points in the President’s letter:

- To build up the chapters;
- To establish strategic links with related organisations;
- To extend ISCAST’s communication function through the website, social media, and relations with secular and Christian media.

The appointment was extended to two days per week in 2015 and the title changed to Executive Officer. Throughout, Chris has focussed on speaking and writing as well as initiating the move to a more dynamic website that would be attractive to the non-ISCAST

person. From 2014–2016 Chris' position was funded from donations from members over and above their annual subscriptions, supplemented by several substantial contributions.

During 2016, discussions took place between ISCAST and a potential benefactor, Mr Tony Morgan, a retired senior public servant, that led to a commitment to fund a third day a week for Chris to enable ISCAST to engage more explicitly in Christian Apologetics. In the light of that, the Board resolved to appoint Chris as ISCAST's first Executive Director (ED) from 2017 for three days per week. Despite Tony's untimely death, Chris' appointment as executive director went ahead. Although necessary documentation was never signed, the executors of Tony's estate have honoured the commitment with a one-off payment of \$105,000.¹¹

The funding goal for the ED position in 2017 (60% FTE) was \$90,000 including salary, travel and associated expenses. By the end of the year \$93,000 had been raised, including \$35,000 from the \$105,000 benefaction.

Richard Gijbbers has commented,

The funds have always arrived when we needed them. God has provided and continues to provide abundantly. Members have been and are being generous and people are seeing the need and feel it is important enough to support. My feeling is that our potential for service is limited only by our imaginations and vision, and not finance. The challenge now is for us to build a team of supporters and donors to make this funding secure over the long term so that we can continue to plan and, hopefully build up the ministry and the team into a permanent one.

During 2017 Chris has taken an increasingly directive role in the organisation as well as pursuing opportunities to speak. He has also built relationships with other organisations including the World Science Festival Brisbane. Along with Chris, ISCAST fellows Ken Freeman and Jonathan Clarke participated in the 2017 festival.

Chris' editorial from the August 2017 edition of the ISCAST Digest provides a timely account of his activities, and is therefore reproduced in full here:

Dear ISCAST friends, acquaintances and interested observers,

Lend me your ears as I comment on exciting ISCAST happenings and plans.

A time of transition

As many of you know, ISCAST is in transition as we step boldly into a public space dominated by increasingly strident secularism. We are on a path to become a significant

¹¹ Tony Morgan's sister and Executor, Felicity Hartigan, sent the following message in an email to Alan Gijbbers: "I'm sure I can speak for all of us when I say that "some sort of memorial lecture after his name" - or any other small tribute you can imagine would be most appreciated. Tony may have wished to remain anonymous in life (he was always modest and unassuming), but I think that he has no choice but to let us speak on his behalf now! I am very happy for you to work out how best to do this - but I can speak for Tony by suggesting that we would not want this to become a burdensome task for you - I am sure you, like many of us, find difficulty fitting your work into the time available! We are most touched that you have suggested this, Alan, and look forward to hearing if and when such a memorial is put in place. It is very cheering to know that Tony lives on in the lives and memories of many of us who loved him".

voice on matters of science (and apologetics more generally) and Christian faith. And we now have a part-time Executive Director (yours truly, and ED for short).

As I seem to be telling people daily and as people confirm, coming to terms with science is essential for a robust Christian faith. Dividing the mind between faith on Sunday and the Western secular technopolis during the week is a recipe for existential and intellectual atrophy. So, as well as things we have done in the past, ISCAST is deliberately aiming at vigorous engagement, in both the church and secular space.

So what are we doing to change perceptions about the credibility of following Christ in an age of science?

The networking circuit

My vow in this first year as ED was to accept all offers to speak, preach, write, and meet with people. No, it's not sustainable but it has enabled me to do a lot of 'networking' (how I dislike that word). And in so many places the response is the same: "ISCAST? That's great ... but, I haven't heard of you".

Snippets

Above you will see a memento of my recent trip to Perth where I gave eight talks to Scripture Union, to Baptist youth and young adults, as well as three at Christ Church Grammar. This month I go to Brisbane to be with Anglican school chaplains.

I have been interviewed on two ABC programs in the last couple of months: on James Carleton's slightly irreverent *God Forbid* and on *The Nightlife*. It was gratifying to have James ask for more ISCAST 'talent' and say "I thought your episode was a beauty; it really made me think about the assumptions I didn't know I was making".

In July and August I am engaged in a 'church crawl' across Melbourne, preaching in numerous churches on Psalm 19, "The heavens declare: Science, faith and the gospel".

Garratt Publishing have asked us to propose a volume in their popular series with *A Friendly Guide to Science and Christianity*. It will be an attractive resource, particularly for schools and study groups, presenting a light history and philosophy of the harmony between Christianity and science.

We are also in conversation with a publisher about an ISCAST imprint so we can easily publish quality books economically. Do you have a book in you?

Future plans

Our biennial Conference on Science and Christianity, March 23–25 next year, will feature Jennifer Wiseman, senior scientist on NASA's Hubble space telescope.

In March 2019 we are hatching plans for a visit by Alister McGrath, perhaps for a national apologetics conference. Meanwhile, don't forget to keep perusing the ISCAST website or 'like' us on Facebook so you see the latest in news and views. Not to mention our regular book reviews too.

God's peace to all and wisdom too as we seek to engage as Christians in the marketplace of ideas.

2.7 John Templeton Foundation (JTF)

Many attempts were made over the years to obtain funding from the John Templeton Foundation, based in the United States. Modest funds were provided to assist with COSAC 2007 (\$5,700). An even smaller sum was provided by the JTF for the small Calvin 500th Birthday Conference held in Melbourne in 2009.

During August 2007, John Pilbrow visited the John Templeton Foundation headquarters in Philadelphia where he discussed funding strategies with Program Director Drew Rick-Miller. This revealed an important aspect of the JTF philosophy: that its funding schemes are generally set up for projects of up to five years' duration, after which they are expected to be self-funding. This was confirmed by Dr Rich Park (Biola University), representing the JTF, in a short presentation to the State of Play Conference in 2015.

In 2008, ISCAST was awarded US\$30,000 for the re-development of the ISCAST Website (the third iteration) over a five year period. US\$15,000 was provided up-front for setting up the new site followed by annual grants of US\$3000 a year for five years to ensure that the site was properly maintained and kept up-to-date. James Garth managed the funding from, and reporting to, both the Board and the JTF.

At the present time, ISCAST has no plans to seek further funding from the JTF.

Chapter 3 Developing Strategic Directions

The various stages in the development of what are now the broad directions of ISCAST are outlined in what follows. In sections 2.3, 2.4 and 2.6 we have already referred to a number of initiatives that have been discussed ahead of the fuller accounts here in Section 3.

3.1 Statement of Aims 1992

In 1992, the Board released a document, Statement of Aims 1992, which built on the aims embodied in the Memorandum of Association (see sample in the Introduction). This statement represented an important step in the evolution of ISCAST and is reproduced in full here:

The Institute for the Study of Christianity in an Age of Science and Technology (ISCAST) has been set up to aid the study of the interaction between science and the Christian faith, and the assessment of modern technological advances in terms of the insights of that faith.

The institute is registered in New South Wales as a not-for-profit company. It is governed by a Board of directors elected at an annual general meeting of fellows (members). Fellows have been invited by the directors to apply for election in consequence of being persons of academic standing who have declared themselves in agreement with the aims and objectives of ISCAST as set out in its Articles of Association.

Principles:

Fellows of ISCAST take a theological stance which is based upon a belief that God is the author of all truth and in particular that Jesus, the Living Word of God, is revealed in the Holy Scriptures. The statements of the Apostles' Creed would be warmly affirmed by all fellows.

Fellows of ISCAST affirm the general objectives of scientific research, which aims at increasing our understanding of the universe, and take the view that scientific research should be employed for the benefit of all.

It is considered that there are many phenomena that cannot be examined in a meaningful way solely by the methods of science. To deny them meaning on this account is to beg the question of their importance. Ethical issues, for example, resist treatment from a purely pragmatic viewpoint. Human relationships also involve more than psychological states expressed in terms of chemical processes. It is now generally agreed that the objectives and methods of science and technology cannot be isolated from the values held by members of society.

ISCAST fellows affirm that the Christian faith makes an essential contribution to the study and resolution of contemporary issues. They believe that the investigation of the natural world by the methods of science affords valid and useful information because the universe is rational and the creation of God who is the source of reason.

No satisfactory world view can therefore be developed unless it takes into account the universal activity of God in creating and sustaining the material universe. We are challenged by the nature of phenomena to investigate complementarity theories which seek to bring order and meaning to varying theories of knowing.

Logistics:

The activities by which ISCAST carries out its aims and objectives include: seminars and conferences, publication and circulation of ISCAST bulletins; inviting distinguished scholars who can bring their own experience and insights to bear on matters related to science, technology and the Christian faith. The organisation of local chapters is encouraged where there are fellows able and willing to take responsibility for them. At the time, activities of ISCAST were supported by the Hugh Lyons Memorial Fund but it was always the intention that as far as possible all activities will be self-supporting.

Professional relationships:

By 1992, ISCAST had already established links with like-minded organisations such as the American Scientific Affiliation, Christians in Science (UK) and the Victoria Institute (UK). Cordial relationships were sought with Australian organizations such as the Zadok Centre, the Australian Fellowship of Evangelical Students, Christian Medical Fellowship and the Australian Teachers' Christian Fellowship. ISCAST recognises the value of longer established bodies such as the Centre for Theology and the Natural Sciences, Berkeley, USA and the Ian Ramsey Centre, Oxford.

Information service:

The Institute provides a service whereby persons who would like advice on, and answers as far as possible to, questions in the general area of science and Christianity, may put these questions to informed Christian scholars.

The first four of these principles require no particular comment. The final item, information service, while still a laudable idea, still remains a challenge. ISCAST certainly has appropriately qualified people to respond to questions from the public and the website provides a place for this to happen (see also Section 7).

3.2 Brainstorming 2006

During John Pilbrow's term as President (2006–2009), 'brainstorming' meetings were held in Melbourne, Adelaide, Sydney, Brisbane and Canberra between March and November 2006, to seek input from a wide range of our members regarding the future directions for ISCAST. The feedback from this process went some way towards furthering the understanding of what ISCAST is and what its role and function should be. The findings were distilled into a document (ISCAST Ltd – Discussion Paper), widely circulated amongst the ISCAST membership back in 2007. For uploading onto the ISCAST website, it has been renamed Discussion Paper on Future Directions 2007.¹² The executive summary of the report is reproduced in appendix 2.

The brainstorming process identified many areas of opportunity and contained a number of recommendations for future action. In particular there was strong support, in principle, for a full-time person who would be able to represent ISCAST, who would travel and encourage the involvement of those scientists who were Christians to be much more involved. As already mentioned, it was not until 2014 that the Rev. Dr Chris Mulherin was appointed initially with the title of 'executive project officer.' Over the past decade, approximately 80%

¹² Original Title was ISCAST Ltd Discussion Paper, and circulated in 2007. See http://iscast.org/resources/Pilbrow_J_2007-Discussion_Paper_on_Future_Directions_2007.

of the recommendations listed in appendix 2 have been acted upon and achieved at some level.

John Pilbrow's presidential address at COSAC 2007, "Of Those To Whom Much is Given, Much Will be Required", identified many challenges and how they might be addressed.¹³ Here he covered the main issues from the Discussion Paper including hermeneutics, the conviction that science is a legitimate human activity,¹⁴ technology, creation theology,¹⁵ the human person,^{16,17} theodicy,^{18,19} cloning and stem cell research²⁰ and anthropic principles in fine-tuning.²¹ We were also challenged to articulate our role as responsible stewards of the earth.²² Noting that evolution and the history of life on earth are matters that never seem to go away, he commented,

We must be concerned for students at high school and in 1st year university, particularly, who come from backgrounds where evolution and much else of modern science is

¹³ http://www.iscast.org/resources/To_Whom_Much_is_Given_Pilbrow_President_Address-COSAC07.pdf.

¹⁴ See recent book, *Let there be Science: Why God loves Science and Science loves God* by Hutchings and McLeish (2017).

¹⁵ We need to be reminded that we are not creators in the sense that God is. We are designers and builders. Often we look for symmetries yet nature is not really symmetric. And in physics terms, the most interesting things in the world involve symmetry breaking.

¹⁶ MA Jeeves, *Human Nature at the Millenium: Reflections on the Integration of Psychology and Christianity*, Baker (Grand Rapids)/Apollos (Leicester) 1997,

¹⁷ Alan J. Gijsbers, *The Dialogue between Neuroscience and Theology*, COSAC2003 Collected Papers: *God, Science and Divine Action: God's Interaction with His Creation*, 26. ISCAST Website – past papers.

¹⁸ DVD of lecture by Dr Vinoth Ramachandra from Sri Lanka to Faraday Institute Course #5 on 1 April 2007.

¹⁹ From 1991 to 2002 an extensive exploration of divine action in the light of modern science took place, co-sponsored by the Vatican Observatory (VO) and the Center for Theology & the Natural Sciences (CTNS) in Berkeley. Topics covered included Quantum Cosmology, Chaos Theory, Evolution, Neuroscience and Quantum Mechanics. The goal was to see what insights from modern physics, in particular, might illuminate our understanding of divine action. There was particular emphasis on a non-interventionist understanding of God's actions, consistent with the kind of world that I described earlier which is believed to exhibit genuine openness. Nothing¹⁹ on this scale has ever been previously attempted. The 100 or so chapters that comprise the five volumes, *Scientific Perspectives on Divine Action*,¹⁹ provide scholars and the general reader with a resource that is unmatched anywhere on the topic. The introductory chapters written by Bob Russell (Vols 1-3 & 5) and Nancey Murphy (Vol 4), are important summaries of the main findings and are valuable scholarly contributions in their own right. Mark Worthing authored the final Chapter in the sixth and last volume!

²⁰ Gareth Jones *Bioethics: When the Challenges of Life Become Too Difficult* ATF Press, Adelaide 2007

²¹ Simon Conway Morris, *Life's Solutions: Inevitable Humans in a Lonely Universe*, CUP Cambridge 2006

²² Prof Bob White FRS gave a lecture on *Caring for the Environment* to the Faraday Course #5 on 1 April 2007. A DVD is available.

opposed on the grounds that it conflicts with scripture. Regrettably such students come ill-equipped to pursue a credible career in biological or behavioural sciences while clinging to the particular Christian position they have inherited. It must mean that those who have taught these young people to pitch the bible against the best science have simply not done their homework. It is no wonder some lose their faith at university. It is grossly unfair and irresponsible to load such a burden on young people.²³

In the months following COSAC 2007, a small working group consisting of Alan Gijsbers, John Pilbrow, Tom Spurling and Richard Gijsbers met to discuss possible strategic directions for ISCAST. As already referred to in the Introduction, scientific and consequent technological advancements are causing our lives to change faster than ever before. This had led to three common reactions to this state of affairs that were noted in 2007:

- A scientific fundamentalism that eschews religion, demanding that we mindlessly keep up.
- A religious fundamentalism that rejects scientific advancement and with it the insights about creation that that brings.
- A dynamic dialogue as advocated by ISCAST holding both the scientific and theological perspectives seriously and exploring the tensions between the two.

It was out of those discussions, with particular input from Richard Gijsbers, that the working document, *Strategic Directions for ISCAST*, emerged. The 2015 update of *Strategic Directions* is available on the ISCAST website.²⁴ The results were workshopped with ISCAST Victoria members and presented to the Board in February, 2009 at a retreat at John White's house in Canberra where Richard Gijsbers was invited to table the results and to speak to them. The Board accepted the proposed vision, mission and core values and, in principle, the intention to recruit an executive officer. In August 2009, President John Pilbrow and Secretary/Treasurer Robert Stening wrote to all fellows regarding how the sum of \$100,000/yr might be raised in order to finance the appointment of an executive officer. Regrettably this was not successful. It was not until 2017, eight years later, that ISCAST has been able to raise such a sum.

At a practical level, it became clear that ISCAST should serve three groups:

- Scientists in their own professional contexts to provide pastoral support, mentoring and encouragement in their personal and professional challenges.
- Churches as they struggle with the apologetic challenges posed by the rapid developments in science and technology.
- The wider community as the insights that this dialogue generates is offered humbly to our society as it progressively tackles more complex problems.

At COSAC 2009, John's second and final presidential address²⁵ emphasised the need for ISCAST to move forward in a climate that involves two sorts of fundamentalism - scientific and theological - and the curious muddle that has been allowed to develop in between. John again reviewed the challenges he saw us facing.

²³ Quoted in Tom Frame's *Evolution in the Antipodes* p. 183.

²⁴ http://www.iscast.org/documents/2015_ISCAST_StrategicDirections_WEB.pdf

²⁵ http://iscast.org/resources/Pilbrow_J_2009-Whither_ISCAST-COSAC09

3.3 Blueprint for the Future 2015

Introduction

As already noted, successive Boards have continued to wrestle with questions regarding the role and function of ISCAST and to find ways of responding to the changes occurring within the culture. To carry the process further forward, the State of Play Conference held at Ridley College in Melbourne on August 15, 2015 represented another step in ISCAST's journey to maturity. The attendance was about 45.

The official report prepared by Mark Worthing, State of Play of the Science–Religion Dialogue in Australia, is reproduced in full as Appendix 3. The results have already been incorporated into ISCAST strategic planning. What follows is a summary of the key issues and approaches adopted on the day. The State of Play report needs to be read alongside the Strategic Directions for ISCAST (January 2015 update)²⁴ particularly noting the common theme of the need for a 'theological safe space' for consideration of the matters at the interface between science and Christianity, emphasising the provisionality of our sciences and the difficulties posed by the challenges. Actually, ISCAST's mandate includes not only the interface between faith and science, but also exploration of the impact of other worldviews on peoples' attitudes to both Christianity and modern science. As already noted, ISCAST seeks to reach out to university students, academic and research communities, churches and the wider public.

This State of Play Conference identified six emerging themes, six key strategies and adopted the six core values already contained in the Strategic Directions for ISCAST. The goal was to try to foresee the major issues at the science–religion interface in for the next ten years, so as to ensure that the topics we decide to explore as an institute over the next few years will be of contemporary significance, and not just yesterday's issues rehashed. Inputs were sought beforehand from across the ISCAST community as to what the emerging issues over the next five to ten years might be. These were grouped into the six emerging themes.

After a brief introduction by ISCAST president, Alan Gijsbers, the Rev. Dr Mark Worthing, Pastor of Immanuel Lutheran Church, North Adelaide, presented the main address, "Standing on the Shoulders of Giants". Ideally qualified with doctorates in both theology and the philosophy of science, he reminded us that the early scientists in Britain and Europe were overwhelmingly religious. He then referred to some of the leading twentieth-century thinkers at the science–faith interface including Teilhard de Chardin, John Polkinghorne, Ian Barbour, Wolfhart Pannenberg (his doctoral supervisor) and Robert John Russell (Founder & Director of the Centre for Theology and the Natural Sciences, Berkeley). It was Barbour who defined the issues for serious conversation at the science–faith interface in his seminal book, *Issues in Science and Religion* (1966). Of the many science–faith models identified by Barbour, Worthing opted for a compatibility/complementarity view where science and faith address the same phenomena in appropriate, non-conflicting ways. He emphasised the importance of conducting the science–faith dialogue within a common faith commitment. He also stressed the importance of ensuring that both Christians and the general public are made aware of the many scientists for whom working in science is a Christian vocation and for whom there is, personally, no conflict – although there are tensions.

Our attention was also drawn to several Australians who have been prominent in the science–faith dialogue. These included: the late Professor Charles Birch, strongly influenced

by, and involved with, the Student Christian Movement; the late Professor Lawrie Lyons who spearheaded the founding of ISCAST in 1987; The late Professor Allan Day who sought to raise the level of the faith–science conversation; Professor Peter Harrison (University of Queensland and formerly Andreas Idros Professor of the History and Philosophy of Science at Oxford), and a world authority on the rise of modern science in ‘Christian’ Europe; and Professor Denis Edwards (Australian Catholic University), an internationally regarded Eco-Theologian.

Worthing also referred to the contribution of ISCAST, the Australasian Theological Forum (ATF) and many other contemporary organisations that have kept the science–faith conversation alive here.

Brainstorming the Future involved many short presentations in breakout sessions on the following six topics: stewardship of creation; uses and abuses of science and technology; mind, body, soul; evolutionary biology and theology; secularism, worldviews, and culture wars; and, scientific literacy: knowing science and knowing about science.

The wide-ranging discussion on Stewardship of Creation identified the need for a theology of creation that properly identifies nature, environmental stewardship and conservation. We were encouraged to think of God’s creation not simply as the environment.

The key question concerning the transfer of scientific knowledge to new technologies is ‘what serves God’s purposes in the world?’ Blanket opposition to technological advances was not seen as an option for Christians as we need to be part of the conversation. We were challenged to find ways to overcome the effect of misinformation regarding technology, given that there are some Christians, amongst others, who oppose new medical technologies such as cochlear implants, pacemakers and immunisation.

In the area of neuroscience and theology, Alan Gijsbers argued that, from a scientific perspective, the meta-theory of emergent complexity has encouraged neuroscientists to see humans from many levels, thus contributing to our understanding of rationality, emotion, decision-making, a sense of self and qualia (the subjective ‘colour’ to our perceptions). These considerations force us to reappraise notions of ‘soul’, ‘mind’ and rationality as keys to self-understanding.

Both Christian theology and modern anthropology have been heavily influenced by enlightenment individualism which fails to properly recognise that humans are born, raised, flourish and die in community. To recapture a proper sense of community will require a stronger theology of the church. Psychiatrist Associate Professor Michael Wong observed that we should think of personhood rather than of the ‘self’, as all persons have narratives. What it means to be human will continue to be challenged by developments in artificial intelligence, the potential for genetic manipulation, the desire for human enhancement and the quest for immortality.

Associate Professor David Young (author of *The Discovery of Evolution*, Cambridge University Press, 1992, 2nd edition 2007) argued that evolutionary biology must be freed from atheist ideology, that theology must be freed from outright rejection of evolution that occurs in some quarters, and that creation theology must incorporate biological evolution in theological discussion.

Discussion of secularism, worldviews and culture wars, raised questions such as, “What does it mean to live in a post-secular society?” and “What does it mean to follow God in a post-Christendom world?”

Scientific literacy, much needed these days, is more than just knowing about science. It also means respecting the limits and presuppositions of human enquiry, something which is made possible by the receptiveness of the human mind to understanding the world.

While being urged to trust scientific consensus, notwithstanding that science always remains provisional, open to correction and sometimes requires paradigm shifts in order to progress, we were reminded that science is not just a bald collection of facts. However, since qualities such as love and beauty cannot be quantified by science, clearly science does not provide the only kind of explanation. Since there remains much confusion about science amongst both some scientific and religious people, there is a need to counter the extensive scepticism about science and the prevalence of pseudo-science attitudes.

A recurring theme was the call for mature dialogue, underpinned by Christian values, rather than argument. This certainly applies to conversations between Theologians and Scientists (whether Christian or non-Christian). More specifically, we were asked to consider how to improve the tone of discussion in areas of disagreement and polarisation on issues such as evolution, climate change and care of God’s creation.

Six Core Values

In addressing these issues, our attention was drawn to ISCAST’s core values already enshrined in the Strategic Directions for ISCAST that are reproduced in full here as they define the ISCAST ethos in seeking to act intentionally and proactively:

1. Christian commitment.

We affirm the gospel of Jesus Christ as expressed in the Bible and outlined in the Nicene Creed as central to our faith.

2. Scientific commitment.

We are committed to rigorous scientific and technological research; particularly the insight this gives to our understanding of our Creator and the benefits it brings to our planet and humanity.

3. Moral accountability.

We are committed to understanding and working within the limits of our knowledge and seek to minimise the adverse impacts of the application of our science and technology.

4. Biblical interpretation.

We seek to interpret the Bible within the mainstream evangelical tradition while respecting the stance of others.

5. Theological and academic safe space.

We will encourage people to be free to explore new areas of discovery without fear of unfair or inappropriate criticism or theological ostracism.

6. Mode of debate.

We seek to speak the truth in love and firm humility while being open to new ways of thinking and without rejecting the insights of the past.

As already mentioned, this list of core values is prominently displayed on the ISCAST website.

State of Play Conclusions

Since the State of Play Conference was a seminal event in the life of ISCAST, it seems appropriate to reproduce the conclusions from the report in full:

In summing up A Game Plan for the Future, Alan Gijssbers noted we don't have all the answers. He encouraged us to be adventurous, not reactionary, to be aware when issues crop up in the workplace and in our everyday lives, to reflect on these theologically and to bring a thoughtful and creative Christian perspective to them.... "We walk in a fog, and can only see the next mile-post, but as we walk towards that, the fog will clear and we will see our next step".

ISCAST, along with many similar organisations elsewhere, will certainly seek to promote the acceptance of good science and a balanced view of technology within a proper theological perspective.

A recurring theme was the call for mature dialogue, underpinned by Christian values, rather than argument. This certainly applies to conversations between theologians and scientists (whether Christian or non-Christian). More specifically, we were asked to consider how to improve the tone of discussion in areas of disagreement and polarisation on issues such as evolution, climate change and care of God's creation.

Historically, theology has been regarded as the queen of the sciences. Is that relevant today? The ensuing discussion highlighted a great need for science-trained theologians and a Christian worldview in relation to science, something that might take two generations!

Given that we live in an age of science and technology, a recent Board meeting (October 2, 2016) asked "how does that affect our strategy?" ISCAST, along with many similar organisations elsewhere, will certainly seek to promote the acceptance of good science and a balanced view of technology within a proper theological perspective.

The challenge is for those responsible for each ISCAST activity or project (COSAC, issues of the online journal, public lectures, books, mini conferences, research projects, etc.) to identify at least one key strategic area of focus and at least one key strategy for engagement and at least one core value that will guide the planning and anticipated outcomes of the event or activity. Every proposal that comes before the leadership should be challenged to address the following questions:

- What key topic or cluster of topics will this initiative or activity address?
- Which key strategy or strategies will this initiative or activity employ?
- Which core value or values will be exhibited in this initiative or activity?

These questions should not only be asked at planning and approval stages of projects, but should be revisited by the organisers and key participants or stakeholders upon completion of the project or event to determine to what extent they have been effective in

addressing these and to make recommendations about how to improve delivery of these objectives in future projects.

The suggestions outlined here that have arisen from the State of Play initiative and in no way suggest ISCAST should change its focus or values. They are instead aimed at strengthening these through the clear identification of core topic clusters that are likely to dominate discussions over the next five to ten years and the identification of clear strategies that will assist the organisation in addressing these topics or issues in a manner consistent with its stated core values.

3.4 Board Brainstorm 2016

At the Board meeting in December 2016, a fifteen minute brainstorm led to the following propositions that are listed in full in order to show that development of the ISCAST ethos is necessarily ongoing:

- a. Science and technology have given us a way of thinking that is different from that of other ages and we have become dependent on this. We are less likely to understand the thinking of the past and why people acted as they did then (see h. below).
- b. There is an expectation that science will answer all questions (eventually) and a tendency to think that those that it can't/won't answer aren't real questions anyway.
- c. As Christians, we are acutely aware that science doesn't answer the questions we consider most important.
- d. This approach is utilitarian and creates a technical functionality to both our questions and the answers. This can lead us to losing our perspective of people as persons.
- e. Science and technology have not made things easier. Many of the answers science has given have led us into further complexity and into realms that science cannot cope with. The interface between the different sciences is just as complex as the interface between science and religion (see g. below).
- f. Science and technology have opened the door to secularism in which God is seen as an optional extra. For many, science has replaced God and science has become the essential component to our thinking.
- g. Science and technology have led us to specialisation in which the amateur clergy-scientists of the 1800s have given way to the exclusive study of distinct sciences by individuals, individual groups and industries. This has also split our lives into areas of specialisation (of which Christianity can be understood as one area).
- h. There is a loss of respect for history and a tendency to think that what is happening now is the only way of things. Thus today, the wisdom of the past is ignored.
- i. We are a "storied" people, each with our own individual and collective narratives but we forget this and so describe ourselves quantitatively (see d. above).
- j. Having said all of that, we are currently moving away from this "scientific" mindset and re-enchanting our narratives (particularly in our movies, novels, games, but also in response to complex issues such as understanding our relationship to the environment).
- k. Science and technology suggest that there is an objectivity to our relationship to nature that may not exist. There is a hermeneutical dimension to this that we need to

understand. This interpretation is coloured by our (often hidden) values and presuppositions.

3.5 ISCAST in Ten Years

At the start of each year the ISCAST Board tries to meet face-to-face to explore the priorities and challenges for that year. So at the Board meeting in February, 2017, there was further extended consideration of issues raised by the State of Play Conference in 2015 and the Board brainstorm of December, 2016, in an attempt to foresee the shape of ISCAST as it may be in ten years from now. The resulting page document, reproduced in Appendix 4, awaits further consideration.

Chapter 4 Membership

At its establishment in 1987, there was only one membership category being that of fellow. Drawn from both academia and research institutions, fellows were required to demonstrate a genuine interest in the relationship between Christian faith and other areas of knowledge. Though fellows have predominantly been scientists, currently there also representatives from theology, economics and philosophy.

As early as 1990 (as in the Board meeting on December 4, 1990), the Board considered the need to create an associate member category. Other categories of membership have since been added; corporate associate, supporter, family and student. These categories of membership, in addition to fellows (see previous paragraph) and honorary fellows (established at COSAC 2007) were agreed at the Board meeting on March 3, 2008. It is noted that the supporter category does not appear on the current ISCAST website but it was a category used from the mid-1990s by ISCAST Victoria and therefore, in principle, adopted by the Board in 2008.

Introduction of these other membership categories has not altered the original specification that decision making was to remain in the hands of fellows, as secured through incorporation.

In 2007, the first honorary fellows were appointed and then in 2017, a distinguished fellow category was instituted.

4.1 Fellows

It was always envisaged that one of the responsibilities of fellows was to ensure the integrity of ISCAST and its commitment to the best of modern science seen through the lens of orthodox Christian belief.

Election to fellowship involved, as it still does, rigorous consideration of the credentials of nominees and applicants. In particular, fellows are expected to be established scholars, teachers or researchers in academic and/or research institutions who profess definite Christian commitment and involvement. In this context, it is helpful to restate Memorandum of Association Clause 4,

In view of the need firstly to integrate the views of the world, as revealed in the Holy Scriptures, with scientific discovery, and, secondly to foster the responsible use of knowledge and technology for right and proper purposes ...

The aims from 1992 involve the following clarifications required for election as a Fellow:

Fellows of ISCAST take a theological stance which is based upon a belief that God is the author of all truth and in particular that Jesus, the living word of God, is revealed in the Holy Scriptures. The statement of the Apostles' Creed would be warmly affirmed by all fellows.

Fellows of ISCAST affirm the general objectives of scientific research, which aims at increasing our understanding of the universe, and take the view that scientific research should be employed for the benefit of all.

On August 2, 1998, the Board stated;

Fellows of ISCAST should be 'the intellectual merit of fellows of Oxford/Cambridge Colleges or of those who gain tenure in Australian university faculties.

As a further step in the process of defining the criteria by which people may become fellows, the following bylaw was adopted at the extraordinary general meeting of ISCAST held on September 9, 2000:

While the Board of ISCAST can consider any person for election as a fellow, the following guidelines provide some limits on the qualifications of persons to be so elected. These should all be addressed in the CV submitted for consideration by the Board. Any variation from these guidelines should only be made in exceptional circumstances.

(1) All persons considered should accept the Trinitarian expression of faith of the Nicene Creed, and accept the scriptures of the Old and New Testaments as inspired by the Holy Spirit and therefore as authoritative for our faith and practice.

(2) All persons considered should strongly support the aims of ISCAST, as set out in the Memorandum of Association of ISCAST.

(3) All persons considered should show evidence of advanced qualifications in some area of religion, science or technology, and the ability to discriminate between well – established aspects of religion, science or technology, and more speculative ideas. Such qualifications and ability may take the form of:

- higher degrees in the appropriate areas;
- commercial, industrial or professional experience, or research work, in one or more fields related to the aims of ISCAST;
- teaching experience in these fields, including involvement in public forums or discussions;
- other relevant experience or work.

This development of more detailed criteria for fellowship is the culmination of thinking over ISCAST's first thirteen years. It is noteworthy that the bylaw refers to the Nicene Creed, in contrast to the 1992 aims which refer to the Apostle's Creed. There is a certain wisdom to using the creeds as they articulate a widely agreed Christian orthodoxy.

Initially, the only way someone could become a fellow was to be nominated. The Board meeting on March 3, 1994 resolved:

- that nominations be made, where possible, by the local chapter;
- that election be by vote of the Board, with not more than one vote opposing;
- that if there are two or more votes opposing, the nomination will be defeated.

However, it is now also possible for people to apply to be considered for ISCAST fellowship.

The desirability of nominating further fellows was discussed. Only people who could be expected to be active in the affairs of ISCAST should be nominated.

Honorary Fellows

The resolution to create a category of 'honorary fellow' was adopted in the 2007 AGM as follows:

It was resolved that the following bylaw be enacted: that a category of honorary fellow of ISCAST be established to honour those fellows who have either served the institute with distinction and/or who have achieved significant recognition as scholars at the interface between Christian faith and science or other academic discipline. Honorary fellows will be appointed at a general meeting on the recommendation of the Board of directors.

Honorary fellows shall be exempt from any requirement to pay annual subscriptions, but shall otherwise enjoy the same rights, privileges and responsibilities as ordinary fellows.

The following persons be elected as honorary fellows: Emeritus Professor Allan Day, Emeritus Professor Lawrie Lyons, Associate Professor Robert Stening and Professor John White.

During COSAC 2015, Dr Bruce Craven, Emeritus Professor John Pilbrow and Dr Patsy Robertson were appointed life members. However after consideration of the 2007 AGM resolution, these should now be referred to instead as honorary fellows.

Distinguished Fellows

A 'distinguished fellow' category was established at the Board meeting on May 10, 2016. As a rule, but not necessarily exclusively so, such people will:

- Be scientists or scholars engaged in science–religion dialogue or, at least, be distinguished scientists who are publicly recognised as Christians;
- Have internationally recognised eminence, distinction and high standing in their science or in the field of science–religion dialogue;
- Have demonstrated a familiarity with and personal interest in the mission, vision and core values of ISCAST although not necessarily directly with ISCAST itself;
- And have made significant contributions to ISCAST in some way.

Three distinguished fellows were elected in 2017: Professor Graeme Clark AC FAA FRS, Professor Ken Freeman AC FAA FRS and Professor Tom McLeish FRS FInstP.

4.2 Other Categories

Associates (formerly associate members) are supporters of ISCAST who do not have the qualifications, time or desire to become fellows. They support ISCAST's vision, mission and core values. Many ISCAST associates are among our most active members and are key supporters of ISCAST's program through financial and other means.

Corporate & Family Membership: organisations wishing to support the work of ISCAST can become corporate members. Families too may wish to be involved but do not want to pay a subscription for each member or receive multiple copies of the Digest or email newsletters.

Student Member: this category exists for both secondary and tertiary students.

The Board meeting on March 4, 2007 "agreed on the categories of membership, namely honorary fellows, fellows, associates, corporate associates, supporters and students". The supporter category, which had been used internally in Victoria during the 1990s, appears to have disappeared in the meantime. Regarding criteria for election to Honorary Fellowship see Section 4.1.1 above.

An ongoing challenge concerns the need to broaden the membership and profile of ISCAST with respect to age, gender, ethnicity and discipline. We should also recognise that the ‘pool’ we are drawing from is somewhat restricted.

Chapter 5 Chapters and Local Events

The intention to establish ISCAST chapters goes back to a Board meeting on October 1, 1990. The following convenors were appointed: Sydney (Alan Friend), Melbourne (Allan Day), Brisbane (Lawrie Lyons) and Canberra (John White). By 1993 three active chapters were operating in Brisbane, Sydney and Melbourne. A few meetings were held in Canberra during the 1990s but they were infrequent. Though there is reference in the Board minutes of 1991 to Dr Ed Radlovich and others seeking to establish an Adelaide chapter, it appears this did not eventuate. Chapters remain active in both Melbourne and Sydney. There has not been an active chapter in Brisbane since around 2008.

Smaller chapters have operated from time to time in more recent times in Gippsland and in Orange-Bathurst. The situation in Adelaide in recent years, until this year, was that public lectures sponsored by the Graeme Clark Research Institute (GCRI) at Tabor College (established in 2011 and closed in 2017) are sometimes co-badged with ISCAST, though there was no formal agreement in place. As the GCRI is now closed this informal arrangement will no longer continue.

Given the early emphasis on local events being self-funding, it was not until 1994 that the Board was ready to authorise chapters to operate their own bank accounts. The following minutes from Board meetings in 1994 are worth reproducing in full.

Board Meeting on August 9, 1994:

(1) Separation of accounts. Individual chapters henceforth shall have their own bank accounts and shall keep their own financial records, and except for a start-off grant of \$200 from the national account, shall be responsible for raising their own money to cover their expenses. Unless an activity can in the end cover its costs, in general it should not be undertaken.

(2) Lectures that are part of a visitor's program that has been arranged by the national Board may be funded in the first instance by the national body from the ISCAST visitors' account but the local chapter will cooperate in raising money to cover the expenses of the visit and all such moneys shall be paid into the ISCAST visitors' account. The rule that an activity shall in the end cover its costs shall apply also to a tour by a visitor to various cities.

Board Meeting on October 25, 1994:

3.1 That authority be given for the Melbourne chapter to open a bank account with the Bank of Melbourne and that John Pilbrow and Allan Day be authorised as signatories. AGREED. (The Treasurer will forward a \$200 "float".)

3.2 That authority be given for the Sydney chapter to open an account with the Illawarra Mutual Building Society and that Robert Stening and Alec Wood be authorised as signatories. AGREED.

Board Meeting on May 24, 1995:

This meeting addressed the opening of an ISCAST Vic Bank Account.

At various times ISCAST NSW has been referred to as ISCAST Sydney and ISCAST Victoria referred to as ISCAST Melbourne. This was to distinguish them from ISCAST activities elsewhere in NSW and Victoria respectively. Although activities in country areas

have been closely connected to particular individuals, here they are referred to as ISCAST Bathurst/Orange and ISCAST Gippsland respectively. In some ways, the formal naming of the chapters would appear to be largely irrelevant.

Over the years ISCAST entertained the idea of establishing chapters throughout both Australia and New Zealand. For a variety of reasons this has proved to be quite difficult. At the time of writing, the only active chapters are in Sydney and Melbourne. As already mentioned, ISCAST fellows have existed in other places such as Bathurst/Orange, Gippsland, Canberra, Brisbane and Adelaide. The problem is that most fellows are usually far too busy to undertake extra responsibilities.

Since the John Templeton Foundation has recently provided approximately NZ\$200,000 to establish Christians in Science New Zealand, any idea that ISCAST might develop an international/Australasian focus has been put on hold. In fact the Board is drifting away from this approach (see Section 3.5).

The current thinking is to shift the emphasis towards ISCAST becoming a resource for the groups in each local area. Small groups might in future be considered 'clusters'. Pastoral and professional links would be maintained with other members, but would focus less on a regular program in each chapter. This issue has by no means been decided but is a work in progress. Nevertheless, it is still hoped that new chapters will emerge but will not be seen as the only local expression of ISCAST activity.

5.1 ISCAST Victoria

In its early days, the Victorian chapter coined the name 'VISCASST'. However in 1993, the Board ruled that the acronym VISCASST would not be permitted in future and the chapter would simply be known as ISCAST (Victorian Chapter), often shortened these days to 'ISCAST Vic'. VISCASST News was eventually merged with the ISCAST Bulletin, number twenty five, in December, 1998.

ISCAST Vic organises several informal meetings each year but has also hosted a number of specialist seminars, weekend intensives and excursions. Through the 1990s, most of the informal meetings were held in the home of Allan and Joan Day.

The following anecdote from Helen Joynt explains how ISCAST Vic now functions:

Since around 2000, Fire in the Belly sessions have been arranged, preceded by a 'bring and share' meal first. Alan Gijbsbers suggested curries, and the link with what was a burning passion was too good to lose, so 'Fires in the Belly' were commenced. At about the same time, the idea was proposed that some of our meetings could be occasions for people to explore an idea, seeing where the discussion led. They came to be called 'Thinklings' (borrowing from C. S. Lewis' 'Inklings').

Fire in the Belly and Thinklings sessions have been hosted in various homes. John and Jillian Quartel, Brian and Helen Bayston, Alan and Lois Gijbsbers, Ian and Libby Hore-Lacy, David and Denise Clark and Andrew and Frances Wood are all thanked for their generous hospitality.

At the November, 2013, meeting, Denise Cooper-Clarke, Alan Gijbsbers and John Pilbrow provided tribute in memory of Allan Day who had passed away in on July 29 of that year. These presentations were collated and published in The Melbourne Anglican (May 2014).

John Pilbrow also coordinated an obituary that was published both in *The Age* (1 Nov 2013) and in *Science and Christian Belief* 26 (2), 165–167, 2014.

The annual ISCAST (Victoria) Lecture commenced in 2000 and the list of speakers may be found in Appendix 5.

There is also now an annual Allan Day Memorial Lecture, supported by a \$10,000 gift from Allan Day's estate. The inaugural Allan Day Lecture was presented by Professor Tom McLeish FRS from Durham in 2015. In 2016, there was a departure from the usual format whereby the Allan Day Lecture was in fact a panel discussion on the Faith Project undertaken by ISCAST (James Garth) and the Rationalist Society of Australia (Meredith Doig). James and Meredith were joined on the panel by Robert Martin (City Bible Forum) and Professor Michael Clarke from La Trobe University as chair. Then in 2017, the Allan Day lecturer was Professor Peter Harrison FAHA from the University of Queensland who had formerly been the Andreas Idros Professor of the History and Philosophy of Science at Oxford University.

Allan Day, Alan Gijsbers, John Pilbrow, Brian Edgar, Murray Hogg and Andrew Wood have all served as chairs of ISCAST (Victoria). Allan Day and Helen Joynt served successively as executive secretary of the chapter, until the administration was taken over by Stockdale ACS in 2003.

ISCAST Vic Intensives and Workshops

1998: Teachers' workshop

2002: Forum on stem cells and cloning

Calvin Seminar 2009 Speakers: Murray Hogg, Brian Edgar, Larissa Aldridge. A small grant from JTF was received.

ISCAST Vic Non-Residential Weekend Intensives:

2010 "Who Says? The Use and Misuse of the Bible in an Age of Science & Technology" (Keynote: Gareth Jones). Attendance was around thirty.

2012 "Divine Disclosure in an Age of Science & Technology: How can God be known in the modern age?" (Keynote address and summing up by Mark Worthing). Attendance was around fifty.

2014 "Putting Science in its Place: The Role of Science in Addressing Today's Environmental Crisis". The keynote address was presented by Dr Ian Barns entitled "Putting Science in Its Place: Deepening the Public Conversation about Climate Change". Attendance was around forty.

More detailed information can be found in Appendix 5.

5.2 ISCAST NSW

In the early 1990s, the Sydney chapter had a small committee consisting of Rev. Dr Alan Friend and Associate Professor Robert Stening, Dr Alec Wood and Professor Peter Barry (academics at UNSW). In 1994, when Alan Friend moved to Hobart, Robert Stening took over as convenor/secretary (with additional committee member Dr Lewis Jones, a post-doctoral fellow in astrophysics joining soon after). Robert Stening continued in that role until 2001, when he had to reduce his responsibilities due to health reasons. Robert handed over

the role of convenor/secretary to Peter Barry, though he continued his responsibilities as ISCAST secretary from 1994 for fifteen years. Alec Wood continued on the committee until at least 2008 and Robert Stening continued to look after the Sydney chapter accounts until 2011, when Emeritus Professor Michael Knight took over as chapter treasurer.

While some ISCAST NSW lectures continued to be held in the physics library at UNSW, many of them, particularly those led by international or well-known Australian speakers, were held in the New College main common room, often also in conjunction with CASE (the new Centre for Christian Apologetics, Scholarship and Education at New College, UNSW).

More recently, particularly in the case of recent international speakers, it has been possible to organise recorded audio and video interviews with the Centre for Public Christianity (CPX).

Further, most of the Sydney ISCAST lectures at New College have been audio-taped and/or are downloadable as PDFs. Resource material from these lectures is available on the ISCAST website, under resources/presentations.

Appendix 6 contains a detailed list of some of the major ISCAST lectures and events from 1993–1997 and then from 2002.

A local tribute by Peter Barry to the late Robert Stening is in order here:

Robert Stening continued to play a major and valued role on the ISCAST Sydney committee, with very wise guiding, input and advice, suggesting and contacting potential speakers and helping with all the ISCAST-CASE lecture meetings throughout 2014 (prior to his death in early 2015). From 2014, the ISCAST Committee has been Peter Barry (chair), Michael Knight (treasurer), and Lewis Jones (secretary), with Peter Eyland, a former lecturer in Physics at UNSW, having joined in 2013, and Vaughan Brown, a science master at Shore School joining in 2014.

In the 1990s in conjunction with the British Council for the UK and NZ, Robert helped to organise a number of very successful overseas visits from leading international scientists, including Malcom Jeeves (UK, 1989), Gareth Jones (NZ, 1991), John Polkinghorne (UK, 1994), John Houghton (UK, 1996) and later Sam Berry (UK) as ISCAST speakers in Sydney. These were often hosted in Robert and Carol's home during their stay in Sydney.

Robert had very good contacts across the Sydney Anglican Diocese, with various theological colleges, national and international science and Christian organisations, and other groups like New College, the Centre for Public Christianity (CPX), and some Christian Schools. He was very widely respected. For example, he helped organise a special all-day teachers' science and faith conference at Covenant Christian School with Professor Simon Conway Morris who visited Sydney in 2009, and was also invited to speak at a Redeemer Baptist School assembly in 2013.

He was also Convenor of the first of what became the continuing series of biennial (COSAC) Conferences on Science and Christianity. He organised the first COSAC (COSAC 1997) meeting at Moore Theological College in 1997. In 2003, the Sydney Chapter organised COSAC 2003, in conjunction with Dr Lyndon Rogers, Head of Science, at Avondale College, Cooranbong, near Newcastle (July 18–20, 2003), on the theme God, Science, and Divine Action: God's Interaction with His Creation.

5.3 ISCAST Brisbane 1990–2008

The Brisbane Chapter, led by Lawrie Lyons, was active from 1990 until about 2008. However, despite Lawrie being such a significant figure in ISCAST, there was little activity from 2000, although informal meetings were held at Lawrie's home and a few public meetings organised. John Pilbrow conducted a brainstorm session at John Lucas's home in November 2006 and attended another meeting at the same location in May 2009. In 2008, John Lucas organised a public lecture that was part of an ISCAST lecture tour by Richard Colling from the USA, author of the book, *Random Designer*. So far as is known, there have been no meetings since then. Regrettably, relevant archival documentation has not been located.

5.4 ISCAST Canberra

A few meetings were held at John White's home during the 1990s but they were infrequent. Towards the end of the 1990s, when John was science policy secretary of the Australia Academy of Science, the group was enlarged to work on a Christian response to cloning and stem cell research. This was presented to and accepted by the Anglican Diocese of Canberra-Goulburn, alongside parallel actions from the Australian Academy of Science to government and the public. The chapter has not been active since the late 1990s.

5.5 ISCAST Adelaide

A formal ISCAST Adelaide chapter never eventuated in spite of encouraging comments in Board minutes as far back as 1991. More recently, ISCAST fellows in Adelaide have been involved with the Graeme Clark Research Institute at Tabor College (GCRI). Many potential ISCAST members attended the Tabor/Faraday Conference in September 2011 following the official launch of the Graeme Clark Research Institute.

No direct collaboration between ISCAST and the GCRI was ever formalised although several lectures sponsored by both the GCRI and ISCAST have occurred in recent years. Two such joint ISCAST/GCRI lectures have been were "Genetics, Evolution, Cancer, Suffering, And God" by Graeme Finlay (2015) and "Is the brain just a computer made of meat? What neuroscience says about who we are" by ISCAST President, Alan Gijsbers on February 25, 2017.

Discussions in 2016 concerning the possibility of the GCRI being formally linked with ISCAST, rather than just through fellows, did not result in anything formal. There was also discussion between GCRI and ISCAST concerning the possibility of collaborating together in the area of apologetics in order to facilitate a possible significant bequest from a private donor. The donor, sadly, died before the bequest was given and so this possibility also came to nought.

Sadly, Tabor College recently made the decision to close down the GCRI due to lack of funding. Therefore the informal link between ISCAST and GCRI will no longer exist.

5.6 ISCAST Gippsland

A small chapter in Gippsland, convened by James Garth, has met from time-to-time since 2011. In 2012, Chris Mulherin spoke about a 'sense of awe'. Other meetings involved discussion of Alvin Plantinga's *Science and Religion: Where the Conflict Really Lies* (September 17) and McGrath's *The Passionate Intellect* on October 29. Jonathan Clarke

presented a talk on *The Martian* at Warragul Cinemas for a packed ‘film and theology’ session with about eighty people in attendance. James presented a smaller ‘film and theology’ talk on the film *Chappie* which looked at questions of artificial intelligence, consciousness and the soul.

James Garth spoke on science and faith at the 2011 AFES Victoria student camp. He also spoke at a chapel service at St Paul's Anglican Grammar, Traralgon Campus, on August 29, 2013 attended by some sixty students. James also presented the 2015 annual Warragul Regional College dinner on the topic "A Harmonious Relationship: Can Science and Faith Be Friends?" attended by more than a hundred people. (The talk can be viewed on YouTube).

Several people from Gippsland attended the William Lane Craig – Lawrence Krauss debate at the Melbourne Town Hall (August, 2013) while in 2014 a group also attended the John Lennox training event which featured several ISCASTians on a panel at Glen Waverley Anglican Church August 9, 2014 (See also section 10.10).

5.7 ISCAST Bathurst-Orange

The Bathurst-Orange Chapter, convened by Professor David Goldney, commenced in 2011. Three meetings took place in 2012. There is a small core of supporters but, unfortunately, no one is yet able or willing to share the burden of leadership. The core sciences by Charles Sturt University are now only offered at the Wagga Wagga and Albury campuses, further reducing the pool of professional scientists in the Bathurst-Orange area. In most years there has been at least one public address, and in other years workshops on science and faith, guest lectures to church schools and during national science weeks, David has participated in a number of special church services. He has presented a series of lectures over the years: “The God Delusion” at Bathurst Anglican Cathedral and at the Charles Sturt University campus in Orange, as well as “A Biblical View on Creation Stewardship”, “Can a Christian Believe in Climate Change”, “Miracles and how God acts?” and “A Critique of ‘Intelligent Design’”. Numbers attending meetings have varied between fifty and two hundred. Outside speakers such as Bishop Tom Frame had an audience of seventy five, Professor Nancey Murphy with two hundred, and Rev. Dr Chris Mulherin with sixty two attending. This small chapter demonstrated that there is a public thirst for trustworthy speakers in the public square at ‘the science–faith’ interface. However, attracting quality speakers to Bathurst can be expensive!

David reflected that the “Bathurst - Orange Chapter is not yet dead and buried but has no appropriate or foreseeable succession plan in place”. There are plans for a range of lectures on a number of topics related to science and faith to church groups, linking in with an inter-denominational group seeking to bring an appropriate and reputable Christian worldview into the secular market place.

For 2018, plans are under way for a one day series of lectures on the thorny issue of creation and evolution in Bathurst entitled “Creation Science for Australian Christians”. The aim is to help both church people and the secular world to understand the relatively recent emergence of ‘creation science’ as a dominant theme in sections of the evangelical sub-culture as a modern heresy. David plans to cover topics such as the overwhelming evidence for deep time and evolution, including a forensic analysis of the young earth model and so-called flood geology, the changing evolutionary paradigm challenging the Dawkins model of

the post Darwinian synthesis, human evolution, intelligent design and a reassessment of the Genesis stories.

Chapter 6 ISCAST Conferences

The establishment of the biennial Conferences on Science and Christianity (COSACs) was an important step in the maturing of ISCAST as a significant body at the interface between modern science and Christian faith in Australia. COSACs have been held every two years from 1997 until 2015. In order to take advantage of the 2018 Brisbane Festival of Science, the next COSAC, originally planned for 2017, was postponed until March 2018. Attendances have ranged from around forty to more than 130. A convenient summary in tabular form may be found in Appendix 7.

6.1 COSAC 1997

The first COSAC held was at Moore College,²⁶ Sydney from July 11–13, 1997. It considered topics including science and Christianity, cosmology, Christianity and the age of the earth, organic evolution and genesis, Biblical and scientific descriptions of humanity, environmental responsibility and biomedical ethics.

The keynote speaker was Dr Robert John Russell, Founder and Director of the Center for Theology and the Natural Sciences (CTNS). He reviewed the foundations of science and of theology to show from a Christian perspective that there are common elements.²⁷ This established a benchmark for all future COSACs. He presented the following four lectures under the general theme Theology and Science in Creative Mutual Interaction:

- “Ways of Relating Science and Religion”
- “Creation Ex-Nihilo and Big Bang Cosmology”
- “Continuous Creation/Divine Action in the context of Quantum Physics and Evolution”
- “Sin/Redemption/New Creation in the context of Anthropology and Cosmology”.

The event was coordinated by Robert Stening. It was judged a great success and had an attendance of 130.

Prior to the conference, Dr Jonathan Clarke had conducted a survey of ten fellows in Victoria though only five of them replied. Most of the issues surfaced again almost ten years later in the brainstorming process undertaken by John Pilbrow (See also Section 3.2).

6.2 COSAC 1999

This conference was held at the Bible College of Victoria in Lilydale. The keynote speaker was Professor R. J. (Sam) Berry FRSE, Professor of Genetics, UC London. He presented on the theme, *God, Genes and the Environment: Integrating Biology & Theology*. Professor Berry presented five lectures; “Chance and Purpose”, “Genes and Genesis” and “God and Evolution and Creation groans”. His wife, Dr Caroline Berry, made a presentation on The Human Genome Project. The public lecture “God and Evolution and Creation Groans” on the Saturday evening attracted a wider audience. The attendance was more than one hundred

²⁶ It is understood that some pressure was exerted on Moore College by members of a creationist organisation to cancel the booking!

²⁷ Chris Mulherin’s doctoral thesis 2016 explored the same issue in depth.

and the Conference realised a profit of more than \$800. The coordinators of the event were Allan Day and Brian Edgar.

6.3 COSAC 2001

Some forty people, including many students, attended COSAC 2001 in Adelaide where Professor Owen Gingerich of Harvard University, the world authority on Copernicus, spoke on modern cosmology. He posed the questions, “Are we alone? Is the cosmos all there is? Galileo hero or heretic? Dare a scientist believe in design?”

All presentations were of high standard, consistent in keeping with the tradition of previous conferences. On the Saturday evening, while Prof Gingerich took part in a question and answer session at the Adelaide Festival of Ideas, the film *Gattaca* was shown, followed by discussion led by Mark Worthing. This conference was coordinated by a team headed by Mark Worthing.

6.4 COSAC 2003

The fourth COSAC was held at Avondale College at Cooranbong, NSW, from July 18–20 on the theme “God, Science, and Divine Action: God’s Interaction with His Creation”. The theme was timely as there had been six conferences from 1991–2003 co-sponsored by CTNS (The Centre for Theology and the Natural Sciences, Berkeley) and the Vatican Observatory on the theme “Scientific Perspectives on Divine Action”. It is noteworthy that Mark Worthing participated in the sixth conference and wrote the final chapter.²⁸

There were six main talks were: “Assumptions of Science & the Christian Tradition” by Mark Worthing, “The Assumptions of Theology” by Neil Chambers, “Divine Action and the Problem of Miracles” by Mark Worthing, “The Dialogue between Neuroscience & Theology” by Alan Gijsbers, “Theological Boundaries on Theistic Evolution” by Andrew Sloane, and “Divine Action and Organic Evolution – a Biblical Perspective” by Jonathan Clarke. There were no international speakers.

About sixty people were in attendance, coming from Queensland, New South Wales, Australian Capital Territory, Victoria, South Australia and New Zealand. They represented a wide range of backgrounds, including Adventist, Anglican, Baptist, Brethren, Catholic, Presbyterian, Reformed, Uniting and many others. Electives focussed on mind (Alan Gijsbers), miracles (Mark Worthing) and evolution (Andrew Sloane) (See Bulletin 41).

The conference was coordinated by Robert Stening, Peter Barry and Lyndon Rogers.

6.5 COSAC 2005

With an attendance of about sixty, COSAC 2005 was held at Burgmann College at Australian National University from July 15–17, 2005, and celebrated the hundredth anniversary of Einstein’s first paper on relativity. The keynote speaker was Professor George F. R. Ellis from the Department of Mathematics & Applied Mathematics, University of Cape

²⁸ M W Worthing in *Scientific Perspectives on Divine Action: Twenty years of Challenge and Progress* (Eds. Robert John Russell, Nancey Murphy, William R Stoeger SJ, Vatican Observatory Publications and CTNS, 2007, pp 315-329.

Town, South Africa. His two COSAC lectures were given under²⁹ the general title, “The Present State of the Science and Religion Debate Cosmology-Theology-Ethics”, with part one entitled “Cosmology-Theology-Ethics” and part two entitled “The Nature of Emergent Complexity”.

Other presenters included that of John Pilbrow, Emeritus Professor of Physics, Monash University on “The Impact of Relativity on Christian Thought;” Andrew Sloane (lecturer in Old Testament and Christian Thought at Morling Theological College) on “Phenomenal Cosmic Power, Itty-bitty Living Space? (Reflections on the Incarnation in an Einsteinian Universe);” Robert Stening (Visiting Associate Professor, School of Physics, UNSW) on “Einstein and his Religion;” and Marcus Reeves (Ministry Team Crossroads Church) on “Is Contemporary Science Irrelevant to the Gospel?”

On Friday July 15, George presented the Burgmann Lecture on “Cosmology – Universal Questions” in the Manning Clarke Lecture theatre at ANU with an attendance of around four hundred. A week later, on Friday July 22, George presented a research seminar to the School of Physics, the University of Melbourne. Some twenty ISCAST members joined George over an informal dinner at University House, Melbourne University. That evening, George presented the ISCAST (Victoria) Annual Lecture, a joint venture with the Australian Institute of Physics (AIP) and the Victorian Branch of the AIP who were keen to have George speak as part of their Einstein celebrations. Some 750 people squeezed into two large lecture theatres for George’s lecture entitled “Curved Space and Compassion: Einstein’s cosmology and ethics”.

George was interviewed on July 19 by Philip Adams on *Late Night Live* and gave a talk at UNSW on “Physics in the Real World”. He also presented the New College CASE/ISCAST lecture on July 18 on “The Present State of the Science and Religion Debate”.

An extensive report on COSAC 2005 can be found in Issue 47 of the ISCAST Bulletin.

The conference was coordinated by John White and Jonathan Clarke.

6.6 COSAC 2007

With an attendance of about eighty at the Geelong Conference Centre from September 28–30, 2007, the keynote speaker, Alister McGrath (Professor of Historical Theology at Oxford University) explored the nature of reality and the nature of a scientific theology. His four lectures were based on the general theme “What is Real? Conversations in Science & Theology” were entitled “What is Real?,” “What is Real in Science?,” “What is Real in Theology” and “Natural Sciences and Christian Apologetics”.

On the Thursday evening prior to COSAC 2007, Alister presented a the annual ISCAST (Victoria) lecture entitled “The Bankruptcy of Scientific Atheism” at the Glen Waverley Anglican Church. The attendance was approximately 550.

Brian Edgar coordinated the conference, and all administration was seen to by Stockdale ACS. The chaplain to the conference was Rev. Mike Flynn, the vicar of St Columb’s Anglican Church, Hawthorn.

²⁹ George visited Australia again from 20-21 June 2006 to speak at the Paul Davies 60th Birthday Conference on *From Stars to Brains* at the ANU, organised by Manning Clark House, Canberra.

6.7 COSAC 2009

Given that 2009 was the 150th Anniversary of the publication of *Origin of Species*, COSAC 2009 had as its theme "Christianity and the Origin of Species", thus providing the opportunity to evaluate the contribution to biology and science by Darwin as well as consideration of the status of evolution. The conference was held from September 18–20, 2009, again at the Geelong Conference Centre. Professor Simon Conway Morris³⁰ FRS was the keynote speaker, a very distinguished palaeontologist from Cambridge University. Also in attendance were several participants from New Zealand. Total attendance was about 70.

Professor Conway Morris presented two very fine lectures on the theme "Christianity and the Origin of Species". The first lecture was entitled "Evolution: The Royal Route to Consciousness" and the second entitled "Human evolution and eschatology". We learned that during the 150 years since Darwin published *Origin of Species*, the idea of evolution has itself evolved. He also presented the ISCAST annual lecture at the Glen Waverley Anglican Church in suburban Melbourne to an audience of about one hundred.

Murray Hogg coordinated the conference, and all administration was provided by Stockdale ACS. The chaplain was Rev. Merrill Kitchen, principal of the Churches of Christ Theological College.

In considering the report from COSAC 2009, the Board meeting on December 14, 2009 appointed the COSAC 2009 Committee as a standing committee for future COSACs.

6.8 COSAC 2011

COSAC 2011 ran from August 26–28, 2011 at the delightful Tamar Valley Resort, Grindelwald (near Launceston). The keynote speaker, Prof Nancey Murphy³¹ from the Fuller Theological Seminary, spoke on the theme "Disenchantment: Faith & Science in a Secular

³⁰ First applauded for his work on the fossils of the Burgess shale, Conway Morris continues to research early life on Earth. He has made significant contributions to discussions on the philosophical and metaphysical implications of evolution, and, in particular, submits that humans are the inevitable result of convergent evolutionary processes, rather than being governed by contingency of circumstance. He is a strong critic of materialism and reductionism, arguing that the Creation is open-ended and endlessly fertile. His presentations raised questions such as "What are the implications for the Christian faith?"

³¹ Her first book, *Theology in the Age of Scientific Reasoning* (Cornell, 1990) won the American Academy of Religion award for excellence. She is author of nine other books, including *Anglo-American Postmodernity: Philosophical Perspectives on Science, Religion, and Ethics* (Westview, 1997); and *On the Moral Nature of the Universe: Theology, Cosmology, and Ethics* (with G.F.R. Ellis, Fortress, 1996). Her most recent books are *Bodies and Souls, or Spirited Bodies?* (Cambridge, 2006); and (co-authored with Warren Brown) *Did My Neurons Make Me Do It? Philosophical and Neurobiological Perspectives on Moral Responsibility and Free Will* (Oxford, 2007). She has co-edited eleven volumes, including (with L. Schultz and R.J. Russell, Brill 2009) *Philosophy, Science, and Divine Action*; (with G.F.R. Ellis and T. O'Connor, Springer, 2009) *Downward Causation and the Neurobiology of Free Will*, Springer; and (with W. R. Stoeger, Oxford, 2007) *Evolution and Emergence: Systems, Organisms, Persons*. Her research interests focus on the role of modern and postmodern philosophy in shaping Christian theology, on relations between theology and science, and on relations among philosophy of mind, neuroscience, and Christian anthropology.

World”³² with her first lecture entitled “What is disenchantment? How did it happen?” and her second entitled “A Post-Enchantment Program for Relating Science to Faith”. The attendance was eighty three.

Dr Denis Alexander, director of the Faraday Institute in Cambridge, spoke on “Biology, Ideology and Faith” with a very deep and clear exposition addressing the misuse of science to boost ideology. Richard Prideaux gave a lecture entitled “20th-Century Disenchantment, Convergence and Re-Enchantment”.

The Chaplain was the Bishop of Tasmania, John Harrower, who provided us with wonderful Devotional Talks: “Keeping On” (COSAC devotion number one), “Humility Before The Facts” (COSAC devotion number two), “Loyalty and Accountability” (COSAC devotion number three) and “Being Sure of Our Ground” (COSAC devotion number four). These and several other papers presented by ISCASTians are available on the ISCAST website. Funds from the Hugh Lyons Fund for the first time provided COSAC scholarships for students to be able to attend.

Reviewing 2011, ISCAST President A/Prof Alan Gijsbers grappled with the question, “How to live the Gospel as scientists in a contemporary society” (See section 2.4). He pondered how to professionalise ISCAST and to make it a key player in the science–religion scene in Australia. He said it means we will have to fund our vision in other ways; recruiting more fellows and associates, relying on donations, applying for grants or even consultancies. Any other imaginative suggestions would be welcomed.

Professor Murphy also presented ISCAST Lectures in Melbourne and Hobart. The conference was coordinated by Brian Edgar and Stockdale ACS was once again engaged.

6.9 COSAC 2013

Held from July 19–21, 2013 at Tabor College, Adelaide we were treated to splendid lectures by astrophysicist and theologian, Rev. Prof David Wilkinson, (Principal, St John’s College, Durham, UK) on the theme, “Faith, Hope and Quarks: Scientific and Theological Perspectives on the Future”. His lectures were entitled “The futility of the future: Scientific Pessimism and the challenge to theology” and “New Creation: Theological hope and the challenge to science”. Professor Wilkinson’s excellent lecture summaries are reproduced in full here as they are relevant to the development of thought in ISCAST:

Lecture 1: “The Futility of the Future: Scientific Pessimism and the Challenge to Theology” (July 19, 2013)

Scientific views of the future are often dominated by the myth of human progress, that is that science and technology will solve all problems and lead to a human-made Utopia. Wilkinson denies that this is true and rather poses several questions that theology must seek to answer, such as, the current cosmological models, reinforced by the accelerating

³² Professor Murphy provided this summary. “From the time of the Enlightenment, Western society has become progressively disenchanted, as a sense of the transcendent and of spiritual forces, which pervaded mediaeval life, was lost, even repudiated. Modern science was part of the cause and is now, in its reductionist form, a result of this process. Paradoxically, in this secular age, there is a new “disenchantment” with such science: post-modern skepticism. Are we now disenchanted with disenchantment? How do Christians who are scientists speak into this world?”

of the expansion of the universe, raise other questions such as: What has the end of the Universe to say to the doctrine of new creation? What does the end of the Universe mean for providence? What does the end of the Universe mean for hope?

Lecture 2: "New Creation: Theological Hope and the Challenge to Science" (July 21, 2013)

Popular views of eschatology are often dominated by dualism and the image of immaterial eternal life. The Bible, in contrast, sees future transformation of the material rather than its complete destruction. Indeed, the central view of the New Testament about the future is new creation - not just for the individual or human community but for the whole of heaven and earth. Wilkinson explored a range of biblical themes touching on new creation and used them to critique much of the scientific pessimism concerning the future of the universe. He contrasted the materialist pessimism with the picture of Christian hope which does have much to contribute to the scientific picture of contemporary cosmology. Wilkinson discussed the idea that resurrection means transformation, yet recognised there is both continuity and discontinuity. For example, the risen Jesus is recognized by the disciples (John 20:19–20) yet there remains a real sense of mystery to the resurrection appearances (Mark 16:1–8).

This event was coordinated by Graham Buxton, with Stockdale ACS managing the registration process.

6.10 COSAC 2015

COSAC 2015 took place from March 7–9 at the Geelong Conference Centre. The keynote speaker was Professor R. S. (Bob) White FRS, Earth Sciences, Cambridge and Director of the Faraday Institute in the UK. He spoke to the topic, "Creation in Crisis: Science, Theology and Action", and presented two lectures: "Are Natural Disasters Acts of God?" and "Let All Creation Rejoice: Biblical Hope and the Ecological Crisis". Bob also participated in our new "Science & Religion 101: Conflict? What conflict?" stream. There was good representation from colleagues from New Zealand. Attendance was about sixty.

Several eulogies were presented in honour of former ISCAST secretary, the late associate Professor Robert Stening, who had died in the previous January and who had served ISCAST so loyally over more than fifteen years.

This event was coordinated by Brian Edgar, with administration provided by Stockdale ACS. Devotions and worship were led by Philippa Thompson, Chris Mulherin, Margo Sietsma and Peter Barry.

6.11 COSAC 2018

The eleventh ISCAST Conference on Science and Christianity (COSAC 2018) will be held in Brisbane from March 23–25, 2018 covering the topics of theology, history, apologetics, ethics and philosophy. It is being held in Brisbane to coincide with the World Science Festival. Dr Jennifer Wiseman, Senior Scientist on the Hubble Telescope Program at NASA, is to speak at both. The conference will be held at Emmanuel College at the University of Queensland, commencing on Friday afternoon and concluding after lunch on Sunday with the ISCAST AGM and fellows' meetings. Some 47 speakers are listed to speak and total attendance will number over 150.

COSAC 2018 will represent a change from past conferences in two particular ways: firstly, most of the presenters have been personally invited rather than responding to the open call for papers, and, secondly, there will be a deliberate emphasis placed on apologetics (largely in the light of discussions following Tony Morgan's approach to ISCAST described earlier). As well, there has been a deliberate attempt to invite more women speakers. These initiatives are part of a strategy to broaden ISCAST's reach, to engage more obviously in apologetic issues, and to reach younger people.

Chapter 7 Communications

7.1 2003 to the Present

During the early period when Stockdale ACS was managing the affairs of ISCAST Vic, Richard Gijsbers became concerned that the existing ISCAST website (see Section 7.4) was in need of upgrading and further that the communications function needed to be coordinated and made consistent with ISCAST plans and policies. He thus advocated that a Communications Working Group (CWG) be established with a representation of ISCAST fellows and others. Established in 2003 under Dr Patsy Robertson's leadership it laid the foundation for much of the communication and publication policy in still in effect today.

7.2 ISCAST Bulletin

The early communication with members was achieved by means of periodic issues of the ISCAST Bulletin, first published in July 1989 as a two-page newsletter. It contained news of ISCAST lectures, book reviews and opinion pieces. Lawrie Lyons³³ was the first editor, remaining in that position until the end of 1998. It was published irregularly with evolution and environmental issues being the main concerns explored.

For a time between November 1996 and 1998, ISCAST Vic reported on its own activities through VISCAST News, edited by Alan Gijsbers, produced roughly every three months. It reflected the identity of the Victorian chapter and the activities that it instigated, including the establishment of the ISCAST (Vic) Office with Allan Day as the secretary and the establishment of the Ridley College science and religion course.

Alan Gijsbers became editor of the ISCAST Bulletin in March 1998. However the Bulletin and VISCAST News continued to be published in parallel until December 1998 when they were combined for the first time as ISCAST Bulletin Number 25. Jonathan Clarke took over as editor from the Spring 2000 Edition (Bulletin Number 31) until the Autumn 2005 Edition (Bulletin Number 46), followed by Mick Pope who edited the final eight bulletins up to number 54. Producing the Bulletin regularly was arduous, and running it in parallel with the website and the emerging social media meant much doubling and overlapping of effort as well as mixing of signals.

With the development of the third iteration of the website in 2008–2009, and on advice from the CWG, it was decided to integrate the bulletin content into the website and also to produce a regular quarterly digest. From 2009, the new digest was produced as efficiently as possible, using internet technologies, but also in a folded A3 format. News, abstracts of ISCAST-generated resources and discussions and event notifications led by an introductory article provided the content. The format was standardised so that the arduousness of copy-editing and production (and therefore cost) was minimised.

Stockdale ACS was contracted to produce the digest quarterly in digital format with hyperlinks to fuller stories. Hard copies were produced for those without access to the Internet and/or who preferred their news that way. The emphasis was on producing it quickly with little duplicated effort and reduced copy-editing. New layouts, letterheads and standard

³³ For some years, Lawrie Lyons produced The Evangelical Digest that ISCAST members received. It was never adopted as an official ISCAST Publication.

formats were produced to streamline the production. James Garth was actively involved in much of the development of this concept and continues to provide many of the news snippets of interest to the science–religion space that are published.

7.3 Communications Working Group

The establishment of the Communications Working Group (CWG) has already been mentioned (Section 7.1). Established in 2003, under Patsy Robertson's leadership as convenor and reporting to the ISCAST Board, it oversaw the preparation of a successful major submission to the Templeton Foundation in 2008 for the building of a new website (third iteration), the construction of that site, the integration of the ISCAST Newsletters with the website, the development of the online journal, establishing policies relating to the website (privacy, access to the site etc.) and more recently the development of ISCAST's social media presence. The CWG was also charged with establishing the criteria and basis for a revamped *Online Journal*.

The CWG was based in Melbourne with corresponding members in other places. Minutes of the first meeting of the CWG (May 19, 2003) records those present as; Helen Joynt, Brian Edgar Richard Gijssbers and Patsy Robertson; with apologies from the following; Jia-Yee Lee, Ian Hore-Lacy, Jonathan Clarke and John Pilbrow. Over time, the CWG Membership included: Patsy Robertson (convenor), Helen Joynt, Ian Hore-Lacy, John Pilbrow, Jillian Quartel, Mick Pope, James Garth, Bruce Craven, and Richard Gijssbers. Jonathan Clarke and Mark Worthing were interstate and so were not part of the regular meetings but continued to contribute in their own ways.

A report to COSAC 2003 began with the note: "the Communications Working Group was convened early in 2003 by Patsy Robertson at the request of the Victorian Branch of ISCAST". The Board meeting on December 14, 2009 resolved that the CWG convenor, Patsy Robertson, should be invited to join the Board *ex officio* and she continued in this role until September 2014.

The privacy policy proposed by the CWG was accepted by the Board on February 7, 2011. Though the CWG had been a very effective body from 2003–2012, it fell into what was thought at the time to be a temporary abeyance following the meeting on May 21, 2012. It has not been re-established.

A joint meeting of the CWG and the CPOSAT Editorial Committee was held on September 17, 2012. The following were recorded as present; John Pilbrow (chair), Helen Joynt, Ross Macmillan, Richard Gijssbers, Bruce Craven and James Garth (via Skype). Apologies were received from the following; Patsy Robertson and Ian Hore-Lacy.

The following principles emerged from the work of the CWG and have proved foundational for future developments:

The theological safe space: This allows those challenged by their science to follow where their discoveries take them. Sometimes this will require back-tracking and trying again, other times it will lead to breakthroughs in understanding. Boldness is required.

The accessibility of theological reflection to all: We not only encourage scientists, academics and professionals to engage in theological reflection, we demand it. How else can we establish the constructive debate?

The accessibility of our science to all: We are all lay people outside our area of specialisation but we also have insights that need to be heard. Often it is the lay questions that are the most challenging!

7.4 Website

Towards the end of 2001, the Board agreed on November 19, 2001, to the establishment of the ISCAST website with Ian Hore-Lacy as website manager. This soon became a repository of a great many valuable articles and information. The website has always been seen as our ‘shop front’ to the world and increasingly seen to be crucial to our operation and function. Ian remained website manager until at least 2004 (see also Section 2.2).

In 2004, Richard Gijsbers, with expert assistance from his son-in-law, created a new website (the second iteration) to house ISCAST documents and provide a forum for news and discussions. They drew heavily on whatever documentation could be found without questioning its official status, thus cutting a number of Gordian knots that had bedevilled the Board. This second iteration of the website presented a new profile to the world and created many interesting responses including a Young Earth Creationist who took exception to being labelled a “fundamentalist”. This started a very enjoyable correspondence with him about what we believed and how we should live. Richard (and ISCAST) has also been accused of showing a lack of faith in God over global warming, and many other contentious issues.

When the second iteration of the website was undertaken, Richard Gijsbers coined the tag-line “ISCAST: Exploring life, science, technology and the love of Jesus Christ”. It was an attempt to give visitors to the home page a succinct statement of what ISCAST stood for. The website already reflected an understanding of what ISCAST stood for based on the material available, much of it arising from Allan Day’s thinking that the Board was still struggling through. Unaware of the debates around this, Richard published what he found and this was never questioned despite the fact that the much of the documentation had never been endorsed formally.

During establishment of the third iteration of the website, a new summary statement was sought that would encapsulate and describe what ISCAST was and what it had become (which was, essentially, to explore the interface/overlap between science and religion, specifically Christianity). The CWG, while agreeing that the full ISCAST name did not really inform people about who we were, it noted that the ISCAST brand³⁴ was established and it was felt that it should not be lost. So the CWG, recognising our link with Christians in Science (CiS) in the UK, suggested we be called “ISCAST–Christians in Science and Technology”. CWG member Ross Macmillan was adamant that “technology” not be lost. Patsy Robertson contacted CiS and as they had no objection, that name was recommended. The legal entity is still the long title (and ISCAST Ltd) but the new public name is now “ISCAST: Christians in Science and Technology”.

Funding was sought and obtained from the John Templeton Foundation in the USA for website upgrade (third iteration) and maintenance (www.iscast.org, established February, 2009). The confirmation letter from the JTF is dated May 23, 2008. The total grant of

³⁴ It was noted that brand names like KODAK and EXXON do not “stand” but are, or have been, very effective.

\$US30,000 was allocated as follows: \$US15,000 to establish the site + \$US3,000 per year for maintenance and upgrading until 2013. The Grant period was to run from February 1, 2008 until January 21, 2013. The funds were administered by James Garth, reporting to the CWG, and he was also responsible for regular reporting to the JTF. Members of the CWG, with the addition of Mark Saward, assisted at the early stage. The new website was designed to present a face to, and a medium for, the interaction between science and Christianity particularly relevant to the Australasian context.

Statistical data were kept during the early phase and at one point, around 2010, there were more than one thousand sites linked to ours. These included Wikipedia articles quoting ISCASTians, blogs referring to contributions we have offered, portals on science and religion, as well as the vitriolic sites that leave us in no doubt as to their opinion of us. Currently we receive around 1,500 visits per month.

There is the potential for the website to allow for presentation of materials designed specifically for particular groups, for example congregations, schools, campus groups, theological colleges and more. To achieve these sorts of goals and aims, resource people within our membership need to be identified in order that they might contribute to topics of their expertise. The website has certainly proved ideal for provision of up-to-date reading lists and short book reviews. Further, it enabled the seamless transition from the Bulletin (that ran for 54 issues) to the online ISCAST Digest in 2009. The digest continues some functions of the bulletin and highlights the functions of the website and the online journal (CPOSAT). For those without Internet access, hard copy versions of the digest are made available.

All ISCAST activities are advertised on the website. It also draws attention to other events of interest, presents up-to-date news regarding developments in science and major new contributions to the science–faith interface. It also hosts the ISCAST Online Journal.

There are website links to other organizations such as Christians in Science, The Faraday Institute, and Biologos (established in 2008 by Dr Francis Collins, Director of the Human Genome Project 1992–2008).

An important point made during the brainstorming process during 2006–2007 was that the level of materials on the website, or alternatively available in hard-copy format, should be indicated. The following three levels were suggested: senior scientist/theologian - scholarly level, for example at the level of our online journal, level of undergraduate and postgraduate students and high school and lay level resources for congregations.

In May 2016 an informal meeting of some ten people was held at St Paul's Cathedral and led by Richard Lange. The meeting, entitled 'Raising Our Voice' aimed to explore ISCAST's public face and how to "assertively move into the public space". The most significant outcome was the construction of a new website over the following eighteen months. The new site (fourth iteration) is directed at the "outsider" rather than the person well acquainted with ISCAST. In Richard Lange's description, the new site is a 'front door' open and attractive to the newcomer and general public rather than a 'back door' for those familiar with ISCAST.

7.5 Christian Perspectives on Science and Technology

The origin of the ISCAST Online Journal goes back to Board discussions in 1999. Initially a printed hard copy journal was envisaged but it was quickly realised this would be

prohibitively expensive. The first steps taken towards a recognisable journal was the modest collection of articles that were uploaded onto the original website during 2001–2005. At this stage there was only one category. The emphasis was on quality content and fresh material to attract visitors to the site. Articles of interest were extracted from previous bulletins to make them more accessible online.

The criteria and categories under which the journal has operated since 2009 arose from extended discussions within the CWG that began in 2003. The development of the online journal was a major step forward though it is not seen, even today, as supplying the last word in science–religion engagement. It certainly has the role of providing an accessible means for scientists, academics, theologians, professionals and others to explore science and technology and reflect theologically.

The ISCAST Online Journal is now known as *Christian Perspectives on Science and Technology* or CPOSAT, a name decided on after discussion within the CWG and after consultation with the ISCAST Board, the Victorian chapter of ISCAST and the editor of *Science and Christian Belief*. CPOSAT, as it now exists, did not appear formally until 2009. The online journal was originally managed by the CWG, but minutes from a separate online journal editorial committee meeting show that at least one meeting was held on August 28, 2005.

CPOSAT includes articles (which are peer reviewed), opinion, discussion, reflections, book reviews and editorials. Other than articles, items in all other categories are published at the discretion of the editor. There is a broad range of topic areas: Science & Christianity, Physical Science, Biological Sciences, Environment & Resources, Technology & Computing, The Human Being and Creation & Evolution. With regard to the refereed journal articles, in 2012 the acceptance rate was about 30%. Items that are not considered up to the standard of an article are sometimes published at the discretion of the editor under one of the other categories such as opinion.

Bruce Craven was editor from 2001 to 2014, and when he retired, he was appointed editor emeritus in view of his long and loyal service. To assist with processing of papers, John Pilbrow served as co-editor from 2012 to December 2014. Since 2015, editing has been undertaken by Chris Mulherin though the position has been advertised without success.

The editor(s) were assisted by the editorial team that worked under Dr Helen Joynt. Those involved have continued to assist in bringing articles into a form consistent with CPOSAT requirements, as required. Other members of the editorial team were Patsy Robertson, Ross Macmillan, Robert Joynt and Kathlyn Ronaldson.

While there has been in principle a commitment for some time to move CPOSAT to a dedicated website, this has not, as yet, happened.

An ongoing challenge is to obtain contributions to CPOSAT from a wider section of the ISCAST membership. Barriers to achieving this include a sense of unworthiness (there is always someone who could say it better—but is there?), lack of time as well as the need for effort and discipline to do the research and to document material in acceptable formats.

7.6 Media and Public Arena

Our reputation also stands to be made in the public arena. What follows is a representative selection that is far from complete.

1986

The late Dr Ken Smith was a joint winner of the 1986 Award of Australian Skeptic of the Year for the book he co-edited with Martin Bridges on *Creationism: An Australian Perspective*, Australian Skeptics, Roseville 1986.

2005

This can be illustrated by the following anecdote. Dr Brian Edgar appeared on ABC National Radio Encounter in 2005 along with Associate Professor David Young (Melbourne University; ISCAST Vic annual lecturer in 2001) on the topic of intelligent design. The ABC presenter thought he had chosen two people with very different views, and was astounded to find they were in substantial agreement. He had not bargained on the zoologist from Melbourne University also being a Christian!

2009

David Young, Nicola Hoggard-Creegan (theologian from NZ) and John Pilbrow were guests on Sunday night with John Cleary, on September 20, 2009, immediately following COSAC 2009 where Darwin and Evolution were discussed.

2010 and 2011

In 2010 and 2011 Chris Mulherin produced and presented three, one-hour ABC Radio National *Encounter* programs: “If God Is Dead ...?” (November 11, 2010)³⁵ which asked about the relationship between morality and the existence of God; “Consuming Creation” (May 29, 2011)³⁶ dealt with theological attitudes about the natural environment, especially in the light of climate change; and “A Sense of Awe” (November 6, 2011)³⁷ for which there is a dedicated website focused on connections between an awareness of the reality of God and a sense of awe at the wonder of the universe.³⁸

2017

Professor Ken Freeman was interviewed on ABC Radio National during the Science Festival in Brisbane last March. Two ISCAST fellows have participated in the new ABC Sunday Night Radio National program, *God Forbid*: Chris Mulherin on April 30 and Ian Hore-Lacy on October 22.

On Sunday June 30, James Garth along with Robert Martin from the Melbourne City Bible Forum dialogued on Light FM, talking about some interesting topics in science and metaphysics.

Social Media

As well as the importance of the website, social media (particularly Facebook and Twitter) is of increasing importance in public engagement, especially in reaching younger people. This remains a challenge for ISCAST. However, by the end of 2017, ISCAST had a solid,

³⁵ <http://www.abc.net.au/radionational/programs/encounter/if-god-is-dead/2980622>

³⁶ <http://j.mp/CM-ConsumingCreation-ABCEncounter-29052011>

³⁷ <http://www.abc.net.au/radionational/programs/encounter/a-sense-of-awe/3614842>

³⁸ <http://www.asenseofawe.net/>

although not very dynamic, social media presence with some 900 followers on Facebook and 350 on Twitter.

Chapter 8 ISCAST Visiting Lecturers

This section lists those ISCAST lecturers who were not involved in COSACs. From early on, the Board was adamant that local chapters were to take full responsibility for all arrangements and local funding. The lecture programs involving John Polkinghorne, John Houghton and John Bryant were conceived as a joint program with the British Council, universities and the chapters. They were successful spiritually and financially and the support of the British Council is acknowledged where speakers from the UK were involved. The details following are not complete as full itineraries were not available in the archives in every case.

8.1 Professor Malcolm Jeeves, 1989

Three lectures at Ridley College in November co-sponsored by ISCAST, AFES Graduates and Friends and the Institute for Christianity and Society:

1. "Issues of Science and Religion"
2. "Scientific and Christian Models of Man – Impact of Recent Advances in Neuroscience and Psychology"
3. "Evaluating Psychological Accounts of the Origin and Function of Christian Belief"

8.2 Professor Gareth Jones, 1991

ISCAST Symposium Lectures at Ridley College, August 22–25:

1. "Biomedical Technology: Saviour or Destroyer"
2. "Human Embryos: Sacred or Disposable"
3. "Valuing Human Life: Consistency or Diversity"

8.3 Dr John Polkinghorne FRS, 1993

The application to the British Council (BC) to cover Dr Polkinghorne's travel to Australia as ISCAST Lecturer in August 1993 was successful. However, as funding was provided in relation to his visit to the USA on the way and for his attendance at the Science & Theology; Questions at the Interface Conference in NZ before coming to Australia, the British Council funding was in the end not required.

Approximately one hundred people attended Polkinghorne's main public lecture in Melbourne, held at the St Vincent's Hospital Lecture Theatre. This was jointly sponsored by ISCAST and the Institute of Spiritual Studies (ISS) at St Peter's Eastern Hill. He also presented a lunchtime talk on faith and science at Monash University and a lecture, "Six Problem Areas in Physics" to students and staff from Monash Physics.

8.4 Professor John Bryant, 1995

On the strong recommendation of Dr Oliver Barclay from UCCF (formerly IVF) in the UK, Professor John Bryant, Professor of Genetics, from the University of Exeter (UK) was invited in 1995. John Pilbrow prepared what was a successful funding application to the British Council. Professor Bryant presented a lecture to the Science Faculty at Monash University, a talk at the Botany Department at Melbourne University and a special ISCAST lecture (May

22, 1995) at Ridley College on “Genes, Embryos and People”. Professor Bryant also met with an informal ISCAST Vic group at Ian Hore-Lacy’s home.

Lawrie Lyons arranged with Professor George Stewart for a talk to be given to the University of Queensland Botany Department on May 12. There is a reference from the Board meeting of June 20, 1994, to where Dr Ping Han noted the “hot topics” for Bryant’s visit - “Personhood and the New Genetics” and “The New Genetics, Evolution and God” (see Appendix 6 regarding lectures in Sydney).

8.5 Professor Colin Russell

The late Professor Colin Russell was a noted professor of history of science and technology (Open University, UK) and formerly professor of chemistry at the same institution. An author and frequent speaker at the faith–science Interface, he paid a visit to Australia in 1995 or 1996. At an informal meeting in Melbourne at Ian Hore-Lacy’s home, he discussed the origin of what is termed “creationism” in eighteenth-century England. Other documentation regarding that visit has not been found.

8.6 Sir John Houghton FRS, 1996

Board minutes from the early 1990s make frequent reference to a possible invitation to Sir John Houghton FRS, a noted British climate scientist and director-general of the UK Meteorological Office from 1983–1991. Houghton’s visit eventually occurred during March, 1996 and was funded by the British Council. Sir John presented a joint ISCAST-ISS³⁹ lecture entitled “The Search for God: Can Science Help?” at St John’s Camberwell in Melbourne on March 20, 1996, attended by around 100. At Monash University, he presented a lecture to the Science Faculty on global warming. He also visited the Bureau of Meteorology. Other lectures were presented in Adelaide, Brisbane and Canberra and Sydney (see Appendix 6). On March 25, Houghton presented a lecture to the University of Queensland entitled “Global Warming: The Science, The Impact, the Politics”. The title of his book *The Search for God: Can Science Help?* was the same title of his presentation to St Mark’s Theological Centre in Canberra on March 29.

8.7 Professor Darryl Falk, 2006

Darryl Falk from Point Loma Nazarene University in California and author of the book, *Coming to Peace with Science*, presented the ISCAST Vic lecture critiquing intelligent design. He was the first of our ISCAST lecturers who had experienced pressure not to teach evolution but instead to teach so-called ‘intelligent design’. He and his institution refused to bow to such pressure. See Appendices 5 and 6 for more information.

8.8 Professor Richard Colling, 2008

Author of the book *Random Designer*, Richard Colling from the Olivet Nazarene University in Illinois, presented the ISCAST Vic lecture during July. Colling had been under greater pressure than Falk regarding what should be taught in biology courses. In his, the pressure came from within his own institution that had barred him from teaching courses using his

³⁹ ISS is The Institute for Spiritual Studies, St Peter’s Eastern Hill Anglican Church, Melbourne.

own book! His plight was featured in the US media. After several years he resigned. See Appendices 5 and 6 for more information. The deficit from this visit to ISCAST was \$2840.

8.9 Professor Tom McLeish FRS, 2015

Professor Tom McLeish's visit was triggered by his book *Faith and Wisdom in Science*, which so impressed Alan Gijsbers that he wrote a review.⁴⁰ This book challenges a lot of assumptions at the science–Christianity interface and represents an exciting new way forward. McLeish is a professor of physics at the University of Durham, UK and also a Deputy-Vice-Chancellor.

Over a period of eight days from September 11–19, 2015, Tom gave lectures on his research specialty of soft matter physics and the molecular engineering of branched polymer process rheology, talks on the ordered universe project (interdisciplinary readings of mediaeval science⁴¹) and main theme lectures based on his book. He also gave an all-day seminar entitled “Faith and Science – contradiction in terms?” in Melbourne. He visited Swinburne University, the University of Melbourne, the Graeme Clark Research Institute Adelaide, Emmanuel College Brisbane, Centre for Christian Apologetics, Scholarship and Education, New College University of NSW (CASE) and he gave five video interviews for the Centre for Public Christianity (CPX).⁴²

⁴⁰ http://iscast.org/journal/McLeish_Alan_Gijsbers_Review

⁴¹ <https://ordered-universe.com>

⁴² <https://www.publicchristianity.org/>; search McLeish

Chapter 9 Local and International Links

9.1 Australian Links

Within Australia, ISCAST has links with the Centre for Christian Apologetics, Scholarship and Education at UNSW (CASE) and the Centre for Public Christianity (CPX), particularly in NSW. CPX have produced video recorded interviews with some of our notable invited speakers such as Simon Conway Morris.

Hilary Regan from the Australasian Theological Foundation (ATF) has continued to make contact with ISCAST and he also attended two COSACs, promoting ATF publications.

The Graeme Clark Research Institute (GCRI) at Tabor College, Adelaide, was launched in September 2011 and was followed by a three-day faith–science conference where keynote speakers were Denis Alexander, Bob White and Graeme Clark. Members of the advisory panel included John Pilbrow, Graham Buxton and Mark Worthing. Regrettably, as noted earlier, Tabor College closed the GCRI in 2017 due to a lack of external funding.

9.2 International Links

It is reassuring that ISCAST has counterparts in other parts of the world such as Christians in Science (CiS) and the Faraday Institute in the UK and the American Scientific Affiliation (ASA) and Biologos in the USA. These other organisations provide different models for operating at the science–faith interface and merit consideration as we think about future directions for ISCAST.

Early references in Board minutes to the Ian Ramsey Centre in Oxford and the Centre for Theology and the Natural Sciences (CTNS) in California indicate that the Board was actively thinking about links with other like-minded institutions that operated at a high intellectual level.

Christians in Science (CiS), that succeeded the Research Scientists' Christian Fellowship in the UK many years ago, holds annual conferences. However, every seven years or so, a joint meeting co-sponsored by CiS and ASA is held either in Britain or North America. CiS, in collaboration with the Victoria Institute, publishes the journal, *Science and Christian Belief*. In fact there is an early reference in Board minutes from 1989 to the establishment of *Science and Christian Belief* (SCB). For a good many years, ISCAST Members have enjoyed a special subscription deal. John White, Allan Day and John Pilbrow were appointed to the editorial Board of SCB in 2002.

The Faraday Institute for Science and Religion was established in Cambridge at the beginning of 2006 with a major grant from the John Templeton Foundation. It runs weekend courses and one- and two-week summer courses for particular audiences such as clergy, theological students, teachers and science students. John Pilbrow presented two lectures at course number five for secondary school teachers in March 2007. The Faraday Institute released the Test of Faith (ToF) course in 2009, funded by another substantial grant from the John Templeton Foundation. Materials are available at several levels: adult, youth and sunday schools (see also section 10.5).

Biologos, established in 2008 by Dr Francis Collins, appears already to have had an impact in helping many in the USA change their attitude to science in general and evolution, in

particular, according to a recent Gallup Poll. In 2009, Biologos sought and was granted permission to put a link to ISCAST on their website.

Christians in Science NZ, established with a substantial grant from the JTF in 2016, held a small, but successful, inaugural conference in Auckland, from September 22–24 with Dr Christopher Southgate from Exeter University as the keynote speaker.

Chapter 10 ISCAST Initiatives and Other Activities

This section collects together what is a representative, though undoubtedly incomplete, compendium of various events and activities involving ISCAST fellows. Other relevant information may be found in Section 5 and in Appendices 5 and 6.

10.1 National Prayer Breakfast, 1991

Professor Lawrie Lyons was the speaker at the 1991 National Prayer Breakfast at Parliament House, Canberra.

10.2 ISCAST–Ridley Course, 1997–2001

The brainchild of the late Allan Day and Jonathan Clarke, these lectures were presented at Ridley College in 1997, and as part of the Ridley Extension Program, at other venues in 1999 and 2001. Ross MacMillan and John Pilbrow also presented one lecture each. Lecture notes (notes on “Science and Christian Belief”) are available on the ISCAST website.⁴³

10.3 Brian Edgar on the Gene Technology Ethics Committee, 2001–2007

Dr Brian Edgar was appointed to the Gene Technology Ethics Committee of the Federal Government’s Office of the Gene Technology Regulator in 2001 and served for two terms, until 2007. The committee was tasked with providing ethical advice to the regulator on various matters relating to the manipulation of genes whether within a laboratory or outside, and also concerning genes related to plants, animals, humans or across species. Brian’s nomination was made on behalf of the Board by John White and John Pilbrow.

In this connection, it is noteworthy that Brian had already won a Templeton writing award for a published article that was one of the first papers exploring the theological significance of genetically engineered, greatly enhanced human life-spans entitled “A New Immortality? Reflections on Genetics, Human Aging and the Possibility of Unlimited Lifespan” which was published in *Evangelical Review of Theology: Journal of the World Evangelical Fellowship* Vol. 23 No 4, (1999) 363–382.

10.4 Templeton Course Awards, 2002

As a precursor to the competitive application process for Templeton Course Awards in Australasia, the John Templeton Foundation ran a large conference at the ANU in January 2002 that provided an opportunity for staff from the foundation to discuss propositions with potential applicants. Speakers included Bob Russell, David Wilkinson and Neils Henrik Gregerson (Denmark). John White made a presentation, “Developments in Human Cell Research: Science and Christian Ethics”, as chair of the Australian Academy of Science Policy Committee.

Those who attended, of particular interest to ISCAST, included John Wilson (a Melbourne Anglican Bishop), John Pilbrow, Allan Day, Stephen Ames, Mark Worthing, Graham Buxton and Robert Stening.

⁴³ http://www.iscast.org/science_faith_intro/Notes_on_Science_and_Christian_Belief_2009.pdf

Course Award Grants valued at US\$10,000 were awarded to a number including Graham Buxton (Tabor College, Adelaide), Robert Stening (UNSW), Brian Edgar (Bible College of Victoria) and Stephen Ames (University of Melbourne). In fact, Brian Edgar received two such awards. These courses all continued for some years beyond the expiry of the Templeton funding. In the meantime, both Graham Buxton and Stephen Ames have been elected ISCAST fellows.

Mark Worthing was the Australian/New Zealand coordinator for the course awards while ISCAST was one of four official supporting groups, the others being the Australian Theological Forum, the Centre for Theology Science and Culture of Flinders University (now defunct) and St Mark's National Theological Centre (in partnership with Charles Sturt University).

For more than a decade until 2014, Robert Stening continued to run his science and religion course GENS4010 at UNSW. In spite of a lack of support from UNSW, once the Templeton Funding had run its course, it continued to flourish as an online course with an enrolment of about 150. With Robert's death early in 2015, the course is no longer offered.

Today, only "God and the Natural Sciences", a subject for second and third year students within the History and Philosophy of Science Department at the University of Melbourne continues. It is run by Stephen Ames and Dr Kristian Camilleri. Of the current enrolment of more than one hundred, Stephen reports that 40% are committed atheists, 40% are committed to a religious tradition and 20% are agnostic.

10.5 Genesis 1–3: Science? History? Theology? 2007

The late Dr John Thompson's Tyndale Fellowship lecture first given in 1967 (repeated to the Melbourne RSCF in 1973) establishes the early chapters of Genesis as theology, but not as science or history. A long-standing popular item on the ISCAST website, it was been published in book form by ISCAST in 2007 and launched prior to Alister McGrath's ISCAST Vic annual lecture. Helen Joynt revised the text introducing inclusive language where necessary.

10.6 Test of Faith (ToF) Courses, 2009 – present

Several ISCAST members have conducted test of faith programs from the Faraday Institute (see Section 3) in their local churches. For example, James Garth ran two test of faith courses in Gippsland (2011–2012), one with a small group and one with a larger group of some fifteen persons (including agnostic, atheists, liberal and conservative Christians). Other ISCAST members known to have conducted test of faith courses in their local churches include John Pilbrow, Max and Philippa Thompson, Robert Stening and Peter Barry. ISCAST Associate, Father Frank O'Dea, also ran test of faith courses at St Francis' Catholic Church in Melbourne in 2012. All these would acknowledge that their involvement was enriched by their involvement with ISCAST.

10.7 Q&As on Science, Faith and Atheism, 2010 & 2012

A Q&A session took place during the 2010 International Atheist Convention in Melbourne, arranged by St Jude's, Carlton and held at St James' Old Cathedral. The Panel, chaired by Dr Denise Cooper-Clarke, consisted of Alan Gijsbers, Murray Hogg and John Pilbrow.

Two years later, during the 2012 International Atheist Convention in Melbourne, James Garth arranged and chaired a Q&A forum with three atheists, including Professor Graeme Oppy (Monash University), and three ISCAST fellows; Alan Gijsbers, Murray Hogg and John Pilbrow. The event took place at the State Library of Victoria, with an attendance of around 200.

10.8 Melbourne College of Divinity (MCD) Centenary Conference, 2010

During July 2010 at Trinity College, University of Melbourne, the centenary conference was held in conjunction with the Australian and New Zealand Association of Theological Schools (ANZATS) Conference. John Pilbrow coordinated the Science and Religion Forum in which both he and Stephen Ames presented talks. The Session Chair was Rev. Merrill Kitchen. (MCD has since become the University of Divinity).

10.9 ISCAST/GCRI Lectures for Clergy and Teachers, 2012

The Graeme Clark Research Institute (GCRI) at Tabor College, Adelaide, was awarded a grant of \$US53,000 from the John Templeton Foundation to fund a joint GCRI/ISCAST project involving a series of science and faith seminars in six capital cities during March 2012. These provided an opportunity for Christian pastors, leaders and school teachers to meet specifically to reflect together on the relationship between science and faith in a spirit of openness and charity. Lectures to clergy and teachers were presented in Melbourne, Sydney, Canberra, Adelaide, Perth and Brisbane. ISCAST fellows, Graham Buxton, Chris Mulherin and Mark Worthing each presented at two locations.

The numbers attending varied. The best attended seminars were those in Adelaide and Brisbane where combined attendances exceeded one hundred. On the whole, more teachers attended than clergy. Attendances in Melbourne were somewhat lower for some reason, but still represented a decent response. Worthy of note is that many who attended were key influential people in their fields. An important outcome was the publication “God and Science in Classroom and Pulpit” (Morning Star Press), edited by Buxton, Mulherin and Worthing.

10.10 John Lennox Weekend, 2014

On August 9, 2014 at Glen Waverley Anglican Church in Melbourne, Professor John Lennox from Oxford University presented two lectures in the morning, particularly rebutting the new atheism of people such as Richard Dawkins. Whilst well attended, Lennox did not stay either for lunch or the afternoon session where the Q&A forum, chaired and organised by Chris Mulherin on behalf of ISCAST, took place. Panel members were James Garth, Prof Michael Clarke (LaTrobe), John Pilbrow, Murray Hogg and Alan Gijsbers.

10.11 Graeme Clark Biography, 2015

ISCAST fellow, Mark Worthing, authored the authentic biography of Professor Graeme Clark AC FAA FRS, the inventor of the cochlear implant. This project, sponsored by the Graeme Clark Research Institute (GCRI) at Tabor Adelaide, was supported by a \$20,000 grant that went towards publication of the book, including editing and advertising.

The biography was launched on Friday August 14, 2015 at the State Library of Victoria, the evening prior to the State of Play Conference at Ridley College (see Section 3.3). The event,

organised by ISCAST, made possible by a generous donation from Cochlear Pty Ltd, was attended by more than 100 invited guests, including colleagues of Graeme's, politicians, implant recipients and ISCAST members. It was a significant occasion for ISCAST to be able to sponsor the celebration of the life of a great man who has achieved so much with such humility and grace. Since then, Graeme has become one of the inaugural distinguished fellows and our inaugural patron.

10.12 Faith Survey, 2016

James Garth made a presentation during the State of Play Conference in 2015 concerning a survey exploring the different ways we use the word "faith". The presentation was co-sponsored by ISCAST, the City Bible Forum in Melbourne, the Rationalist Society of Australia and others. The 2016 Allan Day 'lecture' was in fact a panel discussion on the results of the faith survey.

10.13 Anglican Diocese of Melbourne

As will be evident from the following, various members of ISCAST have an excellent working relationship with the Anglican Diocese of Melbourne, much of which is ongoing.

Science–Faith – the Interface Service, St Paul's Cathedral, 2009.

This service on February 8 was arranged following a request to Archbishop Freier from Professor Phil Batterham, Chair of the International Conference, "Evolution – the Experience". The service was advertised in the conference program and a good many conference participants attended. Many of those who attended were from the USA and commented that such a service could not happen in their own country. Archbishop Freier preached while both John Pilbrow and Phil Batterham described their own journeys in science and faith (see videos on the ISCAST Website). Denise Cooper-Clarke and Merrill Kitchen read the lessons.

Archbishop's Breakfast Conversations, 2009

The breakfast conversations are held several times a year at Federation Square in Melbourne.

May 19, 2009: Guests included Ian Hore-Lacy and Professor Ross Garnaut, on the topic of climate change.

October 28, 2009: Guests included Robyn Williams (ABC Science Show) and John Pilbrow, on "Faith, Science & Atheism".

Science Week in The Cathedral, 2009

The brainchild of Rev. Dr Canon Stephen Ames, Science Week in the Cathedral events have been held in St Paul's Cathedral during National Science Week each year since 2009. John Pilbrow preached at the inaugural Science Week cathedral service in 2009. Alan Gijssbers has made presentations on "Neuroscience and Addiction" (2010) and "Is my brain a computer made of flesh?" (2017). The following people have preached at evensong at the beginning of National Science Week: Stephen Ames (2013), Phil Batterham (2014), Mick Pope (2015) and Ian Barns (2016).

Current members of the Science Week in the Cathedral Committee are Stephen Ames (chair), Chris Mulherin, John Pilbrow, representatives from both Ridley and Trinity Colleges and the Dean, the Very Rev. Dr Andreas Loewe.

Committee on Christianity and Atheism, 2010 and 2012

Stephen Ames, Denise Cooper-Clark and John Pilbrow (as deputy chair), were members of the Anglican committee on Christianity and atheism charged with developing resources for parishes in the wake of the Global Atheist Conventions held in Melbourne in 2010 and 2012.

ISCAST Fellows and The Melbourne Anglican

During the early 2000s, Allan Day and Brian Edgar worked closely with the editor of the monthly Melbourne Diocesan Newspaper, *The Melbourne Anglican* (TMA), Roland Ashby, and both contributed several articles. John Pilbrow has been particularly involved since 2009 in helping select topics and writers for articles of interest at the faith–science Interface. Since 2009, a faith–science interface banner has been placed at the head of each article.

Stephen Ames, Chris Mulherin and John Pilbrow, all of whom have contributed a good many articles on a variety of topics, have recently joined with the editor in putting together a collection of some seventy or more of the faith–science articles from the past decade or so to be published as a book early in 2018.

Other ISCAST fellows who have contributed one or more articles in TMA in recent years include Alan Gijssbers, Jonathan Clarke, Mark Worthing, Andrew Wood, Murray Hogg, Mick Pope, James Garth and Ian Hore-Lacy.

TMA also features interviews with several of our distinguished ISCAST visitors, for example, Sam Berry, Owen Gingerich, Alister McGrath, and Tom McLeish. The Berry and Gingerich interviews were included in “A Faith To Live By”, edited by Roland Ashby.

Chris Mulherin has also conducted interviews with John Lennox (May 2014), Bob White (May 2015), Tom McLeish (November 2015), Graeme Finlay (September 2016) and Alister McGrath (November 2016). In 2013, Chris also interviewed both William Lane Craig (Christian philosopher), and Lawrence Krauss (prominent spokesperson for the New Atheism).

Chapter 11 Conclusion

We have seen that science is to be understood as God's providential gift to us. Thus it is logical for a scientist to be a Christian in today's world and to see a career in science as a Christian vocation that requires our God-given minds and rationality. Fundamental assumptions are that God exists and the universe is His creation, all truth is God's truth and the universe may be explored scientifically, indeed must be explored if humanity is to have a future. These themes are convergent with the recent popular level text, "Let there be Science: Why God loves Science and Science Loves God" by Hutchings and McLeish (2017).

People of faith have nothing to fear from scientific discoveries even though nineteenth and twenty-first century science has forever changed our perception of the world and of our place in it. Biology, physics and cosmology each show how intimately we are related to the rest of the creation.

The faith–science interface is not on the agenda of most churches and, regrettably, ISCAST members get few opportunities to speak to churches, youth groups, schools and campus groups. What we have to share with the church should be a source of rejoicing and worship. The time has come to advocate the celebration of God's creation, appropriately informed by taking into account the impact of modern scientific paradigms as to how we understand the world and our place in it, connected to the biblical revelation that informs us about the divine purpose. There will be consequences for the church if our voice is not heard on the kinds of issues before us.

With increasing specialisation of scientific disciplines, and increasing competition for status and funding, modern scientists who are Christian tend to spend their time within their discipline and not leave much time to think of the broader issues outside of their discipline. Added to that, church teaching in some quarters tends to be strong on "gospel preaching" but neglects the interface between faith and everyday life. This "Sunday to Monday disconnect" leads to scientifically literate Christians who are theologically naive and not well thought out in the science–religion area. Nor is there much encouragement to change that. ISCAST seeks to address this issue.

We can sum up the task of ISCAST as being to provide a bridge between the world of science and the church, to represent the best science within a sound theological understanding to the community, and to identify and challenge flawed lines of argument used within and outside the churches. We must represent modern science as a friend of faith and not a foe and we must explain that the real "enemies" are scientism (or scientific naturalism), materialism, young-earth creationism, and the social constructs of relativism and evolutionism. While we have a responsibility to be well-informed, we cannot be experts in everything. Some advice given by the writer to theological students at Ridley College in 1970 is worth pondering:

My advice to you is – acquire some scientific friends – preferably Christians – let them tackle the real scientific enquiries. I do not believe your task is to be jack of all intellectual trades. This is a mistaken view of the Christian ministry. It is better to say "I don't know, but I'll try to find someone who can help".

To take this matter deeper, it is essential that Christian leaders should be convinced about epistemological coherence. That is, if God is author of both books (creator of the universe

investigated by science, and author of the Bible) then any apparent contradiction between science and hermeneutics is an artefact resulting from our ignorance and/or failure to understand category errors. Thus, to reach out into the churches and the community, we must understand the language and thought forms that people take for granted. Take, for example, the impact of post-modernism and other such influences on viewpoints, worldviews and prejudices that people hold. We will all need good tools and strategies for scholarly reflection so that we can make useful contributions to Christian apologetics at appropriate levels. The challenge will be to ensure effective communication.

There is no shortage of good arguments and sound ideas for presentation to church and community regarding modern science in the light of Christian theology. Of course it not all up to ISCAST! Underpinning our consideration is what we can say about the nature of the physical universe and how we relate that to our Christian faith. Nevertheless we do well to heed the late Professor Charles Coulson concerning the danger of the God of the gaps when he said, with telling force, "when we come to the scientifically unknown, our correct policy is not to rejoice because we have found God; it is to become better scientists". (Coulson, C. A. (1955) "Science and Religion: A Changing Relationship". Cambridge: CUP).

ISCAST is but one group of people who bring considerable collective expertise into the spectrum of issues at the science–faith interface. All fellows should be encouraged to become more active at the faith–science interface and to contribute to top-level scholarship. There are others who share our viewpoint who also need to be encouraged to become involved. Regrettably, there are senior Christian academics, many of them reasonably early in their careers, who find that in the current academic environment they have little time to be involved. It seems inescapable, however, that our Christian discipleship leaves us no choice but to be involved and to identify as Christians in our own contexts.

ISCAST has been and continues to be an effective conduit for the best thinking in the conversation between faith and science. Public lectures and other events in major centres and key country centres will continue to provide important opportunities to reach out beyond our existing operation.

We are indebted to scholars such as Polkinghorne, McGrath, Berry and McLeish amongst others. Their seminal contributions have helped equip us to fulfil our responsibility in our part of the world. We have to depend on the best scholarship available to enable us to be able to live up to Jesus's challenge of "much will be required".

It is also worth pondering some words of wisdom written by St Augustine of Hippo (354–430AD), that are just as apposite today as when first written some 1600 years ago. His insight is that as we carry the flag both for faith and science, we must be not only authentic believers but also properly informed believers. That will be the task for ISCAST and other similar groups throughout the coming century.

Usually, even a non-Christian knows something about the earth, the heavens, and other elements of this world, about the motion and orbit of the stars and even their size ... and this knowledge he holds to as being certain from reason and experience.

Now, it is a disgraceful and dangerous thing for an unbeliever⁴⁴ to hear a Christian, presumably giving the meaning of Holy Scripture, talking nonsense on these topics; and we should take all means to prevent such an embarrassing situation, in which people show up vast ignorance in a Christian and laugh it to scorn ...

If they find a Christian mistaken in a field which they themselves know well and hear him maintaining his foolish opinions about our books (meaning the Bible), how are they going to believe those books in matters concerning the resurrection of the dead, the hope of eternal life, and the kingdom of heaven?⁴⁵

In his 2007 Christians in Science/American Scientific Affiliation (CiS/ASA) lecture in Edinburgh, Professor Alister McGrath raised two related questions that remain of critical importance for ISCAST at this time. These are:

How can we *encourage* a new generation of scientists and theologians to develop interests in the field of science and faith?

What are we *doing* to ensure a rising generation is interested in the relation between science and faith?

This reinforces the idea that science should be seen as a Christian vocation for scientists who are Christians, a point of view well-articulated by David Wilkinson in his BBC Sermon presented in June 2016.⁴⁶

Though the items from the Memorandum of Association, clause 4, presented in the Introduction would appear to have been substantially fulfilled, it is clear that what the sub-clauses actually mean in practice has been the subject of the ongoing attempts to refine the role and function of ISCAST (1992, 2006–2007, 2015, December 2016 and February 2017). The following two statements from the Strategic Directions for ISCAST encapsulate much of what ISCAST stands for:

Vision: That Australasia hosts a dynamic dialogue, critically reviewing both science and religion, allowing each to influence the other as our understanding of reality progresses.

Mission: To develop and advocate a Christian perspective in the science–religion dialogue within the science community, the Christian community and society generally in the Australasian and international communities.

There is thus much scope for broad areas for debate and dialogue. Indeed, within ISCAST we treasure the freedom we have to discuss a wide range of issues and ideas. This, of course, requires the theological safe space already referred to more than once.

However, after thirty years, ISCAST is still seeking to refine its mission and to be pro-active in seeking to chart some new directions. While we still continue to benefit from prominent overseas visitors, we recognise that we cannot allow our agenda to be shaped solely by their

⁴⁴ Infidel was replaced by unbeliever.

⁴⁵ Augustine of Hippo, *The Literal Meaning of Genesis*, circa 400, Book 1, chapter 19, section 39; translated and annotated by John Hammond Taylor, S. I., 2 vols. (Ancient Christian Writers, Nos. 41, 42), (New York: Newman Press, 1982), vol. 1, pp. 42–43.

⁴⁶ From Sermon by Rev Prof David Wilkinson – *When faith and science meet*, BBC Sunday Worship 19/6/16 and published in *Science and Christian Belief* 29, 43, 2017.

interests. By whatever means it ultimately employs, ISCAST must encourage its members who have a commitment to Christ to talk about how their faith impacts upon their professional life and vice versa. During the process of refining the ISCAST ethos, it has become increasingly clear that we need to think about how to convey what we have learned from modern science in appropriate ways into our everyday Christian journeys.

ISCAST has survived the rise and demise of other organisations and it has continued to grow so that we are now the oldest and largest science–religion organisation in Australasia. ISCAST will survive because it does not rely on one single source of funds which might well control our direction or what we say.

As a fellowship of Christians particularly at the faith–science interface, all that has been attempted and achieved through its activities and, more especially, how it goes about those activities, has been to the glory of God. We have an authentic perspective and we have a story to tell.

Appendices

Appendix 1 Board Members 1987–2017

As some Board minutes are missing from the archives, it proved impossible to be sure about the accuracy of some of these dates. Notwithstanding, some of the dates may be in error by one year, resulting from the fact that AGMs, where Board members are elected, have not taken place at a fixed date in the year.

Barry	Prof. Peter	2002–2017
Burnard	Mr Ian	1987–1994; secretary 1992–1994
Clarke	Dr Jonathan	1996–2006; 2011–2017
Daniel	Dr Art	1990–1992
Edgar	Rev. Dr Brian	1999–2000
Day	Em. Prof. Allan	1989–1992
Eyland	Mr Peter	2011–2015
Friend	Rev. Dr Alan	1987–1998; secretary 1989–1992
Garth	Mr James	2011, 2012, 2014
Gijbsbers	Assoc. Prof. Alan	1999–2001 (or 2002?), 2006–2017
Gijbsbers	Mr Richard	2009–2017 (non-voting; ex officio)
Goldney	Prof. David	2010–2011
Han	Dr Ping	1994–1998
Judd	Dr Stephen	1987–1988 secretary/treasurer (from 1986)
Lucas	Prof. John	2008–2009 ⁴⁷
Lyons	Prof. Lawrie	1987–1998; president 1987–1992; treasurer 1988–c. 1998
Mulherin	Rev. Dr Chris	2015–2017 (executive director; ex officio; non-voting)
Parkinson	Prof. Patrick	1990–1991

⁴⁷ John Lucas may also have served on the Board during the early 1990's but this has not been verified.

Pilbrow	Prof. John	1994–1996, 2002–2003, 2006–2013; president 2006–2009
Pope	Dr Mick	2011–2013
Restall	Prof. Greg	2000 (2001?)
Robertson	Dr Patsy	2010–2011
Smith	Dr Ken	1997 2004
Stening	Assoc. Prof. Robert	1992–2009; secretary 1994–2009; treasurer c. 1998–2009.
White	Prof. John	1987–2010; president 1992–2006
Wilson	Prof. Alan	1994–1996
Wong	Assoc. Prof. Michael	2011–2017 (treasurer 2011 – current)
Wood	Dr Alec	1994
Worthing	Rev. Dr Mark	1999–2004

Appendix 2 Discussion Paper for Future Directions 2007 – Executive Summary

Prepared by Prof John R Pilbrow, president of ISCAST 2006–2009

This executive summary of the discussion paper¹² resulted from John Pilbrow's meetings with fellows and associates in Adelaide, Canberra, Melbourne, Sydney and Brisbane during the period March – November, 2006.

The findings of that brainstorm process are summarised below and were prepared ahead of their consideration and feedback prior to the meeting of fellows that took place at the conclusion of COSAC 2007.

As at November 2017, some 80% of the following recommendations have been achieved to some degree.

Recommendations For The Future Of ISCAST

BOARD

That the Board review the broad agenda for ISCAST, taking into account feedback from fellows and associates.

That the Board encourage the establishment of chapters in both Canberra and Adelaide.

That the Board explore the establishment of a chapter in Western Australia.

That the Board investigate opportunities for ISCAST to reach out to regional centres and to ascertain the financial and other implications of so doing.

That the Board and chapters continue to seek out suitably qualified people as fellows.

That the Board ensure that appropriate ISCAST fellows are nominated for major national committees as opportunity arises.⁴⁸

That the Board be asked to review COSAC conferences, to investigate why attendances dropped in 2001, 2003 and 2005 and to explore the best locations for future conferences.

That the Board explore the topic, timing and location for COSAC 2009 in the light of recent developments regarding the possibility of an ATF-Charles Darwin University conference to celebrate the 150th anniversary of *Origin of Species* during late November 2009.⁴⁹

CHAPTERS

That chapters be pro-active in seeking opportunities for members of ISCAST to present lectures to church groups, campus groups, senior school students, church leaders and clergy.

⁴⁸ e.g. National Gene Ethics Committee

⁴⁹ The Conference, co-sponsored by The Charles Darwin University (CDU) and the NT Government took place in Darwin at the end of September 2009 with an attendance of more than 400. Professors Ted Peters and Martinez Hewlett were invited to participate but Ted Peters was unwell and could not come. Marty Hewlett presented a fine lecture and participated effectively in two Q&A sessions.

That financial statements provided to the Board by chapters at the end of each year be audited.

ISCAST MATERIALS AND PUBLICATIONS

That the Board and the chapters maintain a watching brief on key issues for discussion, lecturing, writing and publication.

That ISCAST materials, lectures and presentations should be developed at broadly three levels:

Scholarly level - senior scientist/theologian – online journal

Level of undergraduate and postgraduate students.

Level of high school students and lay level resources for congregations.

That the Board encourage members of ISCAST to prepare material for churches, teachers (particularly in biology), university and school chaplains and for parents and children.

That the Board and chapters encourage fellows and associates with particular qualifications to write scholarly articles for the ISCAST online journal, *Science and Christian Belief* and other science–faith publications.

That the Board and chapters encourage those fellows and/or associates with appropriate qualifications and suitable materials to consider writing books and monographs.

That an up-to-date brochure describing ISCAST be prepared, updated at least annually and maintained on the website.

That ISCAST fellows be asked to submit a website entry of at least a half page profile with their photograph, the format to be developed by the communications working group, and that these entries should appear on the ISCAST website by the end of 2007.

That the Board, chapters and all fellows and associates be asked to ensure that up-to-date information regarding activities undertaken in the science–faith area be included on the website as a way of advertising what ISCAST is able to offer.

That a new *Bulletin* editor be identified, otherwise consideration will need to be given to incorporating *Bulletin* functions onto the website along with provision for hard copies of relevant material for those without internet access.

REACHING OUT

THEOLOGICAL EDUCATION

That all members of ISCAST be encouraged to develop their contacts with theological and bible colleges and to be available to assist with discussion and dialogue regarding science–faith issues with staff and theological students through seminars and workshops.

COURSES AND SEMINARS

That the Board and chapters seek opportunities for ISCAST to sponsor and/or participate in short courses, seminars and workshops for identifiable groups or organisations.

OPPORTUNITIES IN THE MEDIA

That ISCAST members should seek opportunities to write for church newspapers.

That appropriately qualified members of ISCAST seek opportunities to write for the daily papers and to participate in the media.

BOOKSHOPS

That all members of ISCAST seek to encourage their local Christian bookshops to stock titles that represent appropriate science–faith perspectives and to remove titles based on faulty science.

PUBLIC LECTURES

That the Board shall ensure, wherever possible, that the itinerary for visiting speakers include Adelaide, Hobart and Perth as well as Melbourne, Sydney, Brisbane and Canberra.

That the Board and chapters give consideration to joint sponsorship of public lectures with other organisations without compromising ISCAST principles.

MEMBERSHIP & SUBSCRIPTIONS

That ISCAST establish uniform subscriptions for each level of membership across the country with an agreed proportion to be held in Board funds

That in addition to categories of fellow and associate, in order to encourage involvement of younger people, a student membership category with a modest annual subscription be introduced nationally.⁵⁰ Other categories of membership should also be investigated.

FINANCIAL

That the Board explore ways and means to increase the level of ISCAST financial reserves and to set a goal to be achieved within five years, such funds to be used for underwriting COSAC conferences, to support and seed fund major initiatives and to support lecture tours by overseas speakers.

That the annual budget presented to the AGM contain new initiatives consistent with the aims and goals of ISCAST.

That the Board explore the possibility of tax deductible status for ISCAST to enable applications to be made to charitable trusts for particular purposes.

That the Board negotiate with the Lyons family regarding future uses of funds from the Hugh Lyons Fund for ISCAST activities.

EXTERNAL FUNDING

It is noted that the first stage submission for \$US30,000 from the John Templeton Foundation for upgrading the website and its maintenance for a period of five years, submitted recently, has been accepted. Preparation of the full submission will now be undertaken.

⁵⁰ A Student Membership Category exists in ISCAST (Vic). Victoria also has Corporate and Family categories.

That consideration be given to making application for a CTNS STARS program award in 2008 and in subsequent years.⁵¹

(It has been pointed out that this needs academics/researchers with projects upon which they will need to spend a considerable amount of time)

That the Board invite suggestions for large scale projects that would require funding at the level of \$100,000–200,000 per year for five years from the John Templeton Foundation.

That the Board investigate applications for funding from bodies such as the Australian Research Council (ARC).

ADMINISTRATION

That the Board be charged with developing a proposal regarding the establishment of an ISCAST national office and the appointment of an executive secretary. As a first step, the Board be asked to investigate the costs and feasibility of obtaining a 1300 or 1800 telephone number that would be answered during working hours and a possible location and associated costs.

OTHER ORGANISATIONS

That the Board maintain appropriate links with other organisations including Christians in Science (UK) and the Australian Science and Theology Network.

That the Board explore an appropriate partner relationship with colleagues in NZ.

That the Board seek appropriate levels of cooperation with other organisations such as ZADOK and CASE.

ACTION RECOMMENDATION

That the Board be responsible for implementation of the above recommendations and that it provide a progress report for the 2008 AGM.

⁵¹ These are collaborative grants of value \$US20,000 for interdisciplinary research.

Appendix 3 The State of Play of the Science–Religion Dialogue in Australia

“Six Emerging Themes, Six Key Strategies, Six Core Values”.

An ISCAST discussion paper prepared by Mark Worthing following the State of Play workshop held at Ridley College in Melbourne on August 15, 2015.

Introduction

ISCAST is the oldest and largest science and religion organisation in Australia, having been established in 1987. The early years were focused on getting out the message that science and the Christian faith need not be enemies. At that time, the organisation was dominated largely by Protestant evangelicals who worked within the physical sciences.

Over the years the focus of ISCAST has broadened to include social, political, medical and ecological sciences and well as specialists in technology, theology and philosophy. ISCAST's membership has also broadened to include both Catholic and Protestant scientists and theologians. A conscious effort is also being made to recruit younger, women and non-Caucasian scientists as well.

Through all of these changes, ISCAST remains committed to the need for a constructive dialogue between science and religion in general and science and Christianity more specifically. As an organisation, we recognise that many non-religious thinkers believe that religion has little to say to the sciences and therefore there is no basis for dialogue.

We are also aware that some within our own Christian communities believe science is at best a peripheral issue and, at worst, idolatrous and that dialogue is not a priority. It is not despite, but precisely because of these persistent views in many segments of society that ISCAST remains convinced of the need to establish and maintain dialogue.

ISCAST argues that this dialogue will benefit not only individuals in their professional context providing pastoral support, mentoring and encouragement in their personal challenges, but also the churches as they struggle with the apologetic challenges posed by the rapidly developing sciences, and also to the wider community as the insights that this dialogue generates is offered humbly to our society as it tackles progressively more complex (or even wicked) problems.

ISCAST continues to be committed to the need for scientific and Christian thinking to be integrated into the daily lives of those Christians working within the various sciences, and in the lives of clergy, theologians and other Christian leaders who are exposed to the modern scientific world.

Within this context, ISCAST realised the need to look afresh at its purpose and the issues it was addressing with a view to future needs and directions. This report is an outcome of this review.

The Process

In the initial phase, the ISCAST community was canvassed for their thoughts on where the emerging areas of dialogue would be. Each fellow and member was asked what they thought the emerging or continuing issues in their particular field would be in the next five to ten years. A very large and diverse number of responses was received. A small group was given the task of putting these into six major clusters.

But much work remained to be done in understanding what these issues were and how we might respond to them. The decision was made to hold a one day consultation with a variety of presentations and panellists to work through the issues. The State of Play workshop was held at Ridley College in Melbourne on August 15, 2015. Presenters made copies of their presentations available and notes were taken of the discussion at each session.

Dr Mark Worthing began the day with an overview of the science and Christianity scene in Australia, highlighting especially the contributions of ISCAST members and fellows. He was also asked to make some brief summary observations at the end of the day.

This report was produced as a result of the workshop. Its purpose is not to note everything that was said or suggested through the consultation process, but to take up from the various contributions the most significant themes and to suggest how these might best be addressed. Professor John Pilbrow produced a document summarising the presentations on the day as a separate document.

The Distinctive Australian Context

Within the wider context of the science–Christianity dialogue around the world it is important that the distinctive situation, history and role of those involved in this dialogue in Australia be recognised. While there is much in common with science and Christianity discussion in centres such as the UK and North America, the Australian situation is in many ways distinct.

Australia has long been known for its innovation in many areas, including science and technology. One of our own ISCAST members, for example, Professor Graeme Clark, was the pioneer developer of the bionic ear. There is a long history of working creatively and often against the odds to find novel solutions to problems. This same spirit of innovation is present in the contributions to the science and religion discussions that arise out of the Australian context.

Similarly, Australians are known as risk-takers. It is not our custom to wait until an issue is settled and then join the queue of those advocating this position and view. In our culture, as well as in our academic pursuits, we tend to be willing to ‘take a punt’ when others would prefer to ‘wait and see.’ While we must guard against being over hasty, this characteristic means we are in a good position to take the lead on emerging issues or, at worst, demonstrate quickly why a particular approach might be limiting.

Geographically and historically, Australia is well placed to build on its developing relationships within the Asia-Pacific region. As Asian economies grow and Asian contributions to scientific and technological advances increase, Australians involved in the science–religion dialogue are in a good position to introduce and encourage the development of this dialogue among our Asian neighbours. Similarly, we stand in a unique position within the English-speaking world between the major intellectual centres of the US and the UK and are well placed to serve as ‘trans-Atlantic brokers’ of ideas arising from these centres.

Australia also has a long history of involvement in the science–Christianity field. One of the pioneers of the modern dialogue in the 1950s and 1960s was Australian biologist Charles Birch. Basil Hetzel, who pioneered the adding of iodine to salt, was also active during this period in promoting the conversation between science and religion. And ISCAST fellow Graeme Clark has long been open about his Christian commitment. Prominent Australian scientists such as Laurie Lyons, John White, Robert Stening, Allan Day and John Pilbrow

were active in the early formative years of ISCAST, making significant contributions not only to their sciences but to the interface of those sciences and their Christian faith.

Australia has also produced a number of scholars whose work in the science–religion area is well-known internationally. We think here, for instance of ISCAST fellow Denis Edwards in the fields of theology, evolution and eco-theology, Norm Habel in the area of eco-theology, the development of the ‘season of creation’ and the Earth Bible Commentary series, and Peter Harrison in the area of the history of science. Australia has also produced a number of organisations that have contributed to the science–faith field. Apart from ISCAST the Australian Theological Forum (ATF), Centre for Theology, Science and Culture (Flinders University), Centre for Theology and Culture (St Marks and Charles Sturt University, Canberra), and Graeme Clark Research Institute (GCRI) of Tabor College, the Centre for the Study of Science, the Religion and Society (CSSRS) in Brisbane, the Australian Fellowship of Evangelical Students (AFES) and the Centre for Public Christianity (CPX) all merit mention.

The Australian science and religion dialogue has been relatively independent of parallel movements in the UK and North America. Some of the major funding sources that have helped to build and shape the field in those regions have had minimal profile here. This means that we have been less well funded in our endeavours to that of our northern cousins, but it also means that we have been able to develop in the directions in which various groups and individuals have been committed to pursue, free of adapting these goals to suit the values and aims of the various key funding bodies.

It is also important to note that our relatively small population has meant most of our projects and conferences have been necessarily national (despite the trans-continental distances involved). We have long experience, built out of necessity, of networking widely both geographically and across disciplines.

Finally, our unique environmental context positions us well to be leaders in the field of eco-theology. Our ongoing links with indigenous cultures, our long-standing need to conserve water and other vital resources, our regular and brutal experiences with bush fires, our sad and recent experiences with extinction of species, our many world heritage listed areas from the Great Barrier Reef to the forests of south-western Tasmania, our pioneer work in solar power and wind farming all strengthen our need to contribute actively to the ecological movement and to eco-theology.

Six key areas of dialogue for the future

Perhaps the main outcome of the State of Play workshop is that five to ten years is a long time in trying to predict what issues will emerge. Not long after the workshop, gravitational waves were discovered, opening up a huge new sense of awe and achievement as well as pause for reflection as to what this means for us as God’s creation.

ISCAST recognises that the issues identified represent areas upon which focus is being directed at the present time and which have been extrapolated into the coming years. Significant and unexpected discoveries (such as extra-terrestrial life or a grand unified theory) or major changes in the world’s ecosystems or political structures will require adjustment to the areas of priority focus within the science–religion dialogue. But we have to start somewhere.

For instance, less than a decade ago, ISCAST identified seven areas of priority: creation and evolution, the physical sciences, the biological science, environment and natural resources, technology and computing, the human being, and science and Christianity. Many of these foci are still present in the current areas of concern identified, but others have been modified or incorporated into other areas as the dynamics of the situation have changed. We should likewise anticipate that in ten years' time our list of priority areas will have changed. Much can happen over that period of time!

Perhaps the most important finding of the day was that we need to be ready to follow where the issues go and not lock too solidly onto today's issues and get left behind. The six areas of concern are listed below although perhaps the most important outcome of the workshop was the six strategies that follow.

1. Stewardship of creation

Environmental concerns are not new, but Christians have a novel perspective and the problem of the 'global commons' is increasingly relevant, as the issue of climate change makes very obvious. This is no longer 'someone else's' issue, it is each of ours—every man, woman and child's. The Pope's *Laudato Si* and the Paris COP21 meeting in December 2015 (the 2015 United Nations Climate Change Conference) make climate change a particularly timely topic. Environmental considerations take into account a broad range of inter-related topics including anthropogenic climate change, biodiversity, habitat loss, water and resource allocation, new authority structures on the global stage, and the rights of humans versus those of animals and other life forms on the planet. In addition to this, environmental issues include a wide range of sciences, many of which rarely speak to each other.

It is important to note that the deep divides that occur in the media and political discussions on these issues are also to be found in the church and within ISCAST. While some see the clear and present danger and seek urgent responses, others question aspects of the data or the appropriateness of those responses. Often they see another danger or another concern or challenge to be confronted.

The dilemma and challenge is that while those who worship the God who created the heavens and the earth must clearly be actively engaged in these discussions, there is at present no single and unified Christian response but rather a number of responses that have been emerging from Christian thinkers.

It is also important to note the continually changing face of the environmental challenge. Urbanisation in particular is one area around which the environmental concerns will shift; further distancing society from the natural ecology and raising concerns such as the greater need of areas for recreation and the increasing importance of "values" like scenery, natural vegetation and the like over against more traditional values such as timber resources.

2. Uses and abuses of technology

This topic cluster has a strong focus on ethics. It incorporates ongoing questions that continue to generate discussion, as well as new issues that have arisen as techno-science opens undreamt-of possibilities. Some of the issues that will continue to dominate discussion in the years to come include information technology, the militarisation of science, implications of the internet and social media, issues of surveillance and privacy, evolving 'macro-ethical' challenges (going beyond personal morality to larger issues), biotechnology and genetic manipulation, the impact of multinational corporations, global politics, gene

profiling for insurance and superannuation purposes. All of these issues have experienced resistance from the general public, as described, for instance, by Tom McLeish as a ‘narrative of suspicion’. The church’s lack of action on many of these issues, and even sometimes its tacit (or otherwise) complicity, has raised the question of whether the church’s voice on moral issues has been compromised. The interest shown by Pope Francis in these areas has signalled a more open approach and is striking a chord with the wider public, and this may well contribute to an increased willingness of secular society to be open to listening to the church’s voices on these matters.

3. Neuroscience and Christian theology

Neuroscience, philosophy and theology are increasingly coming together as we seek to deal with the complex issues surrounding our understanding of humans, embedded within the complex structures of family, societies, religious communities and others networks. One trend is that of naturalism and reductionistic determinism, which clash with emergent complexity, personal responsibility, and the broader transcendent perspective. This field of enquiry constitutes a nexus between philosophy and natural science. Are we seeing the brain as just another machine (marvellous, intricate, and complex, yet a machine) so that our decisions, emotions, beliefs, personality are predetermined? An important challenge is for those within the psychological sciences to develop their own modes of inquiry which may vary from those of the other natural sciences and to clarify the philosophical issues which impact the way problems are viewed. The conclusions coming out of these discussions will have a profound impact on how human beings are viewed theologically. It is important for Christians to be involved in these debates and to help the wider church understand the implications of emerging views of the human being arising out of neuroscience. Issues such as emergent complexity and the mind-brain split, arising from neuroscience; and concepts such as the spirit/flesh distinction, arising from biblical anthropology—all need to come into consideration.

4. Evolutionary biology and theology

The “creation-evolution” debate has been around since the 1859 publication of Charles Darwin’s *Origin of Species*. While most hold that the debate among scientists has been long ago settled, the issue is still very much alive in many Protestant churches. Despite all predictions that this issue would fade away (made by advocates of both sides), increased activity by Young Earth Creationists in congregations and Christian schools, and the linking of YEC with the Christian faith in general by many New Atheists has injected new life into this debate.

For many Christians it is still the first thing they think of when one mentions any dialogue between science and Christian faith. The implications of genetic research for human lineages continue to impact our understanding of human origins, debates within theological circles about how to read and interpret biblical texts such as Genesis 1–3, as well as the need to broaden our theological understanding of creation beyond the Genesis account to include other biblical creation texts, are all ongoing and continue to add new layers to this old debate.

It is therefore vital that, despite the fact that for many members of ISCAST this is no longer an issue, that it be given serious attention in future, including the challenge of finding ways for constructive dialogue with those who have a very different view to our own.

5. Secularism, New Atheism and other worldviews

Aggressive secularism, including the stridency with which atheism is increasingly presented and the enthusiasm with which this has been taken up by some in society lays a number of challenges before us. Scientific naturalism is still problematic for many of those who confess faith in a supernatural Creator who is active in sustaining creation and is just as active in human history. Other issues of note in this broad category include the rise of the new internationalism, the emergence of new fundamentalisms (scientific, religious, environmental, etc.), and the apparent retreat by Christians into cultural and intellectual ghettos that often keep us out of the forefront of engagement over these issues. We also need to address the tacit impact of secularism even on Christian thought which has prompted us often to move to the sidelines of our day-to-day thinking about the God whom we confess to be the Creator and the Sustainer of all that exists.

6. Scientific literacy in the public forum and in the pews

This cluster concerns public science and the nature of science. The loss of public connection with science within our culture (including within the Christian community) must be acknowledged.

Science and technology have given us nuclear weapons, thalidomide, pollution and so many other dubious “benefits”. It is also now often the preserve of huge organisations like the military and multinational companies and the everyday wonder of discovering and exploring new knowledge has been taken from us by a high priesthood that controls what is available to the public and what we use and how we use it.

Science is fragmented so that conflicts can be just as much one science versus another science as for any other reason. The lack of knowledge concerning the various sciences is not only a problem within the Christian community and the wider public, but also between the individual sciences. This in turn raises the question of the ongoing place and role of science within our human societies.

Six key strategies for engagement with these dialogue areas

1. Dialogue

The very nature of the science and religion field is built around dialogue and the fundamental assumption that these two distinct areas of intellectual pursuit have something to learn from and say to one another. ISCAST is not an organisation whose purpose is advocacy of certain points of view, but an organisation dedicated to establishing and maintaining healthy dialogue. With this background and this fundamental assumption underlying ISCAST one of strongest key strategies should be making use of the ability to bring together people from diverse fields and diverse points-of-view to debate and discuss key issues. ISCAST must provide opportunities for science and theology students to discuss and debate key topics of mutual interest so that, at the very least, they will be aware of the difficulties and have some comprehension of their nature.

ISCAST must model how divergent opinions should be handled. It must help Christians to understand the perspective of those in the sciences, and help those in the sciences to understand the concerns of those in the churches. It must seek to reach out in constructive dialogue to those with whom many of us would strongly disagree (e.g. Young Earth

Creationists). It must create opportunities for those in separate fields of study to come together to discuss common (and even divergent) concerns.

2. Publications and Conferences

As a group seeking to have a profile within and impact upon the academic community it is imperative that ISCAST actively pursue publications and conferences. The COSAC series and the e-journal have been star performers in the past. But these must be reviewed continually and infused with new ideas and directions if they are to continue to fill these roles.

ISCAST should also consider whether it can develop or support other conferences, workshops and public lectures to supplement its existing program. Are there other forms of publication ISCAST might support? Could ISCAST partner with one of the academic or religious presses to support a science and faith monograph series? Should it seek to produce a book of published papers coming out of the COSAC conferences? In what ways can it encourage its members to write more on science and faith topics and promote these works?

3. Growing the science–religion dialogue community

Any organisation that is not constantly renewing itself and that is not growing, has either stagnated or is dying. A key strategy for ISCAST in addressing the major issues it has identified is not only to grow the organisation but to grow the science–religion field. It must work intentionally to recruit students and younger academics as well as those coming from fields with which its members may not have traditionally engaged.

It must encourage theologians and clergy with an interest in the natural sciences to write, teach and preach on these topics. The often-discussed vision of a research facility linked to an academic institution could well play a significant role in this area. By whatever means it ultimately employs, ISCAST must encourage and equip scientists with a commitment to Christ to talk about how their faith impacts upon their professional life and vice versa. An important aspect of growing the dialogue community will certainly involve increased links and cooperation with other organisations with an interest in the science and religion dialogue.

Recently also, ISCAST changed its focus from necessarily establishing Chapters in each State and Territory, to supporting the science–religion dialogue and the various entities that promote it wherever that occurs. This shift is significant, seeking to reduce competition for expertise, funds and time as the dialogue develops around the country.

4. Education

One of the things ISCAST can offer is educational resources for both the general public and the Christian community. Schools and congregations are in need of high quality resources for classrooms, small groups, worship, preaching etc. Having identified a lack of scientific literacy (along with a lack of understanding of the science–religion interface) as one of the major challenges facing the dialogue in the years to come we must address ways in which we can better educate those in various contexts with whom we have contact. The 2012 book *God and Science in Classroom and Pulpit* by ISCAST fellows Graham Buxton, Chris Mulherin and Mark Worthing (Morning Star Press) makes the case for this need in both congregation and school and outlines some of the challenges involved. One of the key strategies for each cluster area must be the development of educational resources geared to

specific audiences (such as primary school, senior secondary, undergraduate, graduate, congregational members, the academic community, etc.) to raise awareness and produce the general knowledge needed to engage the topic in a healthy and productive way.

One point that falls under the area of education is definition of terms. Many times key words and concepts are used loosely or even very differently by different groups or individuals. For instance, a recent ISCAST sponsored study found that there is much diversity and lack of clarity both between Christians and atheists, as well as within these groups, of what is meant by the word 'faith.' Specific terms such as 'global warming,' 'creation,' 'evolution,' 'theory' and 'verification' can often be even more fraught with built-in diversity of meanings as employed by different groups and within different contexts. Clearly defining what we mean by specific concepts, and encouraging others to do the same, is an important aspect of the educational role that ISCAST can play and which will have significant benefit for all levels of dialogue.

5. Recognising and affirming the diversity of approaches to the issues

A key strategy for addressing the six cluster areas of issues that have been identified must involve an ability to recognise and work with a diversity of approaches to these issues. It was apparent from the responses received in preparation for the State of Play workshop and in the discussions that occurred during the day itself, that there were few issues upon which the group was in agreement either concerning the science behind the issue, the nature of the issue, or the approach we should take to it. This is not to say there was not a significant amount of convergence and common cause that was also exhibited through the process. But it was clear that there are few areas in which ISCAST would easily be able to write a detailed and official position paper (indeed, it is a commitment by ISCAST that it does not develop 'positions' as a part of its determination to allow a theological and academic 'safe space' for the dialogue). An important strategy should be to turn this diversity into a strength, to allow the variety of views to enrich the dialogue and to sharpen everyone's thinking.

ISCAST fellow Richard Gijsbers has written a reflection ("Christian Voices in the Environmental Debate", unpublished, September 2015) on the diversity of legitimate approaches that can be taken to the key issues that have been identified. He identifies four key voices that need to be heard: the prophetic voice calling for decisive action), the priestly voice providing the pastoral and intercessory function, the kingly or executive voice providing good management and administration to bring about good outcomes, and the voice of wisdom, providing the distinctively Christian perspective weighing of sin and grace to the complexity of the situation. Gijsbers argues that all four voices are needed and should be enabled and listened to. He goes on to argue that it is in the collection of voices that the truth will emerge eventually. Gijsbers reminds us that the way an issue is argued and the things that are argued is not only dictated by the Christian voice being used but by the context and the profession of the people doing the arguing. Public servants, politicians, academics, lobbyists, local people directly affected will all use a different voice in stating their case.

6. Act intentionally, not opportunistically

Too often ISCAST has organised, say, a conference theme around a speaker who happened to be passing through, or responded to an issue well after the heat had passed from it.

ISCAST needs to look at the breadth of its challenge, the scope of its strengths and resources and work out an intentional strategy to develop and broaden the dialogue. Acting

in the moment, reacting to circumstances without a clearly defined understanding of what it wants to achieve and where it wants to go means that ISCAST will be reactive and will not be able to build up its resources and use them intelligently.

The ISCAST agenda must be clearly understood so that its members know where it is going and what it is trying to achieve. In so doing they can support it with confidence and intent.

This calls for leadership and clear governance, and an ability to pass on the baton to the next generation (which, in turn implies that there will be a 'next generation' to pass the baton on to).

Six core values for engagement with these dialogue areas

As an organisation ISCAST has identified a number of core values that indicate its nature and mission. It needs to act intentionally and proactively to promote these. The six core values ISCAST have committed to are:

1. Christian commitment

We affirm the Gospel of Jesus Christ as expressed in the Bible and outlined in the Nicene Creed as central to our faith.

2. Scientific commitment

We are committed to rigorous scientific and technological research; particularly the insight this gives to our understanding of our creator and the benefits it brings to our planet and humanity.

3. Moral accountability

We are committed to understanding and working within the limits of our knowledge and seek to minimise the adverse impacts of the application of our science and technology.

4. Biblical interpretation

We seek to interpret the Bible within the mainstream evangelical tradition while respecting the stance of others.

5. Theological and academic safe space

We will encourage people to be free to explore new areas of discovery without fear of unfair or inappropriate criticism or theological ostracism.

6. Mode of debate

We seek to speak the truth in love and firm humility while being open to new ways of thinking and without rejecting the insights of the past.

Conclusion

The challenge is for those responsible for each ISCAST activity or project (COSAC, issues of the e-journal, public lectures, books, mini-conferences, research projects, etc.) to identify at least one key strategic area of focus and at least one key strategy for engagement and at least one core value that will guide the planning and anticipated outcomes of the event or activity. Every proposal that comes before the leadership should be challenged to address the following questions:

What key topic or cluster of topics will this initiative or activity address?

Which key strategy or strategies will this initiative or activity employ?

Which core value or values will be exhibited in this initiative or activity?

These questions should not only be asked at planning and approval stages of projects, but should be revisited by the organisers and key participants or stakeholders upon completion of the project or event to determine to what extent they have been effective in addressing these and to make recommendations about how improve delivery of these objectives in future projects.

The suggestions outlined in this paper which have arisen from the State of Play initiative in no way suggests ISCAST should change its focus or values. They are instead aimed at strengthening these through the clear identification of core topic clusters that are likely to dominate discussions over the next five to ten years and the identification of clear strategies that will assist the organisation in addressing these topics or issues in a manner consistent with its stated core values.

Appendix 4 ISCAST Board, Adelaide, 25/2/2017: Summary of discussion

1. What are the distinctive characteristics of ISCAST?

Breadth of scientific disciplines represented.

The broad range of expertise and experience within the disciplines.

Attracted theologians and philosophers and others to our number (i.e. not just natural sciences).

There is a sense of community and mutual support with openness and safety.

Our Mission, Vision and Core Values.

Given this, what could we do?

Some things include:

Operate as a think-tank (inter-disciplinary and independent). Can we find issues to work on and contribute to profitably?

Addressing critical science–religion issues and areas of apparent conflict.

Encourage members to become scientific tent-makers: representing their faith at their work place.

Act as a resource for other organisations and events:

WSF

Churches

Strategic relationships (e.g. CPX, etc)

Prepare and provide resources

Website

Talks

Forums

Publications

2. What will a highly successful ISCAST look like in each major city in ten years' time?

Regular (Monthly? Bi-monthly? Whatever-ly?) meetings

Formal lectures to present members' scholarship and provide a forum to present.

Fires in the Belly to encourage members to raise issues they are facing and start the ball rolling on topics for the wider community to explore.

Special interest groups to explore specific topics and take advantage of ISCAST's cross-disciplinary characteristic.

Issues emerging from within the chapters and presented to wider forums for consideration (COSAC?).

For this we need to:

Have committed local leaders

Bring on new generations and succession in leadership

Recruit younger scientists

Continual churn of ideas and openness to hear from members and pass issues on to the wider membership

3. What will a highly successful ISCAST look like in the media in three years' time?

Active presence through the website, Facebook, Twitter et cetera as they evolve. Each have their characteristics that need to be capitalised on.

Requires a continual supply of contributions from

Articles

Blog comments

Facebook contributions

Engagement of ideas

News media:

The Melbourne Anglican and other church newspapers—regular contributions.

Secular media—providing content of interest

“Google-able” content: Youtube clips, VIMEO

e.g. TED-type talks (can we get members to home presentations to get the quality required?)

Q&A-style forums

The features of our media presence should include:

Conversations and not unnecessary controversies

A Kenotic presence (allowing others (e.g. CPX) to flourish and supporting them as a resource—this raises the issue of acknowledgement of our involvement).

Strategic alliances—allowing others to play to their strengths and us to ours.

Can we demonstrate 1 Peter 3:15,16 in such forums and still attract an audience?

4. What will our sources of income be over the next few years?

Membership fees: a demonstration of people belonging to ISCAST.

Donations:

ED support

General/operational support

If people believe in us, they will give if we give them something to give to!

Trusts

Project funding

Investments

Events

5. Whither ISCASTian apologetics?

Although Tony Morgan's death has meant that we haven't any "obligation" to make apologetics a priority, we don't believe that dropping apologetics is in keeping with where we want to go.

Our opportunities include:

Tent-making, representing Christ in the workplace and having more than just a personal morality to offer the issues we face. ISCAST should work to empower and resource our members in their work.

Catalysing apologetics in Australia: e.g. an Australia-wide apologetics conference, and initiating an apologetics network.

To do this we will need to be clear about what we mean apologetics to be and we also need to emphasise that we are committed to the 1 Peter 3:15,16 principles of dialogue and not confrontation.

6. What shall we do about evolution?

Evolution and Young Earth Creationism is an issue that will not go away. Particularly for non-scientists, it is a crucial issue and a stumbling block for many.

Generally, ISCAST is non-aligned on disputes within science and religion. We are a forum for debate and dialogue not a place to develop "answers" to issues that each of our sciences are raising. These issues are often extremely complex and divisive and premature judgements by Christians in the past have taught us to be cautious.

But, is this enough for an issue such as human origins? It goes to the heart of how we interpret Scripture and understand science, *and* on how such a dialogue should be conducted.

We have resource material such as John Thompson's lecture which we have published and others⁵² are thinking hard on this subject.

It was noted in passing that this was an issue too for other Christian bodies. Thus, The Melbourne Anglican (TMA) had made a feature of evolution in its last edition and had received significant correspondence on the matter. It was noted in passing that both the TMA and ISCAST had benefitted from the exposure and, as such, this was not an entirely bad thing for us or for our mission.

Richard Gijsbers

⁵² E.g., https://en.wikipedia.org/wiki/Peter_Enns

Appendix 5 ISCAST (Vic) Activities

A: ISCAST (VIC) ANNUAL LECTURES

“God and SETI (The Search for Extra-Terrestrial Intelligence)”

Speaker: Rev. Dr Mark Worthing (Coordinator of CTNS Science and Religion Course Programme at the Centre for Theology, Science and Culture; lecturer in Systematic Theology at Luther Seminary, Adelaide).

Held at St Jude’s Anglican Church Hall on October 11, 2000.

“Evolution & Creation: Why all the fuss?”

Speaker: Associate Professor David Young (Melbourne University)

The 2002 ISCAST (Vic) Annual Lecture: “Science with Attitude: the Spiritual Context for Good Science”

Speaker: Frank Stootman (lecturer for the School of Engineering and Industrial Design, Physics and Astronomy Group, University of Western Sydney; Member of the Australian Institute of Physics; Director of SETI Australia; Director of the L’Abri Fellowship, Australia).

Held at St Columb’s Anglican Church Hall, Hawthorn at 8.00pm on Saturday, October 12, 2002.

2003 ISCAST(Vic) Annual Lecture: “The Bionic Ear: Passion in Science”

Speaker: Graeme Clark AO (Foundation Professor of the Department of Otolaryngology at the University of Melbourne and The Bionic Ear Institute Leader in research that resulted in the development of the ‘bionic ear’; key player in the development of the Automatic Brainwave Audiometer, Combionic Aid and Tickle Talker™; Fellow of the Australian Academy of Science)

Held at Highfield Road Uniting Church, Canterbury on Saturday, September 27, 2003.

2004 ISCAST (Vic) Annual Lecture: “Bio-theology: Principles of life”

Speaker: Brian Edgar (Immediate past Chair of ISCAST(Vic); Member of the Federal Government’s Gene Technology Committee; Chair of the Evangelical Alliance Commission on Theology).

Held at Highfield Road Uniting Church, Canterbury on Saturday, October 23, 2004.

2005 ISCAST (Vic) Annual Lecture: “Curved Space and Compassion”

Speaker: George Ellis

Held at the Basement Theatre in the Asia Centre of the University of Melbourne. The event was fully booked (486 people) and over 600 attended. The Murdoch Lecture Theatre was booked for overflow with a video link set up. The event was jointly sponsored by the Australian Institute of Physics and held on July 22, 2005.

2006 ISCAST (Vic) Annual Lecture: “Intelligent Design & Science: Can we use the tools of science to explore the realm of faith?”

Speaker: Dr Darrel Falk (Professor of Biology at Point Loma Nazarene University, San Diego CA, USA).

Held at Ashburton Baptist Church on June 3, 2006

2007 ISCAST (Vic) Annual Lecture: "The Bankruptcy of Scientific Atheism"

Speaker: Alister McGrath

Held at Glen Waverley Anglican Church on Thursday September 27, 2007.

2008 ISCAST (Vic) Annual Lecture: "Random Designer: Randomness, Purpose, God, Evolution – Can they go together?"

Speaker: Professor Richard Colling (Olivet Nazarene University, Bourbonnais, Illinois, USA).

Held at Glen Waverley Anglican Church on Tuesday, July 22, 2008.

2009 ISCAST (Vic) Annual Lecture:

Speaker: Professor Simon Conway Morris

Held at Glen Waverley Anglican Church on Thursday, September 17, 2009.

2010 ISCAST (Vic) Annual Lecture: "Through a Glass Darkly: Coping with Ethical and Theological Uncertainty"

Speaker: Professor Gareth Jones (Director of the Bioethics Centre, University of Otago, New Zealand)

Held at Queen's College, Melbourne on Friday, October 29, 2010.

2011 ISCAST (Vic) Annual Lecture: "Did my neurones make me do it?"

Speaker: Professor Nancey Murphy

2012: (no information available)

2013: Rev. Professor David Wilkinson

2014: "Putting Science in its Place: Deepening the Public Conversation about Climate Change"

Speaker: Dr Ian Barns

2015:

Speaker: Professor Bob White FRS

2015: [Inaugural Allan Day Lecture]

Speaker: Professor Tom McLeish FRS

2016:

Speaker: Dr Graeme Finlay

2016: "Faith: What's in a Word?" – Panel Discussion of Faith Project & Survey

This panel discussion was in place of the second Allan Day Lecture.

James Garth (Fellow, ISCAST: Christians in Science & Technology)

Meredith Doig (President, Rationalist Society of Australia)

Robert Martin (Director, City Bible Forum Melbourne)

Chaired by Michael Clarke (Head of School of Life Sciences, Professor of Zoology, La Trobe University)

2017: Allan Day Lecture

Speaker: Professor Peter Harrison

Held at Ridley College.

B: OTHER ISCAST (VIC) MEETINGS, INTENSIVES AND SEMINARS ETC.

“Science, Life & Christian Belief” by Malcolm A. Jeeves & R J Berry 1998 (led by Ian Hore-Lacy and Richard Gijsbers).

2001 Meetings:

“What is Life?” May 19 with Alistair Richardson, Charles Sherlock and Bruce Langtry.

“Galileo – Hero or Heretic?”, “Is the Cosmos all there is?”, “Dare a scientist believe in design?” with speaker Owen Gingerich, July 2001.

AGM and Fire in the Belly: Denise Cooper-Clarke and Andrew Sloane

2002:

‘Thinkling’ on “Appropriate Technology”: May, 2002 with Richard Gijsbers, Don Stewart and Ross Macmillan.

“Lead Learners” by Richard Prideaux with dinner to farewell Andrew Sloane. June 16, 2002.

Seminar/‘Thinkling’ on Abuse and Forgiveness.

Speakers: Assoc Prof David Clarke (psychiatrist), Ms Roselie Freeman (Drug and Alcohol Psychotherapist) and Dr Alan Gijsbers (Drug and Alcohol Physician).

Seminar on Stem Cells: September 21, 2002. The ISCAST Vic Annual Report states, “Stem Cells Seminar,....Assoc. Prof Martin Pera, Dr. David Haylock and Dr Brian Edgar made presentations, and the seminar was chaired by Dr Denise Cooper-Clarke”.

Vic AGM and Fire in the Belly: November 2002 Jonathan Clarke: “Christians on Mars”, and Allan Day: “Theological and Hermeneutic Implications of Contemporary Biology”

‘Thinkling’ on Miracles: February, 2003.

‘Thinkling’ on Mind/Brain: April, 2003 with Alan Gijsbers

Our Common Future: book review (2003/2004)

There were four discussions: (i) based on chapters one to four (led by Richard Prideaux); (ii) based on chapters five to seven (led by Jonathan Clarke and Bruce Craven); (iii) based on chapters eight to eleven (led by Alan Gijsbers and David Clarke); and (iv) based on chapters twelve and thirteen.

ISCAST Seminar and Hypothetical on Miracles: Speakers: Colin Kruse, Denise Cooper-Clarke, Tom Spurling, Bruce Langtry and Merrill Kitchen. Held at Highfield Rd Uniting Church Canterbury on August 17, 2003 from 2–5pm.

Fire in the Belly: “Wisdom to Count the Clouds” by Mick Pope and “Insights from Imaging the Brain” by Michael Wong. Held on July 17, 2004.

Fire in the Belly: “God and the Synchrotron” by Mark Boland and Jennifer Laing on space tourism. Held on November 27, 2004

“God and Natural Disasters” thinkling by Deborah Stories and Charles Sherlock. Held on Saturday, February 26, 2005.

“Science & Suffering”: “Cold Comfort: Christian Responses to Human Suffering” panel. Held on May 21, 2005.

“God and the Weather” by Mick Pope on June 18 (YEAR??).

Fire in the Belly: Brian Edgar on “Science & Beauty”, Alan Gijssbers on “Intelligent Design: Motivation, Will and Desire”. Held on October 15 or 16, 2005.

Fire in the Belly: “Chaos Theory” by Bruce Craven. Held on February 18, 2006.

Fire in the Belly: Ian Harper on “God, Science & Economics” and “God & Mammon”. Held on February 24, 2007.

Fire in the Belly: Jack Holland and Murray Seiffert. Held in 2007.

Fire in the Belly: “Speaking Christianly in Society” by Alan Gijssbers. Held on July 28, 2007.

Fire in the Belly: “Climate Change – What do we do now?” by Robert Joynt and Greg Jacobs. Held on October 27, 2007.

Fire in the Belly: Richard Gijssbers on “Forests and Bushfires”. Held on July 25, 2009.

Fire in the Belly: Andrew Wood and Murray Hogg. Held on March 19, 2011.

VIC CHAPTER INTENSIVES

Teachers’ Workshop 1998: “Science & Christian Faith: Partners Or Enemies?”

This was a Workshop for Teachers and Chaplains held at Ridley College on October 17, 1998. “An initiative of ISCAST(Vic), in conjunction with the Scripture Union, the Teachers’ Christian Fellowship, the Council for Christian Education in Schools, and the Victorian Association of Religious Education”.

2002 Forum on Stem Cells and Cloning.

Main speaker: Assoc Prof Martin Pera with Denise Cooper-Clarke in the chair.

Victorian Chapter Non-Residential Weekend Intensives:

2010: “Who Says? The Used and Misuse of the Bible in an Age of Science & Technology”

Held at Queen’s College, Melbourne over the weekend from October 29–31, 2010 with keynote speaker Gareth Jones. With attendance of around 30. Professor Gareth Jones presented “Through a glass darkly: coping with ethical and theological uncertainty”.

“Diversity and Uncertainty: a Productive Interface between Science and Christianity?”

Brian Edgar “On the Fixity and Fluidity of Species”; James Garth “Cosmology, Apologetics and the Will to Believe”; Richard Gijssbers “The Challenge of Different Christian Approaches to the Environment Debate”.; John Modra “Scarcity or Abundance?”; Frank O’Dea “How to Read the Bible in the 21st Century”; John Pilbrow “Reading Scripture in the Light of Modern Science”; Michael Smith “Spherical Cows and the Search for Truth: Modelling in Science and Scripture”; Geoffrey Nutting “Can We Really Listen Both to the Bible and to our fellow Christians on Contested Issues of Sexual Behaviour and Relationships?”; Chris Mulherin

“Thinking about Slaves, Women and Homosexuals: a Redemptive-Movement Hermeneutics and the Evangelical Webb”; Denise Cooper Clark “Do we need to rethink the Pill?”; Helen Joynt “Miracles and Magic”; Alan Gijsbers “Biblical Anthropology and its Impact on Addiction Care”; 2012 “Divine Disclosure in an Age of Science & Technology: How can God be known in the modern age? (Keynote address and summing up by Mark Worthing). Attendance of approximately 50.

ISCAST Symposium: July 4–6, 2014, at East Camberwell Baptist Church, Highfield Road, East Camberwell.

2014

“Putting Science in its Place: The Role of Science in Addressing Today’s Environmental Crisis”. The keynote address was presented by Dr Ian Barns entitled “Putting Science in Its Place: Deepening the Public Conversation about Climate Change”. Attendance of approximately 40.

Other Presentations: Robert Brennan: “Dominion Over Nature – Is traditional Christianity Really the Eco-Villain?”; Chris Dalton: “What’s theology got to do with Coal Seam Gas?”; Greg Jacobs: “Catholic Social Teaching and Natural Resources”; Mick Pope: “The Earth is Full of Your Creatures: a Theology of Wilderness”; Ian Barns Keynote lecture: “Neither Prometheus nor Gaia: Caring for Creation and Earth-Systems Science”; Stephen Ames: “The Case of Nick Minchin”; George Emeleus: “The Prophets, the Kingdom of God, and Global Warming”; John Pilbrow: “Sir John Houghton – Christian & Leading Climate Change Scientist”; Mark Manolopoulos: “How Radical Philosophy, Ethics, and Politics Put Science and Religion ‘in their Place’ and their Roles in Overcoming the Ecological Crisis”; Denise Cooper-Clark: “Why the Moral Bioenhancement Project is Neither Moral nor Enhancement”; Andrew Bennett: “Who is my Neighbour? Land Use, Landscape Ecology and Christian Faith”; Bob Robinson: “The Wisdom of Limits; The Folly of Excess: Richard Bauckham and the Biblical Genre of Wisdom as a Methodological Resource in the Face of Threatened Ecological Catastrophe”; Sally Shaw: “Creative Arts: Communicating at the Intersection of Science and Theology”; Byron Smith: “Solidarity and Stewardship”; Richard Gijsbers: “Thirty Years On: Reflections on the Reforestation Effort in the Nepal Himalaya and the Role of Science and the Role of Religion”. Sidney Green: “Evangelical Fundamentalists and the Science of Climate Change”; Murray Hogg: “Sustainable Theology for a Sustainable Future”; Ian Barns “A Time for Jonah or Noah? Christian Political Economy in the Anthropocene”.

2015 State of Play Conference

Excursions:

Anglesea/Torquay Geology excursion led by Jonathan Clarke 2004.

Astronomy Excursion to Ballarat Observatory on April 29 and 30, 2005, led by Michael Drinkwater.

Silviculture (Forest) Excursion held on Saturday April 1, 2006, at Toolangi Forest Discovery Centre, Silvia Creek, Narbethong. Topic: “Forest management: What and for whom?” by Richard Gijsbers.

Synchrotron Excursion 2007 led by Mark Boland.

Hall’s Gap, Grampians 2011 with Margot Sietsma.

Appendix 6 ISCAST (Sydney) Activities

Some Sydney ISCAST Lectures before 2002

August 31, 1993: Dr John Polkinghorne (ScD, FRS, President of Queens' College Cambridge) gave an ISCAST Lecture at New College, UNSW on "Religion and Current Science".

May 14, 15 and 16, 1995: Prof John A Bryant (PhD (Cantab), FIBiol, FRSA, from the University of Exeter) gave three Sydney ISCAST Lectures at: St Barnabas Church Broadway (14); New College, UNSW (15) and Morling Baptist College (16) on genetic engineering; e.g., "Swinging New Genes: A Christian Looks at Genetic Engineering".

April 2, 1996 at 7.30 pm: Sir John Houghton (Former Head of the British Meteorological Office and Co-chairman of the IPCC Working Group on climate change) gave an ISCAST lecture on "Searching for God" at New College, UNSW.

July 8, 1996 at 7.30 pm: Dr Kirsten Birkett (Director of the Matthias Centre for the Study of Modern Beliefs), led a discussion on "Religion and the Decline of Magic: the Scientific Revolution in Context", in the School of Physics Common Room (later their library), UNSW.

February 14, 1997 at 7.30 pm: Prof Henry F. Schaefer III gave an ISCAST lecture on "Stephen Hawking, the Big Bang and God", in the Common Room of New College (UNSW). Prof Schaefer is a very eminent scientist and is presently the director of the Centre for Computational Quantum Chemistry at the University of Georgia.

Sydney ISCAST 2002–2003

In 2002 - 2003, there were five (three in 2002 and two in 2003) at 7.30pm ISCAST meetings led by Sydney ISCAST members, held in the School of Physics Library, UNSW, with discussions based on different chapters from the book: *Science, Life and Christian Belief* by Malcolm A Jeeves & R. J. (Sam) Berry, 1998.

In addition, in 2003 ISCAST (Sydney) organised COSAC 2003, in conjunction with Dr Lyndon Rogers, Head of Science, at Avondale College, Cooranbong, near Newcastle (July 18–20, 2003), and entitled "God, Science, and Divine Action: God's Interaction with His Creation".

Sydney ISCAST Lectures 2004–2017

March 29, 2004: Rev. Dr John Dickson (Honorary Associate, Department of Ancient History, Macquarie University, Sydney) gave an ISCAST-CASE lecture entitled "The Genesis of Everything: The Thought-World of the Bible's Account of Creation" at New College, UNSW.

May 24, 2004: Rev. Michael Hill (Vice-Principal of Moore Theological College) gave an ISCAST lecture on "Developing a Biblical Ethic" in the School of Physics at UNSW.

August 2, 2004: Rev. Dr Bill Dumbrell gave an ISCAST lecture on "The Garden of Genesis 2 and the Future" in the School of Physics at UNSW. Bill Dumbrell was previously a lecturer at Moore College.

June 20, 2005: Dr Alec Wood gave a discussion on "Resurrection: Theological and Scientific Assessments" in the Physics Library at UNSW.

July 18, 2005: Prof. George Ellis, a Templeton Prize Laureate, gave an ISCAST case lecture on science and religion at New College, UNSW, entitled: "The present state of the science and religion debate: a personal view".

August 29, 2005: Emeritus Professor Peter Barry gave a review of both "Coming to Peace with Science" by Prof. D.R. Falk and "Random Designer" by Prof Rick Collings in the Physics Library, UNSW.

March 13, 2006: Dr Barry Newman gave an ISCAST Lecture on "Studies on the Soul in the Bible" in Physics Library, UNSW.

May 1, 2006: A/Prof Robert Stening gave an ISCAST Lecture on "Evolution and Providence" in the Physics Library, UNSW.

June 14 & 15, 2006: Dr Darrel R. Falk, Professor of Biology at Point Loma Nazarene University, San Diego. Visiting Lecture gave 2 ISCAST-CASE Lectures in Sydney, Author of "Coming to Peace with Science: Bridging the Worlds Between Faith and Biology" IVP books:

"Intelligent Design: Can We Use the Tools of Science to Explore the Realm of Faith?"

14th June, ISCAST-CASE Lecture at New College, UNSW.

"On Bridge-Building: Coming to Peace with Biology in an Age of Intelligent Design and Young Earth Creationism" 15th June; ISCAST-CASE lecture at Christ Church, St Ives.

October 2006: Rt Rev Robert Forsyth, "Then a miracle occurs": The Blessing and Limitations of Science. ISCAST-CASE lecture at New College, UNSW.

May 14, 2007: Dr Greg Clarke, Director of CASE, "Where Richard Dawkins is not a Scientist", School of Physics, UNSW.

June 25, 2007, 7.30 pm: Emeritus Professor Martinez Hewlett & Professor Ted Peters (USA) "Darwinism, Creationism, Intelligent Design, and Theistic Evolution: A Comparison" at New College, UNSW.

August 27, 2007, 7.30 pm: Dr. Noel Hickson, "Do we have a Soul After All? A Review of Nancey Murphy's book: *Bodies and Souls or Spirited Bodies*, in the School of Physics, UNSW.

October 26, 2007, 6 & 7.30 pm: Annual ISCAST (NSW) dinner and lecture at New College. Associate Professor Andrew Cole gave a lecture entitled "Care when there is no Cure: A Christian Approach to Disability and Dying".

March 10, 2008: Dr Alec Wood, Senior Visiting Fellow in School of BABS, UNSW, comments on "A Scientific Theology: 1 Nature" by Alister McGrath. ISCAST lecture in School of Physics, UNSW.

2008: Prof Richard (Rick) Colling, Department of Biological Sciences, Olivet Nazarene University, Chicago and author of *Random Designer: Created from Chaos to Connect with the Creator*, Bourbonnais Press.

July 2008 ISCAST-CASE Lecture at Holy Trinity Church Hall, Kingsford.

July 2008 ISCAST-CASE Lecture at Trinity Chapel, Robert Menzies College, Macquarie University.

October 20, 2008: Dr Alan Gijsbers gave a lecture entitled "Neuroscience, Addiction and the Gospel". An ISCAST-CASE lecture at New College, UNSW.

Monday March 30, 2009: Dr Peter Neal (a Research Associate with the Cooperative Research Centre for Greenhouse Gas, UNSW) spoke on “Carbon, Climate, and Christians” in the School of Physics, UNSW.

Friday May 29, 2009, 7.30pm: Professor Gareth Jones (Professor of Anatomy & Structural Biology, University of Otago NZ) gave the ISCAST-CASE lecture entitled “Manufacturing Humans: The Borderlands between Human and Divine Control” at New College, UNSW.

Monday 20 July 2009, 7.30pm: Dr Lewis Jones, “The Role and Limit of Science in Moral Reasoning”, in School of Physics, UNSW.

Thursday 17 Sep, 7.30pm: Dr Graeme Finlay (The University of Auckland) “Genetics, Evolution and Christian Faith”, ISCAST-CASE lecture at New College, UNSW.

Monday 21 Sep 2009, 7.30pm: Professor Simon Conway Morris (University of Cambridge) “Darwin's Compass: How Evolution Discovers the Song of Creation” – ISCAST-CEN-CPX lecture, Wesley Centre, 220 Pitt St, Sydney.

April 19 2010: Emeritus Professor Peter Barry gave a lecture at the School of Physics, UNSW entitled “An Outline of the *Test of Faith Course on Science and Christianity*, produced by the Faraday Institute in the UK”.

May 24 2010: Peter Eyland, “Syriac Christianity and Greek Science” ISCAST lecture in the School of Physics, UNSW.

July 5 2010: Dr Larissa Aldridge, “God's Deputy: Divine Law and the Laws of Nature” ISCAST lecture in the School of Physics, UNSW.

August 2010: Dr Ian McFarlane, “Deep Ancestry: The Journey of Man” – ISCAST CASE at New College.

Oct 2010: Associate Professor David Cohen, “The Deep Time Issue: A Christian Geologist's Perspective”, ISCAST-CASE lecture at New College.

May 2011: Peter Eyland, “Dating New Testament Documents”, School of Physics, UNSW.

July, 2011: Emeritus Professor Michael Knight, “How We Became Human from the Beginning” at New College.

Thursday, May 31, 2012: Professor Andrew Ruys (University of Sydney, Director of Biomedical Engineering (Education)), gave an ISCAST-CASE lecture at New College, UNSW, on “Biomedical Engineering and Huxley's Brave New World”.

Thursday July 19, 2012: An ISCAST Science–Faith Panel Discussion meeting was held at New College on: “The Questions Students Ask: Science and Faith in the Classroom”, chaired by Dr Barry Newman, with panel of three teachers (Vaughan Brown (Shore); David Ruys (St Andrew's School.); Jim Wright (Covenant Christian School)).

Monday September 17, 2012: Professor Graeme Clark AC (University of Melbourne), developer of the Bionic Ear, gave an ISCAST-CASE lecture.: “Serving as a Scientist in God's World”. (Audio file & PDF of PowerPoints available).

Monday March 11, 2013: at New College Village, UNSW – Rev. Dr Andrew Shead (BTh (ACT), BSc (Med, Hon1; USyd), MTh (ACT), PhD (Cantab) of MTC) gave an ISCAST-CASE lecture entitled “In What Ways is the Bible the Word of God?”

Tuesday July 23, 2013: at New College, UNSW - Professor David Wilkinson gave an ISCAST-CASE lecture on “Faith, Hope and Quarks: The Search for God in Contemporary Cosmology” (Set of DVDs is available).

Tuesday October 22, 2013: in the School of Physics at UNSW, Associate Professor Frank Stootman, an astrophysicist at UWS, gave a lecture on “Why the Idea of God is not Superseded by Modern Science”.

Tuesday April 8, 2014: Byron Smith (BA (Hons), BD (Hons), PhD Candidate (finalizing his thesis)) gave an ISCAST-CASE lecture on “Climate Change and what we should do about it: a Christian Perspective”.

Tuesday May 15, 2014: Dr Karin Sowada (BA (Hons 1), PhD (Syd)) delivered an ISCAST-CASE lecture at New College, UNSW, entitled “The Impact of Modern Developments of Archaeology on the Bible Record”.

Thursday July 24: Dr Jonathan (Jon) Clark (BSc (Hons), PhD) gave an ISCAST-CASE lecture entitled “God and Natural Disasters”.

Thursday November 6, 2014: Rev. Dr Chris Mulherin (BEng, BA, MSc, BD) gave the final 2014 ISCAST-CASE lecture entitled “Christianity and Science: a Vital 21st Century Conversation”.

ISCAST (Sydney) also supported the 2014 September New College Lectures Tuesday September 9, Wednesday 10 and Thursday 11: Professor Peter Harrison (History and Philosophy of Science, University of Queensland) gave the three 2014 New College Lectures organized by New College.⁵³

Monday April 20, 2015: Dr Patricia Weerakoon (MBBS, MS, MHPed) with her theologian son Kamal, gave an ISCAST-CASE lecture at New College, UNSW, entitled “Gender Identity and Sexuality”.

Thursday June 4, 2015: Dr Andrew Brown (BA, BMin/BTh (QBCM), BA (Hons; UQ) PhD (UQ), Old Testament Lecturer at the Melbourne School of Theology) gave an ISCAST-CASE lecture at New College, UNSW, on: “Athens and Jerusalem: Science—and-Religion Strategies among Interpreters of Genesis 1 through the Centuries”.

Thursday September 17, 2015: Professor Tom McLeish (PhD, FRS, Professor of Physics and Pro-Vice-Chancellor for Research at Durham University, author of *Faith and Wisdom in Science* (CUP)) gave an ISCAST-CASE lecture at New College, UNSW on “Faith in Science? On the Relationship between Faith, Wisdom and Science”.

Tuesday July 5 & Thursday July 7, 2016: Dr Graeme Finlay (BSc, PhD, Dept. Mol. Med. & Path., University Auckland, author of *Human Evolution: Genes, Genealogies and Phylogenies* (Oxford University Press)), gave two lectures in Sydney. The first was entitled “Unequivocal Genetic Evidence for Human Evolution and Implications for Christian Faith” (New Coll. UNSW) and the second was entitled “Genetics, Evolution, Cancer, Suffering and God” (Robert Menzies College, Macquarie Univ.). Audios, videos and PDFS available.

⁵³ <http://www.newcollege.unsw.edu.au/audios/audio-archives>

Tuesday September 27, 2016: Dr Chris Forbes (BA, PhD; Dept Ancient History, Macquarie University) delivered a lecture entitled “The Laws of Nature: the Ancient Origins of a Modern Scientific Puzzle, and its Relationship to Christianity”, (New College, UNSW).

Wednesday May 23, 2017: Associate Professor Alan Gijsbers (MBBS, FRACP, FChAM, University of Melbourne) gave a lecture entitled “Is the brain just a computer made of flesh? What does neuroscience say about who I am?” at New College, UNSW.

Appendix 7 COSAC Summary Table

Year	Site	Main Speaker	Theme	Coordinator	Comment
COSAC 1997	Moore College Sydney	Professor Robert J Russell Director of the Center for theology and the natural sciences	Science and Christianity Cosmology Christianity and the Age of the Earth Organic Evolution and Genesis Biblical and Scientific Description of Humanity Environmental Responsibility Biomedical Ethics	Robert Stening	Archbishop Donald Robinson came and gave the Sunday morning sermon on Hebrews 11:6. Other items lost in the pre-website archives of ISCAST.
COSAC 1999	Bible College Victoria	Sam and Caroline Berry	God, Genes and the Environment	Allan Day	
COSAC 2001	The Monastery, Urrbrae Adelaide	Prof Owen Gingerich, Professor of Astronomy and the History of Science, Harvard University	Are we alone? Is the cosmos all there is? Galileo: Hero or heretic? Dare a scientist believe in design?	Mark Worthing	Apart from brief abstracts there is little available of this valuable conference. (Bulletin 34)
COSAC 2003	Cooranbong Avondale	Mark Worthing and others	Divine Action	Robert Stening Peter Barry	Proceedings on ISCAST Website
COSAC 2005	Burgmann College Canberra	Professor G. F. R. Ellis	Cosmology and the Christian Faith: 100th Year of the Publication of Einstein's Paper on Relativity.	John White	Proceedings on Website

Year	Site	Main Speaker	Theme	Coordinator	Comment
COSAC 2007	Geelong	Alister McGrath	Reality – Developing a Scientific Theology	Brian Edgar and StACS	First COSAC facilitated by StACS. First conference chaplain – Rev Michael Flynn Handbook on website
COSAC 2009	Geelong	Simon Conway-Morris	Christianity and the Origin of Species: Darwin 150 years on.	Murray Hogg and StACS	Conference chaplain – Rev Merryll Kitchen Individual papers on website.
COSAC 2011	Launceston Tasmania	Nancey Murphy, Denis Alexander	Disenchantment: Faith and Science in a Secular World.	Brian Edgar and StACS	Chaplain Bishop John Harrower. Audios and some papers on the website
COSAC 2013	Tabor College Adelaide	David Wilkinson	Faith, Hope and Quarks: Scientific and Theological Perspectives on the Future.	Graeme Buxton GCRI and StACS	Chaplain: Graham Buxton. Non-residential Conference
COSAC 2015	Geelong	Bob White FRS	Creation in Crisis: Science, Theology and Action	Brian Edgar and StACS	Chaplain: