

**How Can We Know?
Co-creating Knowledge
in Perilous Times**

Program and Schedule

The Institute on Religion in an Age of Science

62nd Annual Conference, June 25–July 1, 2016

Star Island, New Hampshire

CONFERENCE STATEMENT

What does knowing and living reliably and humanely now require of us—as persons, communities, institutions and whole societies?

How do we know that these are perilous times? How do we know what is to be done? Does knowing evolve from imagining? How do religious, scientific and secular traditions differ? What are the biological foundations of morality? What might “know yourself” really mean? What have we been missing in the science/religion dialogue?

These are not abstract questions. Our fate—global, societal and personal—hangs on them. The reason, of course, is that what we commit to doing and becoming is largely a function of what we think we actually know.

Given the destructive culture wars of our time-ecological, economic, societal, political and personal—we simply cannot afford to *agree to disagree* on what is to be taken as reliably known. Rather, we need dialogues that foster personal and shared learning; we must explore afresh the nature and demands of reliable knowing.

Tensions between the ways of knowing that underlie the sciences and those of other historical, cultural and religious perspectives often inhibit working together for human and planetary well-being. Pointing to the rapid progress and obvious power of the natural sciences, many assume that only the scientific method fosters reliable ways of knowing. Many scientists, as well as others who emphasize the ambiguities of history and the co-creative power of persons and communities, disclaim such a contention and emphasize the need for a thorough-going self-critical awareness.

How Can We Know? Co-creating Knowledge in Perilous Times—the 2016 IRAS Summer Conference—has been designed to explore the above focal question in light of the emerging conditions of the early 21st Century.

The narrative arc of the week and the daily rhythms of the conference are being designed to enable participants to test and expand their own understandings of what it is to know more reliably and live more coherently. We will create an open and respectful atmosphere conducive to dialogue and shared learning among persons with diverse backgrounds.

Each of the main plenary sessions will be centered around a dialogue: first between two invited speakers and then among all participants. The conference will also include a few selected papers, several workshops and small collaborative groups which use a variety of creative formats.

The Narrative Arc of the Week: We will begin by looking at the complexity of the knowledge required to guide us to an ecologically humane and sustainable planetary civilization. In this light, we will explore and seek to move beyond the limitations of our present scientific, religious and secular traditions as we seek to meet the challenges of truly inclusive knowing and living.

Pat Bennett
Ruben Nelson
John Teske
Conference Codirectors

PRESIDENT'S WELCOME

In welcoming all of us to this conference on Star Island—a rocky, ancient anchoring spot, surrounded by what can be perilous seas and shoals—how can we know what will be offered to, and required of us?

There are clues in the history of this isle as we gather in community but in the context of perilous seas. “Perilous” finds its root of “peril – try, test, danger” in “experience”. Our experiences this week are anchored in lives which have gone before—Native Americans, 10th Century Vikings, 17th Century European explorers, and the 18th Century residents of Gosport Township. They knew these cold, deep Atlantic waters could yield an abundance of large, life-giving fish, to any who persisted in seeking, while working together, even in the midst of danger.

There are clues of what will be offered to and required of us in the evolution of this week’s conference, found in the recent history of John Teske’s and Pat Bennett’s work on world views and epistemology. The theme of an IRAS Conference often emerges on a journey from personal conversation, to ideas tested in other religion and science settings, to a formal proposal to the IRAS Council. The last part of the journey can test the vigor of the proposal’s champions, as volunteers responsible for helping to shape a conference that is inviting, challenging and deeply meaningful consider every nook and cranny of the proposal. What is offered to you, then, is a conference theme which is at once weathered and fresh. What is asked of you is to open to its life-giving nature, and to yourselves engage in those personal conversations from which IRAS’ future conference themes might emerge.

There are clues about what you are welcomed to receive and to give in the new design of this year’s conference. John, Pat, and Ruben have worked to create a week that offers us abundant and intentional opportunities for personal and small-group dialogue—a method to embody the theme of co-creating knowledge in perilous times. Dialogue is a radical act, one that unearths the root of a matter, allowing transformation. In his *Pedagogy of the Oppressed* (1970), in the chapter “Dialogics,” Brazilian educator and activist Paulo Freire (1921–97) expressed it this way (excerpts, paraphrased):

The essence of dialogue is the word, which includes reflection and action.... To speak a true word is to transform the world. Human existence cannot be silent. Once named, the world reappears to the namers as a problem and requires of them a new naming, and work. To say the true word is the right of everyone and so no one can say a true word alone. Dialogue, as an act of re-creating and co-creating the world, must take place in the context of a profound love for the world and for people, with listening humility and openness to the other – as we struggle to learn, together, more than we now know.

This week in which we gather may seem, to some, more perilous for the world than any conference week in recent memory. And so, may we welcome each other into the dialogue, work, embodied learning and play by which we are transformed. And may we experience faith and gratitude that we will leave this Island prepared to transform the world.

Barbara Whittaker-Johns
President of IRAS

CONTENTS

CONFERENCE STATEMENT Inside Front Cover
PRESIDENT’S WELCOME 1
THE STORY OF IRAS 2
PURPOSE OF IRAS 3
IRAS ON STAR ISLAND 4
GENERAL CONFERENCE INFORMATION 5
ARCHI PELAGOS: CONFERENCE YOUTH PROGRAM 7
IRAS MEMORIAL SCHOLARSHIP FUND 8
PROGRAM OVERVIEW: DAYS AND TIMES, ABSTRACTS, BIOSKETCHES 9
PEOPLE 25
READING LIST 26
IRAS FUND DONORS, 2015–2016 29
ACKNOWLEDGMENTS 31

THE STORY OF IRAS

In the late 1940s the American Academy of Arts and Sciences organized a Committee on Science and Values to address topics relating contemporary scientific knowledge to fundamental human concerns about life's morals and meanings. The Committee, which included astronomer Harlow Shapley, neurobiologist Hudson Hoagland, geologist Kirtley Fletcher Mather, biologist George Wald, and Ralph Wendell Burhoe, the executive secretary of the Academy, stated that "we believe that ... the survival of human society depends on the reformulation of man's world view and ethics, by grounding them in the revelations of modern science as well as on tradition and intuition."

Several from this committee accepted an invitation to bring their views to an interfaith group at the Coming Great Church Conference on Star Island in the summer of 1954. Later in 1954, the group from the American Academy accepted an invitation of the Coming Great Church Conference to form the Institute on Religion in an Age of Science, a multidisciplinary society that carried forward the work of both predecessor groups. Other leaders involved in the establishment of IRAS included Brand Blanshard, Edwin Prince Booth, Dana McLean Greeley, Donald Szanthy Harrington, Henry Murphy, Lyman Rutledge, and Malcolm Sutherland. Other early members included Ashley Montagu, B.F. Skinner, Theodosius Dobzhansky, and Ian Barbour.

Since 1954 IRAS has held an annual conference on science, values, and religion, with 57 of those conferences having been held on Star Island, ten miles off the coast of Portsmouth, New Hampshire. IRAS has also conducted—on its own or in collaboration with other groups—conferences in other places: at universities and theological schools and at meetings of the American Academy of Arts and Sciences, the American Association for the Advancement of Science, and the American Academy of Religion.

In 1965 IRAS joined with the Meadville Theological School of Lombard College (later Meadville/Lombard Theological School) to establish a journal: *Zygon: Journal of Religion and Science*. The first issue was published in March 1966 under founding editor Ralph Wendell Burhoe, director of the newly formed Center for Advanced Studies in Theology and the Sciences (CASTS) at Meadville/Lombard. In 1979, when Karl Peters succeeded Ralph Burhoe as editor, the editorial offices moved to Rollins College in Florida. IRAS, the Center for Advanced Study in Religion and Science (CASIRAS, successor to CASTS), and Rollins College became joint publishers. In 1989 the editorial offices moved back to Chicago under the editorship of Philip Hefner, director of the newly formed Chicago Center for Religion and Science (renamed the Zygon Center for Religion and Science in 1999). During the past quarter century, *Zygon* has been the chief international voice for the scholarly community in science and religion and has greatly strengthened the influence of the IRAS-CASIRAS approach to relating religion and the sciences.

In the summer of 2013, IRAS committed to a major review and renewal of its purpose, structures and processes. This work resulted in another statement of the Purpose of IRAS. It was accepted by the members at the Annual Meeting in 2015. In 2016, the Annual Meeting will bring this work to a close with the acceptance of wholesale redesign of our internal structures and processes.

PURPOSE OF IRAS

IRAS is a multidisciplinary society of persons who seek to understand and reformulate the theory and practice of religion in the light of contemporary scientific knowledge, and to provide a forum for discussing issues relevant to that goal. The IRAS Constitution states the formal purpose as follows:

- (1) to promote creative efforts leading to the formulation, in the light of contemporary knowledge, of effective doctrines and practices for human welfare;
- (2) to formulate dynamic and positive relationships between the concepts developed by science and the goals and hopes of humanity expressed through religion; and
- (3) to state human values in such universal and valid terms that they may be understood by all peoples, whatever their cultural background or experience, in such a way as to provide a basis for world-wide cooperation.

Various other statements of the goals and purposes of IRAS have also been articulated over the years. For example, there is one in the back of each *Zygon* which says "IRAS is an independent society of scientists, philosophers, religion scholars, theologians, and others who want to understand the role of religion in our dynamic scientific world."

The IRAS Council, at its 2003 midwinter meeting, adopted the "Campion Statement," so-called because it originated from discussions at the Campion Center in Massachusetts at the 2002 midwinter meeting. The Campion Statement reads as follows:

We at IRAS take the natural world seriously as a primary source of meaning. Our quest is informed and guided by the deepening and evolving understandings fostered by scientific inquiry.

From here, our quests for meaning take us in divergent directions. For some, the natural world and its emergent manifestations in human experience and creativity are the focus of exploration. For some, understandings of the natural world are interwoven with understandings inherent in various religious traditions, generating additional paths of exploration and encounter. As a result, we articulate our emerging orientations with many voices, voices that are harmonious in that we share a common sense of place and gratitude.

We acknowledge as well a shared set of values and concerns pertaining to peace, justice, dignity, cultural and ecological diversity, and planetary sustainability. Although we may differ and hence debate on how these concerns are best addressed, we are committed to participating in their resolution.

In 2015 at the Annual Meeting, this Statement of Purpose, which emerged from the renewal work, was adopted by the members:

IRAS cultivates a community of informed and respectful inquiry and dialogue at the intersections of science with religion, spirituality and philosophy in service of global, societal and personal well-being.

IRAS is a nonprofit membership organization. Governance is by a volunteer Council whose members are elected from the entire membership. New IRAS members and tax-deductible contributions are always welcome.

IRAS ON STAR ISLAND

Star Island, first settled by Captain John Smith in the early 1600s, is situated in what was known as the best fishing grounds in the Colonial world. Today one can still see the lobstermen setting their traps. A small museum and island tours allow one to recapture this early human history; and tours of the local flora and fauna, tide walks, and a marine biology lab help one appreciate the local environment.

Because it is ten miles offshore from Portsmouth, New Hampshire, Star Island's temperature is usually ten degrees cooler than on the mainland. It thus became an ideal resort setting for one of the premier late-nineteenth-century hotels on the east coast. Today the hotel, along with several cottages and motel-type units, is a conference center run by the Unitarian-Universalist Association and the United Church of Christ; these two religious organizations have formed the Star Island Corporation. Although IRAS is not affiliated with any particular religious organization, we have enjoyed the hospitality of the Star Island Corporation since our first IRAS conference in 1954.

The nineteenth-century hotel and other facilities provide both the charm and the amenities of that period. Rooms are provided with wash basins and water buckets, and in most cases the toilet is down the hall. The Star Island management and its staff of mostly college students—called Pelicans—are first rate in meeting the various needs of guests from infants to octogenarians. A highlight of the week is the Pelican Talent show—a delightful extra from the hard-working staff. And in recent years IRAS conferees have returned the favor with their own talent show on the final night of the conference.

Star Island and other islands in the Isles of Shoals are excellent examples of the rocky New England coast. There are no roads, no cars, no bicycles, no TVs, and one public phone (603-601-0832). But there are rocks, bushes, grasses, nesting sea gulls, crashing ocean waves, sometimes fog horns, and sometimes crystal-clear night skies to explore through telescopes with some of our professional and amateur astronomers (IRAS's first president was astronomer Harlow Shapley). There are opportunities for swimming, rowing, tennis, and ballroom dancing. And the Star Island Book Store and Gift Shop offer books related to the conference theme and other items to remember the week on the island.

In the last couple of years the Star Island Corporation has launched an ambitious program to obtain grants and capital fund donations to repair, refurbish, and upgrade the facilities. While Star Island strives to maintain its traditional atmosphere of an island retreat, it also is seeking to meet the demands of being an ecologically sound community and while able to bring to conference like IRAS access to the wider world via the Internet. This year there is a significant expansion of IT capabilities and also the beginning of making Star a 90% self-sustaining solar powered community.

Just as important as the Star Island transitions and conference service upgrades, are the people who come to IRAS conferences from a variety of academic and professional fields, as well as many well-educated "lay persons." Many conferees belong to IRAS, which has about 300 members. Others come because they are interested in how religion relates to science and in the particular topic. There is active dialogue in lectures, discussion groups, conversation on the porch overlooking the harbor and on the rocks, and at the social hour before dinner. For those interested, there are opportunities to meditate and worship together in the stone chapel on a high point of the island, at the gazebo, or in the reflective evening candlelight services.

Those who have been coming for a long time to IRAS conferences believe that the natural setting, the island history, and the people provide a unique opportunity for rigorous, meaningful dialogue regarding religion and values in relation to contemporary science.

GENERAL CONFERENCE INFORMATION

Announcements – Because we are sharing the island this year we will make announcements about matters pertaining only to IRAS at the beginning of the morning plenary lecture and at the evening session. General announcements regarding all conferences and Star Island will be made at meals.

Chapel Services – The daily chapel services are an integral part of the week's experience and tie in to the other intellectual activities taking place throughout the week. **Pat Bennett** has a mind-stretching week of services planned. You will not want to miss them. Chapel services take place every day from 8:45–9:15 A.M.

Star Island dialogues and small-group discussions – These dialogues are the main event of the week. They will be held each morning in Elliott Hall from 9:30 A.M. to 12:15 P.M. This year we feature small group work as well as plenary discussion after the midmorning break. Each evening, there will be an opportunity for informal discussion with the two persons who were speaking in the morning.

Break – There is a new 30-minute break between lunch and the afternoon programs. Look around, breathe deeply, become inspired.

Shapley-Booth Lectures and Workshops – After lunch we offer two ways of engaging with carefully-chosen scholars. One will be to listen to and engage the ideas of one of our five Shapley-Booth Fellows in Elliott Hall. The other will be to participate in a 90-minute workshop in Lawrence Hall. Both will run from 2:00 to 3:30 P.M.

Art Workshop – Yet another alternative is to develop your artistic skills with the guidance of Jane Penfield, our resident artist. This experience will be in Art Barn from 2:00–4:00 P.M.

Break – Another 30-minute break will allow you to be at peace, have a conversation, or run an errand.

Competitive Papers and Playful Learning – After the break, from 4:00–5:30 P.M., you again face a choice. You may listen to one or more of the persons chosen to present a paper in Elliott Hall. Or you may engage in playful learning on Monday and Tuesday with Pat Bennett in Lawrence Hall.

Inter-generational Olympics – From 3 to 4 P.M. on Wednesday, there will be an Inter-generational Olympics on the front lawn. Bring your inner child.

Social Hour – takes place at the end of afternoon activities, from 5:30–6:30 P.M. in Newton Center for an hour of libations, snacks, socializing, and, often, music. Alcohol is provided and depends upon your donations. Please donate generously as you are able. Contact **Mark Kuprych** (the social hour coordinator) for ways you can help.

Dialogue with the Dialoguers – As noted above, the two persons who were speaking in the morning will be in Elliott Hall to engage in informal dialogue. 7:45 to 9:00 P.M.

IRAS Matters – As an organization, IRAS operates all year long. We need and welcome your interest in how we are changing and what we are planning to do next. On Monday evening we will review the major organizational and bylaw changes that will be presented for approval at the Annual Meeting on Thursday. On Tuesday and Wednesday each of the five Working Groups (WGs) will meet 7:45 to 9:00 P.M. in Lawrence Hall. Come and see what kinds of differences you could make to IRAS when we are not on Star Island. The WGs are Membership Engagement, Organizational Relationships, Summer Conferences, Administration, and Finance.

IRAS Choir – A longstanding tradition at conferences is the Choir. Rehearsal is each day from 7:30–8:30 P.M. in the Pink Parlor. The choir sings at morning chapel services later in the week, at the Friday evening banquet, and at the Talent Show. Music director **Jane Penfield** and accompanist **Frank Toppa** are a great professional team, who enjoy working together and making music with the IRAS choir.

Lobstah – Tuesday evening you are invited to a special lobster dinner. You must sign up at the Front Desk to participate and an additional charge will be added to your bill.

Memorial Service – A memorial service for IRAS members who have died during the past year will be held in the Chapel on Tuesday at 4:00 P.M.

Ice Cream Social – By Wednesday afternoon you may be needing a pick-me-up. So come to Ice Cream Social in the snack bar for your midafternoon ice cream break at 3:30. It is on the house. Enjoy.

Banquet – The banquet will be held Friday evening. We will present IRAS awards that evening. Dress runs from casual to a bit formal.

Star Beacon – The *Star Beacon* is an IRAS tradition. This **conference newspaper** appears at breakfast each morning with up-to-date information on the conference and its participants. It provides opportunities for you to respond to lectures and the conference theme, challenge ideas, publish poetry, commentary, and other forms of artistic expression, including humor, all at the discretion of the editor, **Emily Houk**, and as space is available. Contributions from our younger conferees often grace the pages.

Talent Show – The Talent Show is on Friday evening following the banquet, from 8:00–9:30 P.M. If you would like to participate, especially if you have talent (this is an optional requirement; all hams are welcome), **Joan Hunter-Brody**, the talent show co-coordinator, will be happy to hear from you. Don't wait to sign up!

Recreation – You may start your day early (6:30 A.M.) with coffee on the front porch or a Polar bear dip at 7:00 am. Star Island has many opportunities for recreation: talking, thinking, napping, reading, walking, and playing. Star Island's inviting setting offers rich opportunities to renew, refresh, and nurture body, mind, and spirit. Recreational activities abound, including rowing, swimming, arts and crafts, softball game against the Pelicans, a trip to nearby Appledore Island, and various Island tours. Be sure to check the announcement board in the main lobby for daily activities.

Late-night activities – Impromptu conversations, dancing, game playing, and other activities often emerge throughout the week. Enjoy these activities as you choose.

Star Gazing – The telescope comes out on clear nights after Candlelight. Check with **Dave Klotz** or the announcement board to see if and where we'll be observing.

Catholic Mass – On Sunday at 5:00 P.M. there will be a Catholic Mass in the Chapel. All are welcome.

Appledore Trip – On Monday at 1:30 P.M. there is a boat trip to Appledore Island and the Marine Center. ISHRA has arranged it. If there is space, you are welcome to join them at extra cost. Check at the front desk on Sunday.

Farewell Party – An informal farewell party will be held on Friday night, an important part of which is to use up any refreshing substances left over from Social Hour.

If you have any **concerns, questions, or suggestions** about the conference, please bring them up with Conference Coordinator **Jane Bengtson**, or with Cochair Operations **Ruben Nelson** or the Program Cochairs **John Teske** and **Pat Bennett**.

ARCHI PELAGOS: CONFERENCE YOUTH PROGRAM

The Archi Pelagos program takes place in different ways throughout the day.

MORNINGS

Youth meet in morning groups, according to age, during IRAS plenary sessions. The morning program includes activities such as island hikes, rowing or kayaking to Smuttynose, marine lab and island musician visits, art projects, scavenger hunts, games, playground time, and conference-themed, age-appropriate discussion and activities. Two adult Archi Pelagos teachers from IRAS will lead each group. Please SIGN IN and SIGN OUT your child each day, and arrive to pick them up promptly. (Teens will not need pickup.) If your child or teen will not be attending the morning group on a given day, please give his or her teacher a “signed out” sheet, which we will give each parent on Saturday. If your children are not in their groups, and we have not received a sign-out sheet, we will come and find you. Teens may sign themselves in.

Note: We will offer a snack during each morning session. Please make sure your youth's teachers know about any food allergies or other pertinent medical issues.

This year's morning Archi Pelagos teachers are

Ages 2–5: Alice Austin and Susan Treleaven. Our youngest group will meet in the “kiddie barns,” next to the dragon playground.

Ages 7–11: Belinda Bodnar and Nina Habibi. Our elementary group will meet in Parker, across from Newton and behind the Chapel.

Ages 14–17: Henry Jorgensen and Jennifer Whitten. Our teens will meet in Marshman, in the Stone Village.

AFTERNOONS

The afternoon Serendipity Program meets from 2–3:30. It offers youth and adults art projects on the porch or lawn games on the front lawn every day except Wednesday. We do not sign children in to this session. Parents are officially responsible for their children during this time, but do not need to be present if they deem their children old enough to participate on their own. These activities will be run by Archi Pelagos staff, in rotation, with Malcolm Dawkins assisting.

On **Wednesday**, we'll hold our annual Intergenerational Olympics—an IRAS tradition! **Adult participants are encouraged to show support of the coming IRAS generations by joining the fun. We especially invite IRAS members who aren't parents of the current IRAS kids.** Jell-O Drop, Egg Race, or Fortune Telling, anyone?

SOCIAL HOUR

The children's social hour will take place on the dragon playground each day from 5:30–6:30, at the same time as the IRAS adult social hour.

Henry Jorgensen will be in charge, with Malcolm Dawkins and other staff assisting. We may ask IRAS adults to volunteer, as well.

Attending children's social hour is optional, but if your children attend, please sign them in (and out, at the end). The children's social hour snack will be popcorn. If your child cannot eat popcorn, please let us know.

SPECIAL EVENING ACTIVITIES

Evening activities, open to all ages, will be offered from 7:30–8:30 P.M. Saturday through Thursday. A rotation of Archi Pelagos teachers will lead the evening activities, with Malcolm Dawkins assisting. Some offerings include theater games, a s'mores/music/storytelling night, an art project, and Candy Bingo. Adults are welcome to join the evening activities, too! PLEASE NOTE that evening activity locations will vary, depending on the activity. Please check the CHILDREN'S CHALKBOARD OR WHITEBOARD daily, for updated information about the program activities.

We're glad to have you with us. We look forward to a wonderful week!

IRAS MEMORIAL SCHOLARSHIP FUND

The IRAS Memorial Scholarship Fund honors deceased IRAS member, conferees, and members of their families. Donations to this endowed fund are appreciated. The names of those remembered are added to the memorial list. The earnings from the fund support full room and board for two scholars a year.

Applications are made to the chair of the scholarship committee, presently Jane Bengtson. Awardees are decided by a three-person committee. Preference is given to students who are currently pursuing a degree, who are first-time attendees at an IRAS conference, and whose interests are congruent with the purposes of IRAS.

It is expected that scholars will benefit from the intellectual experiences gained by attending sessions and interacting with conference speakers and IRAS leaders. Scholars are also asked to provide some assistance to those running the conference under the guidance of the conference coordinator.

This year IRAS is pleased to support four Student Scholarship Recipients, with funding support from the IRAS Memorial Scholarship Fund and other sources. This year's scholars are:

Ari Brouwer's undergraduate degree is from Boston University, where he double majored in religion and neuroscience. He is now enrolled in BU's master's degree program in religion and science. Having studied religious naturalism with Dr. Wesley Wildman, he is "compelled by the collaborative effort to guide and develop personal/spiritual convictions based on strong empirical foundations" and has "attempt[ed] this integration personally for quite some time now, but [he is] excited about the possibility to further engage with this process in community."

Lise Miltner is a student at the Boston University School of Theology, and has a particular interest in ecological ethics, which she hopes to continue to pursue in doctoral studies. Lise is interested in religious naturalism, as an intersection of science and religion especially as it pertains to our planet. She looks forward to the IRAS conference as an extremely exciting opportunity to learn about different perspectives and issues which people are thinking about on this topic.

Josh Ruszala is a student at Elizabethtown College, majoring in psychology and philosophy with a minor in cognitive science. He writes, "I believe the task of finding a common ground where the wisdom of religion and the findings of modern science can inform one another in a mutually beneficial way will be essential to developing a more complete understanding of human life."

EbonyJanice Moore studied cultural anthropology and political science as an undergraduate, EbonyJanice. A few years ago, EbonyJanice spent 10 weeks in Nyahururu, Kenya implementing a mentoring program and a curriculum she developed for Kenyan girls called, "The Free Girl Initiative." This experience was transformative and was instrumental in her decision to enrol at Starr King School for the Ministry in Berkley, where she is pursuing a master's degree in social change with a concentration on womanist theology and spiritual leadership.

To date, contributions to the Memorial Scholarship Fund have been received in memory of the following people:

James Ashbrook	Barbara Avakian	Ian Barbour
Carl Bildorff	Edwin Prince Booth	Mike Brewer
Sanborn Brown	Ralph Burhoe	Warren Busse
Esther Cox	Eugene d'Aquili	Beth Davis
Henry Everett	Tom Fangman	John Fryer
Scout Fuller	Ward Goodenough	Joan Goodwin
Dana Greeley	Dorothy Griswold	Harlan Griswold
Norman Hall	Hudson Hoagland	Betty Lau
Normand Laurendeau	Bernard Loomer	Nicole Lopresti
Roy Morrison III	Frances Nesbitt	Ton Olson
Bill Orme-Johnson	Carol Peters	George Riggan
Kenneth Roberts	Richard Schlegel	Sally Schlegel
Karl Schmitz-Moorman	Harlow Shapley	Harold K. Shilling
Bob Sorensen	Phil Sturges	Winnie Tomm
George Volckhausen	Paul Walsh	Georgia Wilson
H. vanRenssalaer Wilson	Willie Winternitz	Myra Zinke

PROGRAM OVERVIEW: DAYS AND TIMES, ABSTRACTS, BIOSKETCHES

IRAS Conferences include several different kinds of presentations and activities as described in this Introduction. After the Introduction all events are listed in order by day and time. An overview of the week is found on the back cover. Note that no speaker at this conference is paid to be with us. The cost of travel and room and board for each speaker and her/his family is covered.

MORNING

Chapel Talks – The chapel talks are delivered by a recognized religious professional in his/her spiritual tradition. He or she may or may not be ordained. Sometimes he or she is a lay person; for example, a scientist.

AFTERNOON

Shapley-Booth Fellow Presentations – Fellowships to honor the memory of the first two presidents of IRAS, Edwin Prince Booth and Harlow Shapley, are awarded to the best proposals in response to the conference call for papers. Proposals are evaluated blind by a three-person, anonymous jury. In addition to being recognized, Shapley-Booth Fellows receive financial assistance from the Shapley-Booth Fund for their room and board and for some travel expenses.

Presenters of Competitive Papers – These are serious scholars who were judged to be of a quality and appropriateness that they would add substantially to our annual conference. Each covers his/her own expenses in order to participate.

Workshop Facilitators – These are serious scholars and/or practitioners who were judged to be of a quality and appropriateness that they would add substantially to our annual conference. Each covers his/her own expenses in order to participate.

Art Barn – We understand that there is more to each of us and to our lives than our minds; aesthetic expression is vital. Invest one or more afternoons learning to express in a variety of artistic ways with Jane Penfield, an established artist.

Interest groups – IRAS has two official interest groups: the Ministry Group and the Religious Naturalism Group. These groups meet over a meal or during one of the evenings. Watch the *Beacon*.

The *Ministry Group* includes all who are committed to some form of lay or ordained ministry. It reflects on the issues raised at the conference by science and religion-theology-spirituality.

The *Religious Naturalism Group* includes all who are committed to placing the natural world at the center of religious experience and the search for value and meaning, whether they do so within a religious community or not.

EVENING

Dialogue with the Dialoguers – These are informal opportunities to engage the two persons who were in dialogue during the morning session.

IRAS Work – IRAS is a community with a life that extends throughout the year. We take the opportunity of being together on Star Island to catch up with one another, to undertake the business that must be done and to meet in each of the five Working Groups by which we organize our work: Member Engagement, Organizational Relationships, Summer Conferences, Administration and Finance. All IRAS meetings are open to any interested person, whether or not you are a member of IRAS. We will welcome you.

Candlelight Services – A long-standing Star Island tradition, the conference program day closes with a short service of reflection in the Chapel. Following the evening-program discussion period, a procession carrying candle lanterns leaves in silence from the end of the porch. The lanterns illuminate the chapel, and those attending remain silent until they return to the porch. In inclement weather, the candlelight service is held in Elliott.

Informal Time – Some folks head to bed early, others hang around the front porch or the snack bar in good conversation. Do what suits you best.

CONFERENCE PROGRAM SCHEDULE

CHAPEL SERVICES

ONLY MAKE-BELIEVE?
PLAY AS A WAY OF EXPLORING THE
WORLD.

Pat Bennett

Sunday–Friday, 8:45–9:15 A.M.

ABSTRACT

Whilst play is widely distributed throughout the animal kingdom, human play is unique in a number of respects, notably its employment of imaginative and counterfactual pretence supported by various props, and the construction of dedicated spaces (the ‘magic circle’) in which play is pursued. However play also has a serious purpose and the thesis underpinning this year’s chapel series is that our ways of exploring and evaluating the world, whether undertaken from a scientific or a religious starting point, share a set of evolutionarily conserved skills derived from play: in effect that H. Scientificus and H. Religiosus are closely connected through H. Ludens.

In our times together we will engage various ludic strategies and lusory attitudes and emotions to help us play with this idea and its consequences.

BIOSKETCH

Pat has a dual background in medicine and theology and is interested in developing new ways to integrate scientific and theological material. Her doctoral dissertation, which used theological, immunological, and neurobiological insights to explore the link between relational experience and health, was unanimously awarded the 2014 ESSSAT Research Prize for ‘an outstanding original contribution’ at ‘the interface between religion/theology and the natural sciences.’ She is a member of the Iona Community, a dispersed Christian ecumenical community working for peace, social justice, and the rebuilding of community, for whom she also works as the Programme Development Worker. She enjoys singing, laughing, and malt whisky!

ART BARN

Sunday–Friday, 2:00–4:00 P.M.

Jane Penfield

Jane Penfield will lead the Art Barn Workshop each afternoon from 2:00–4:00. This workshop we take a multimedia approach to drawing and painting, using charcoal, watercolor and pastel to create artistic impressions of our week on Star. Participants will create a sketchbook of their work. Materials will be provided, and all levels of experience are welcome. Artists are also encouraged to bring their own plein air painting supplies and equipment. Jane is an award-winning pastel artist, a signature member of the Connecticut Pastel Society, and a juried member of the Pastel Society of America and the Pastel Painters Society of Cape Cod. She is enthusiastic about sharing techniques of working in this wonderful medium with all who would like to participate. Jane’s work can be seen on her website at janepenfield.com.

SATURDAY

OPENING ACTIVITIES

Elliott, 7:45–9:00 P.M.

We will open the conference with an informal reception, including an official welcome and some “getting to know you” activities. The latter will include meeting the others in the small group that you will meet with each morning during the conference. Activities led by John Teske and Pat Bennett.

SUNDAY MORNING

STAR ISLAND DIALOGUES – AN OVERVIEW

Elliott, 9:30–10:45 A.M.

We will start our week with the eight persons who will be holding a dialogue. Each will speak briefly to this question: **What is the core idea you want us to understand and chew and why it is important?** After all have spoken, Pat Bennett will engage each member of the group by asking questions that demand thoughtful and revealing responses.

As a participant, you will be asked to do a bit of work before we take a break.

SMALL GROUP DISCUSSIONS

Elliott, 11:00–12:10 P.M.

After the break we will gather in small groups. Your group number will be on your name tag. Later there will be a plenary discussion.

SUNDAY AFTERNOON

THE EMPIRICAL STAND FOR KNOWING: FAITH MISPLACED

George Gantz, Shapley-Booth Fellow

Elliott, 2:00–3:30 P.M.

ABSTRACT

Humans have always sought to understand the world in which they are born and from which they depart. At first, understanding was derived from direct personal experience as well as intuition and imagination and shared cultural knowledge including storytelling and revelation. In time, human measurement and codification of regularities in nature added to human understanding of the world. Natural philosophy (empirical science) became a key partner with human aspirations and the resulting technological development enabled vast accumulations of physical goods, comforts and gratifications. As human economic progress exploded, particularly in the 20th century, our culture became increasingly secular and materialist. Pathways to knowing other than the empirical are often viewed as outmoded and sometimes ridiculed.

Yet this shift fails to acknowledge the hard limits to empirical knowledge and the implicit tenets of faith that grounds the empirical enterprise. This paper will explore several frontiers in mathematics and physics that highlight this failure. We will find that certain of these implicit tenets contradict our shared personal experience and deny the mystery, agency and intentionality of the universe in which we live. We conclude that such faith is misplaced.

Topics will include relativity, entropy and the arrow of time, the multiverse hypothesis, quantum indeterminacy and non-locality, randomness and emergence in complex systems, computational indeterminacy and the halting problem, and logical incompleteness.

Through this exercise, we explore the opportunity for a new symbiosis between spiritual and empirical inquiry as valid sources of evidence on an integrated pathway of knowing.

BIOSKETCH

George Gantz is a retired business executive with a life-long passion for mathematics, science, philosophy and theology. He has a bachelor of science degree in mathematics with honors humanities from Stanford University and directs and writes the online Forum on

Integrating Science and Spirituality (www.swedenborgcenterconcord.org). He has made a number of public presentations and several of his essays have been published, including “The Tip of The Spear”, which won fourth place in the 2014 Foundational Questions Institute (FQXi) Essay Contest. The winning essays were published as a compilation, *How Should Humanity Steer the Future?* by Springer (2016).

SCIENCE AND THE NEXT GENERATION OF RELIGIOUS LEADERS: THE AAAS SCIENCE FOR SEMINARIES PROJECT

David Buller and Curtis Baxter

Lawrence, 2:00–3:30 P.M.

ABSTRACT

In 2014 the AAAS Dialogue on Science, Ethics, and Religion (DoSER) program launched the Science for Seminaries project, a three-year effort working with seminaries to integrate science into their training of future religious leaders. An outworking of the AAAS mission of “advancing science, serving society,” this project seeks to encourage the development of future religious leaders for effective leadership on topics relating to science within their communities.

Our ten grant-supported pilot seminaries represent a broad range of evangelical, mainline, and Catholic traditions, and project faculty at these institutions are identifying novel and fruitful ways to engage with science. Rather than creating separate electives, project faculty are integrating various sciences into a broad range of pre-existing core courses, including systematic theology, biblical studies, church history, ethics, and more. A unique illustration of the IRAS conference theme, project leaders are “co-creating knowledge” through the integration of science in the core of religious leaders’ training, lending this project great strategic value for influencing broader public perceptions about science and religion in the years ahead.

Complementing these curricular revisions, the seminaries are conducting campus-wide events on science and reaching out to their constituents and communities on the relevance of scientific engagement. AAAS is supporting these efforts through networking with local scientists and faculty mentors, providing science resources, and hosting faculty retreats this summer to disseminate the fruits of the pilot seminary projects.

This workshop presentation will summarize the Science for Seminaries project and the work of our partner seminaries, highlight lessons learned and best practices, and present key resources DoSER is producing (such as a science video series) to facilitate engagement with science among theological educators. With the input of those present, the presentation will discuss possible future projects for continuing and expending DoSER’s engagement with

theological educators, such as through work with pastoral continuing education and Jewish rabbinical education. Reflecting on past work and looking forward to future endeavors will provide unique opportunities for workshop participants to join the discussion, generating ideas and encouraging future involvement mutually beneficial to the work of IRAS and DoSER.

BIOSKETCHES

David M. Buller is a program associate working on projects promoting dialogue between scientific and religious communities, including work with theological educators engaging science as part of their curricula. After finishing his BS in biochemistry and molecular biology, David earned an MA in theological studies, religion and science emphasis, from the Lutheran School of Theology at Chicago. While in Chicago, David worked as a coordinator on various events and symposia at the Zygon Center for Religion and Science. He has written and spoken on the intersection of religion and science for the BioLogos Foundation and has served as the Student and Early Career Representative for the American Scientific Affiliation.

Curtis L. Baxter III is a program associate working primarily on DoSER's Science for Seminaries project, which aids seminaries in integrating forefront science into their core curriculum. After finishing his BA in religious studies and a minor in biochemistry, Curtis earned a master of theological studies degree from Wesley Theological Seminary. His focus while in seminary was ethics, historical and public theology. Curtis is passionate about all things at the nexus of faith and the public square. Previously, he worked with various organizations that facilitate constructive conversations between people of faith and their communities on important issues.

WHY ARE FACTS NOT ENOUGH?

Ardon Schorr

Lawrence, 4:00–4:45 P.M.

ABSTRACT

When it comes to science, never before have human beings known so much, but agreed so little on what we know. Why is this? Research by the Cultural Cognition project at Yale found some intriguing results: people use their intellect both to seek out knowledge and also to protect their identity. If these two tasks appear to be at odds, and require a choice, most people will abandon their curiosity and filter information in order to protect their identity. So for anyone wishing to communicate about a complex world, the problem is that once this "identity protection mode" is triggered, simply providing more information, however clear, does not persuade people – it actually backfires, and polarizes people even more. In this talk, we'll examine surprising findings about how humans form beliefs, consider how this process is

both harmful and adaptive, and shine light on our own blind spots. Based on these ideas, we'll consider whether the conflict between curiosity and identity is necessary, how we might steer away from this conflict, and instead, show how everyone can use scientific information without giving up being who they are. Using these techniques, we can work towards more meaningful dialogue on the most important issues of our time.

BIOSKETCH

Ardon Shorr is a biology Ph.D. candidate at Carnegie Mellon, and the cofounder of Public Communication for Researchers, a grassroots program to teach graduate students how to explain their work and why it matters. He studies how organisms sense and respond to gravity as a fellow with the National Science Foundation, and hopes to improve the safety of space travel. Ardon studied neuroscience and music theory at Oberlin College. His TEDx talk on understanding classical music was named editor's choice. He was a pelican in 2009.

SUNDAY EVENING

PAYING ATTENTION

Pat Bennett

Elliott, 7:45–9:00 P.M.

Using some playful counter-tourist tactics, we will get out and explore parts of Star Island from some very different perspectives. We'll then use these experiences to reflect on various aspects of how we see the world and build our knowledge about it.

MONDAY MORNING

DIALOGUE ON IMAGINING AND KNOWING: WHAT ARE THE ROLES OF RATIONALITY AND NONRATIONALITY FOR SCIENTIFIC AND RELIGIOUS KNOWING?

Elliott, 9:30 A.M.–10:40 P.M.

*Can We Still Talk about "Truth" and "Progress" in
Interdisciplinary Thinking Today?*

J. Wentzel van Huyssteen

ABSTRACT

On a cultural level, and for Christian theology as part of a long tradition in the evolution of religion, evolutionary epistemology 'sets the stage', as it were, for understanding the deep evolutionary impact of our ancestral history on the evolution of culture, and eventually on the evolution of disciplinary and interdisciplinary reflection. In the process of the evolution of human knowledge, our interpreted

experiences and expectations of the world (and of the ultimate questions we humans typically pose to the world) have a central role to play. What evolutionary epistemology also shows us is that we humans can indeed take on cognitive goals and ideals that cannot be explained or justified in terms of survival-promotion or reproductive advantage only. Therefore, once the capacities for rational knowledge, moral sensibility, aesthetic appreciation of beauty, and the propensity for religious belief have emerged in our biological history, they cannot be explained only in biological/evolutionary terms. Finally, in this way a door is opened for seeing problem solving as a central activity of our research traditions. And as philosophers of science have argued, one of the most important shared rational resources between even widely divergent disciplines is problem solving as the most central and defining activity of all research traditions. And as will become clear, the very diverse reasoning strategies of theology and the sciences clearly overlap in their shared quests for intelligible problem solving, including problem solving on an empirical, experiential, and conceptual level.

BIOSKETCH

J Wentzel van Huyssteen was originally from South Africa, Wentzel moved to the United States of America on January 1, 1992 to become Princeton Theological Seminary's first *James I. McCord Professor of Theology and Science*. Professor van Huyssteen lectures in interdisciplinary and philosophical theology, with a special focus on the dialogue between theology and the sciences. He has published numerous articles and several books. *Theology and the Justification of Faith: Constructing Theories in Systematic Theology* (Eerdmans, 1989), was awarded the *Andrew Murray Prize* and the *Venter Prize for Academic Excellence*. Wm. Eerdmans Publishing Co. has published his latest books, *Essays in Postfoundationalist Theology* (July 1997), *Rethinking Theology and Science: Six Models for the Current Discussion* (edited with Niels H. Gregersen, July 1998), and *The Shaping of Rationality: Towards Interdisciplinarity in Theology and Science* (1999). In 2002, professor van Huyssteen was invited to deliver the Gifford Lectures in Scotland. This lecture series was delivered at the University of Edinburgh, Scotland, in April/May 2004, on the topic *Alone in the World? Human Uniqueness in Science and Theology* (<http://www.hss.ed.ac.uk/Admin/Gifford/>). He explored the interdisciplinary dialogue between theology and paleoanthropology, and questions of human uniqueness, by focusing on the meaning of prehistoric European cave paintings as some of the oldest surviving expressions of human symbolic activity. The Gifford Lectures were published in the United States of America by Wm. Eerdmans Publishing Company, and in Europe by Vandenhoeck & Ruprecht, Germany, with the title *Alone in the World? Human Uniqueness in Science and Theology. The Gifford Lectures, The University of Edinburgh 2004*, and subsequently in Swedish and Russian translations. He also delivered the John Albert Hall Lectures at the

University of Victoria (British Columbia). This lecture series, with the title *Duet or Duel? Theology and Science in a Postmodern World*, was published in September 1998 by Trinity International Press in the USA and SCM Press in London, and in 2002 was published in an Indonesian translation (BPK Publishers, Jakarta). Most recently, in May 2011, professor van Huyssteen co-edited, with Erik P. Wiebe, his latest book, *In Search of Self: Interdisciplinary Perspectives on Personhood* (Eerdmans). For his book *Alone in the World? Human Uniqueness in Science and Theology*, J. Wentzel van Huyssteen was named as the first recipient of the Andrew Murray-Desmond Tutu Prize (April 2007).

*What if the human mind evolved for non-rational thought?
An anthropological perspective*

Jonathan Marks

ABSTRACT

Humans surpass other species in their rational, problem-solving abilities. Those abilities are measureable and comparable. But the human mind is far more complex than that. What if our more highly developed rational thought is an evolutionary by-product of a more fundamentally unique human property, the ability to think non-rationally? Other species solve problems, and with our big brains, we do it bigger and better. But we also talk to people that aren't there, cultivate aesthetics, enter revelatory trances, and discuss possible worlds that are neither part of present experience, nor directly connected to surviving and breeding. What are the implications of the evolution of the human mind as rooted in symbolism and metaphor, rather than in logic and literalism?

BIOSKETCH

Jonathan Marks is Professor of Anthropology at the University of North Carolina at Charlotte. His primary training is in biological anthropology and genetics, but he has published widely across the sciences and humanities on the general topics of human origins and human diversity. In 2006 he was elected a Fellow of the American Association for the Advancement of Science. In the last few years he has been a Visiting Research Fellow at the ESRC Genomics Forum in Edinburgh, at the Max Planck Institute for the History of Science in Berlin, and a Templeton Fellow at the Institute for Advanced Study at Notre Dame. He was awarded the J. I. Staley Prize from the School for Advanced Research and the First Citizens Bank Scholars Medal from UNC-Charlotte. He is the author of several books, including *What it Means to be 98% Chimpanzee* and *Why I Am Not a Scientist*, both published by the University of California Press. Paradoxically, however, he is about 98% scientist, and not a chimpanzee.

SMALL GROUP DISCUSSIONS

Elliott, 11:00–12:10 P.M.

EMOTION, ETHICS AND ANTHROPOLOGY:
TOWARDS A NEW DIALOGUE IN SCIENCE
AND RELIGION

Christian Early, Shapley-Booth Fellow

Elliott, 2:00–3:30

ABSTRACT

Religion and science dialogues often involve topics of cosmology and epistemology. This paper explores possibilities for a constructive conversation between religion and science on the topic of ethics in which both can be seen to contribute. It takes its cue from a reading of Hume, suggested by Alasdair MacIntyre, that Hume did not intend to separate facts from values but instead intended to point to their proper connection in the emotions. Emotions, then, is the starting place for a science of ethics. Although emotions have been largely ignored by scientists, there have been notable exceptions. Charles Darwin argued that the root of ethics was the social instinct in animals and, in particular, sympathy. Given the fact that neither the rational ethics of Kant and Mill nor the traditional and at times authoritarian ethics of Aristotle have been able to secure widespread allegiance, perhaps it is time to give Hume's suggestion another look. The paper proceeds to discuss the recent science of emotions (Panksepp and Porges) and places it in conversation with Harry Harlow's "Chain of Love" John Bowlby's attachment theory. Some consequences for ethics are explored as well as possibilities for religious voices to enter the conversation constructively on the subject of love, compassion, and philosophical anthropology.

BIOSKETCH

Christian Early (PhD, University of Wales) currently teaches philosophy and theology at Eastern Mennonite University. He lives in Harrisonburg with his wife Annmarie and their three children Lukas, Joshua, and Oliver. Together with Annmarie, he coedited the volume *Integrating the New Science of Love and A Spirituality of Peace*, which explores the relevance of attachment theory to neurobiology, psychology, conflict resolution theory, and philosophy. Christian has written journal articles on philosophy of religion, ethics, philosophical anthropology, and epistemology.

MAKING SENSE OF THE
TRANSFORMATIONS WE ARE IN

Ruben Nelson

Lawrence, 2:00–3:30 P.M.

ABSTRACT

It is not news that events today, everywhere, are driving us off our inherited mental maps. The sense that, as persons, families, communities, jurisdictions

and a whole civilization, we are somewhat lost and floundering is far more common than the sense that we are progressing as hoped for and anticipated. The map sheets in our minds no longer reveal the territory under our feet. In this workshop, Ruben will speak briefly about the importance and role of our mental maps. He will also share one of the mental maps he uses in his work as a practitioner of strategic foresight. He finds that this map helps him make more reliable sense of what is happening in our Modern/Industrial world, than the mental maps we have inherited. There will be small group work, so come prepared to imagine and think afresh.

BIOSKETCH

Ruben Nelson has a wide-ranging mind and an interesting background. While born and raised in Calgary, he was educated at Queen's, Queen's Theological College, United Theological College, Bangalore, and the University of Calgary. He has taught philosophy and comparative religion at Queen's, invented new organizations and government programs, developed new frameworks for social policy, undertaken pioneering research into long-term civilizational change and written extensively on futures-oriented topics. Today, Ruben is executive director of Foresight Canada. He is recognized as Canada's leading practitioner and teacher of the next generation of strategic foresight. Ruben is a fellow of the World Academy of Art and Science, the World Business Academy, and the Meridian Institute on Leadership, Governance, Change and the Future. He is member of the council of the Institute on Religion in an Age of Science. Ruben lives in the Rocky Mountains of Alberta with Heather and their three cats.

DARWIN, HAECKEL, AND THE
HERMENEUTICS OF NATURE

Whitney Bauman

Elliott, 4:00–4:45 P.M.

ABSTRACT

It is standard in the world of religious studies to understand the history of interpretation: that ideas and thoughts cannot be cut and paste from the past into the present without historical, sociological, and other forms of analysis. Hermeneutics is a well-developed tradition within the field. The same cannot be said for science. Science is often quoted as if the heart of its endeavor is unchanging. However, as 20th century philosophy of science has argued (e.g., Popper, Kuhn, Harding), science is every bit as much of an interpretative endeavor. The cultural, historical, embodied location of the scientist matters in terms of how data are accounted for in the meaningful narratives that make up our understandings of the world. Ernst Haeckel's work provides an excellent example of the importance of a hermeneutics of scientific understandings of nature.

Haeckel argued for his monistic (materialistic) understanding of the natural world against what he perceived to be the dogmatic slumber of theology. His embrace of Darwin had every bit as much to do with a rejection of religious institutions as it did with adopting the “best” scientific theory. Furthermore, his whole understanding of “nature” is developed before a time in which nature needs saving, so to speak. How is this different from the ways in which “nature” is viewed in an era of climate change and environmental degradation? This bit of exegesis is important for understanding how our own current, scientific and religious understandings of the world are equally unstable, and to prevent the sort of proof-texting of the past in an effort to stabilize and concertize one’s own historically located understanding of the world. Interpretive destabilizations are important for fostering the sense of humility necessary for sustained, multi-cultural discussions on issues of planetary importance.

BIOSKETCH

Whitney Bauman has been involved in the field of Science and Religion since he was a graduate student at the Graduate Theological Union in Berkley, working with the Science and Religion Course Program of the Center for Theology and the Natural Sciences. He has been involved with IRAS since 2006. He is currently associate professor of religious studies at Florida International University in Miami. He was a Fulbright Scholar (working on issues of Religion, Nature and Globalization in Indonesia), and is currently a Humboldt Fellow (2015–2017) in Germany, working on a manuscript that deals with the Religious underpinnings of Ernst Haeckel’s understanding of Nature. Among his publications are *Theology, Creation, and Environmental Ethics* (Routledge 2009) and *Religion and Ecology: Developing A Planetary Ethic* (Columbia University Press 2014). He is also co-editor of: *Science and Religion: One Planet, Many Possibilities* (Routledge 2014) and *Grounding Religion: A Fieldguide to the Study of Religion and Ecology* (Routledge 2010; second edition forthcoming 2017).

THE KNOWLEDGE ENIGMA: CAUSATION IN A PROBABILISTIC UNIVERSE

Maynard Moore

Elliott, 4:45–5:30 P.M.

ABSTRACT

It might be said that a common goal among persons across cultures is to live a life with meaning – life of responsibility and significance. So throughout our lives, we search for meaning, utilizing the best tools available to affirm truth, beauty and purpose. One such tool is the concept of causation—but we find that this is an elusive task: science does all it can to establish the linkage between cause and effect. Artistic endeavors utilize symbols, sounds and synchronization to connect the emotions and intellect. Religions create stories and construct doctrines for

correct belief, often without reference to evidence. Medicine looks for correlations that form a matrix involving biology, psychology, and the environment to discern health outcomes. In the legal profession, cause and responsibility are linked in ways that often represent consensus but only approximate the full picture.

Across the board we make decisions, we aim to live humanely, but we despair about unintended consequences. Throughout, our search for meaning often appears to get lost, and we are left to live with probabilities. The proposed paper will outline some of the basic questions, not answers. The discussion that follows will engage the questions from the various perspectives of those participating in the workshop.

BIOSKETCH

I serve as President of the Board for WesleyNexus. I am ordained United Methodist clergy (retired) and have been a member of the Baltimore-Washington Conference of the United Methodist Church in the National Capital Area for 35 years. Currently I serve on the Board of Directors for the InterFaith Conference of Greater Washington DC, one of the nation’s oldest such organizations, now embracing eleven different faith traditions in the nation’s capital. In addition, I maintain active memberships in the Center for Process Theology at Claremont Graduate Seminary in California, and the Churches’ Center for Theology and Public Policy in Washington DC. I have completed work for two graduate degrees from S.M.U., an M. A. from the University of Chicago Divinity School, and the Ph.D. in Higher Education/ Adult Education at the Union Graduate Institute & University in Cincinnati, Ohio.

PLAYFUL LEARNING

Pat Bennett

Lawrence, 4:00–4:45 P.M.

ABSTRACT

In these sessions we will play with words, movement and improvisations as a way of reflecting on some of the ideas and understandings which we hold but seldom notice or think about.

BIOSKETCH

See the Chapel Services description on page 10 for Pat’s biosketch.

MONDAY EVENING

DIALOGUE WITH THE DIALOGUERS

Elliott, 7:45–9:00 P.M.

An opportunity for informal conversation with the two persons who were in dialogue in the morning session. Facilitated by John Teske or Pat Bennett.

UPDATE ON IRAS

Lawrence, 7:45–9:00 P.M.

The IRAS Council has made substantial progress during the three-year Renewal Process that is now coming to a close. This includes a new organizational structure, new operating processes and major revisions to the by-laws. All of these matters will be reviewed. A general sense of the work of the next three years will also be discussed. Any interested person may attend and participate in the discussion. This meeting will prepare members for the decisions they will be asked to make on Thursday at the Annual Meeting.

TUESDAY MORNING

DIALOGUE ON KNOWING TRADITIONS: WHAT ARE THE ROLES OF RATIONALITY AND NON-RATIONALITY FOR SCIENTIFIC AND RELIGIOUS KNOWING?

Elliott, 9:30 A.M.–10:40 P.M.

Knowing Traditions: Self-Critical Rationalities

Phillip Cary

ABSTRACT

Ever since the Enlightenment, science has been associated with reason, and religion with tradition. This puts religion on the defensive, because modernity opposes the authority of tradition in the name of universal reason. Postmodernism begins with the modern insight that the socio-historical context of tradition is inevitable, even in modernity. This insight means that modernity must recognize itself as an anti-traditional tradition. What happens after that? Two possibilities come to mind: either irrationality is inescapable because tradition is inescapable (call this “leftwing postmodernism”), or traditions are not necessarily irrational but can be the home of rationality (call this “rightwing postmodernism”). The latter possibility, vigorously pursued by Alasdair MacIntyre, results in new way of conceiving the relation of science and religion, both of which can be self-critical intellectual traditions. This also implies that reason is not universal in quite the way modernity expects. There are many traditions of rationality—and in that sense many rationalities, of which Western science is only one, along with the great religious traditions of the world. How shall we conceive of the distinctive rationality of science when it does not represent the only kind of rationality there is?

BIOSKETCH

Phillip Cary is professor of philosophy at Eastern University outside Philadelphia, PA, where he is also scholar-in-residence at the Templeton Honors College. His work focuses on the philosophical as well as theological development of the Christian tradition,

with special focus on Augustine (354–430) and Martin Luther (1483–1546). In addition to numerous article (many of which can be accessed at his academia.edu page), he has written three books on Augustine, *Augustine’s Invention of the Inner Self* (2000), *Inner Grace* (2008), and *Outward Signs* (2008), all with Oxford University Press. He is also the author of a Biblical commentary, *Jonah* (Brazos, 2008), and a book on the Christian life, *Good News for Anxious Christians* (Brazos, 2010). His most recent book is a dialogue on religion, violence and truth, coauthored with Jean François Phelizon, titled *Does God Have a Strategy?* (Wipf & Stock, 2015). He is perhaps best known to the public through a series of lecture courses published by The Great Courses, including courses on Augustine, on Luther, on the history of Christian theology and on the interaction of philosophy and religion in the Western tradition. He is married to Nancy Hazle, with whom he has three sons and two grandchildren.

Science and Religion: Toward a New Dialogue

Louise Sundararajan

ABSTRACT

Science is based on reason, whereas religion on faith or emotion; science is progressive, whereas religion conservative; science promotes creativity, whereas religion stifles creativity. False assumptions such as these render impossible a productive dialogue between science and religion. Proposing a new foundation for the science and religion dialogue, I redefine reason in terms of ecological rationality. I argue that all cultures, including that of science and religion, have its unique rationality that is evolved to function in its ecological niche. Appreciating the basic difference in rationality between cultures can give us a solid foundation for a mutually appreciative dialogue between science and religion, a dialogue that can harness the critical insights and creative energies of both, since neither alone will be able to solve the intractable problems that confront us today in the 21st century. The rich implications of this analysis for cross-cultural dialogue will be addressed in the discussion.

BIOSKETCH

Louise Sundararajan was born in Yunnan, China, and grew up in Taiwan. She received her Ph.D. in history of religions from Harvard University, and her Ed.D. in counseling psychology from Boston University. She is founder and chair of the Task Force on Indigenous Psychology, which is joined by nearly two hundred researchers from around the globe. She served as past president of The International Society for the Study of Human Ideas on Ultimate Reality and Meaning and also past president of the Society for Humanistic Psychology (Division 32 of the American Psychological Association). She is recipient of the Abraham Maslow Award for 2014, from Division 32 of APA. She is a fellow of the American Psychological Association, and also a member of the Board of Directors for the International Society for Research on

Emotions. She serves on the editorial boards of *The Humanistic Psychologist* and *Journal of Humanistic Psychology*. She is associate editor for *Journal of Theoretical and Philosophical Psychology*. She has published extensively on topics related to culture and emotions.

SMALL GROUP DISCUSSIONS

Elliott, 11:00–12:10 P.M.

TUESDAY AFTERNOON

SEEKING CLIMATE CHANGE IN SPIRITUAL LANDSCAPES

Jeremy Kidwell, Shapley-Booth Fellow

Elliott, 2:00–3:30

ABSTRACT

In the midst of our global climate crisis, the struggle by governments to mitigate global climate change is exacerbated by a disconnect between understanding of this issue by the general public and the scientific community (holders of “expert knowledge”). Based in part of the failure of the UN-IPCC to effectively disseminate its findings, climate scientists and science communicators have recently affirmed the importance of “lay knowledges” in generating awareness of climate change and mobilising societal mitigation efforts (Brace & Geoghegan 2010). To date, the role of religious lay knowledge of environmental change has been greatly neglected. In this paper, I share some preliminary findings from an ethnographic research project which builds on Tim Ingold’s work on the anthropology of landscape to explore the possibility of “spiritual landscapes” (Cloke & Dewsbury, 2009) as sites of lay environmental knowledge. I argue that the development of awareness of environmental change which is affective (Lorimer 2008; Schaefer 2015) and embodied may carry a particularly spiritual dimension in which persons develop “capacities of awareness and response” (Ingold 2000). In particular, this research seeks to understand how people and groups attend to modes of transcendence in the construction of spiritual landscapes, whether the experience of spiritual landscape give rise to unique forms of awareness and alterity and how this awareness might surface in new forms of lay knowledge. In this paper I will share insights gleaned from ethnographic interaction with conservation volunteers and research subjects at Scottish religious communities which participate in Eco-Congregation Scotland.

BIOSKETCH

Rev Dr. Jeremy Kidwell is AHRC/ESRC post-doctoral research fellow at the University of Edinburgh in the School of Divinity working on the project “Caring for the Future Through Ancestral Time.” Since 2013, his research on this project has involved ethnographic

study of community groups (particularly churches) involved in sustainability and carbon work. His other interests include design, technology, and business ethics. He is secretary of the Society for the Study of Christian Ethics and a member of the board of Stop Climate Chaos in Scotland. His most recent publications include a co-edited volume *Theology and Economics: A Vision of the Common Good* (Palgrave, 2015) and a book: *The Theology of Craft and the Craft of Worship* (Ashgate, 2016). He is currently working on a monograph to be titled, “Ecological Reconciliation in the Anthropocene”. Jeremy is married to Katy (a former social worker who is now full-time home educator) and they have two sons, Noah (5) and Isaac (1).

WHY DO SOME BELIEVE DISCREDITED KNOWLEDGE?

Paul Carr

Lawrence, 2:00–3:30 P.M.

ABSTRACT

Why do some people still believe in knowledge that empirical data has shown to be incorrect? We will discuss why some still believe (1) humans are not accelerating global warming; (2) the first humans came into existence 6000 years ago, as in the Biblical account (Biblical literalism); (3) federal tax cuts for the rich stimulate our economy, thereby increasing tax revenue. Our discussion will increase an understanding of how we come to know.

The Yale Cultural Cognition Project is an interdisciplinary team that uses empirical methods to examine the impact of group values on perceptions of reality. Their work has been used to criticize climate science deniers, arguing that without intent to deceive, they honestly see and hear only the evidence that is relevant to their preconceived notion of reality. The same argument has been used to attack scientists in the climate field arguing that they unconsciously “choose” data that fits and *ignore data that does not fit the models they wish to promote*. In both cases the *underlying motivation is claimed to be fear of losing intrinsically valuable notions of self* and access to money from fossil fuel companies for deniers and to government grants for scientists.

Is a bigger concept of reality more fruitful than a smaller one? Is the story of blind men examining an elephant a metaphor for finding knowledge and truth?

BIOSKETCH

Paul H. Carr B. S., M. S. MIT, Ph.D. Brandeis U. The Templeton Foundation awarded Paul grants for the philosophy course “Science and Religion” he taught at U Mass Lowell, 1998–2000. This inspired his book *Beauty in Science and Spirit* (2006, IRAS Seminar 2005.) From 1967 to 1995, Paul led a branch of the AF Research Laboratory, which investigated microwave ultrasound and SAW (surface acoustic waves). His over 80 scientific papers and 10 patents have

contributed to new components for radar, TV, and cell phones. His home page is www.MirrorOfNature.org.

THE WHOLE SELF: UNITING KNOWING OF
BODY, MIND, AND SOUL THROUGH
BIOLOGY, PHILOSOPHY, AND THEOLOGY

Carolyn (C. J.) Love

Elliott, 4:00–4:45 P.M.

ABSTRACT

How do we “know ourselves?” As creatures, we exist in time and understand ourselves within a temporal context. We experience our day-to-day lives in time and cannot separate our understanding from time. Yet, how do we understand temporality; what role does temporality play in our life experience; and can we find a holistic temporal model that unites body, mind, and soul? This paper will examine these questions by proposing a new model of temporality grounded in biology, namely genetics, philosophy, namely event phenomenology, and theology, namely Augustine’s philosophy of time that privileges the mind/soul over the physical body.

In pursuit of greater adequacy, this model will propose a re-thinking of Augustine’s philosophy of time, which still defines contemporary theology. This re-thinking will provide a more robust and complete temporal model that encompasses the mind/soul and the body because the human person is more complex than the classical ideal Augustine proposes in book XI of the *Confessions*. A temporal understanding of being-in-the-world that appropriates biology and phenomenology acknowledges the contribution of both our cognition and our DNA.

Uniting body, mind, and soul through a holistic temporal model allows for a robust understanding of how we “know ourselves” without privileging the mind, without dismissing the important functions of our bodies, and without rejecting soul. A holistic temporal model allows for a holistic self-knowledge.

BIOSKETCH

Carolyn J. Love (C.J.) earned a Bachelor of Science in Genetics from the University of Wisconsin, worked in clinical cytogenetics, and attended Edgewood College, earning a Master of Arts in Religious Studies. Dr. Love entered the Constructive Theology Ph.D. program at Loyola University Chicago, where she focused on the intersection of science and theology, presenting several papers at conferences. She defended her Ph.D. dissertation with distinction, titled, “Re-thinking Anthropomorphism through a Genetic-Event Philosophy of Time.” Since then, Dr. Love delivered and published the paper, “God, Genetics, and Event Phenomenology: Re-Thinking Common Human Experience of Temporality In Theology, and Its Usefulness in Science, Theology, and Contemporary Culture,” which can be found on Open Theology, 2015; 1: 415-424 (<http://www.degruyter.com/view/j/opth>).

PLAYFUL LEARNING

Pat Bennett

Lawrence, 4:00–4:45 P.M.

ABSTRACT

See the abstract for Pat’s session on Monday, page 15.

BIOSKETCH

See the Chapel Services description on page 10 for Pat’s biosketch.

TUESDAY EVENING

DIALOGUE WITH THE DIALOGUERS

Elliott, 7:45–9:00 P.M.

An opportunity for informal conversation with the two persons who were in dialogue in the morning session. Facilitated by John Teske or Pat Bennett.

IRAS WORKING GROUP MEETINGS

Lawrence, 7:45–9:00 P.M.

The five IRAS Working Groups will meet in order to plan the major objectives and activities for the coming program year. Come and see how and where your interests and talents can make a difference. The Working Groups are: Membership Engagement (Jennifer Whitten, chair); Organizational Relationships (Karl Peters, chair), Summer Conferences (Whitney Bauman, chair), Administration (Jane Bengtson, chair) and Finance, (David Klotz, chair).

WEDNESDAY MORNING

DIALOGUE ON KNOWING GOOD:
WHAT ARE THE BIOLOGICAL BASES OF
KNOWING GOOD?

Margaret Rapaport and Christopher Corbally

Elliott, 9:30 A.M.–10:40 P.M.

*Human Phenotypic Morality and the Biological Bases for
Knowing Good*

ABSTRACT

Committed to the use of modern scientific findings in neuroscience, cognitive science, information science, and palaeoanthropology to understand human phenotypic morality, the speakers rely on these disciplines to explicate the origins of moral and (and to an extent) religious capacity in the genus Homo. They first review models used by others in (1) analyses of living primates and attempts to identify precursors of morality in their sociability, and (2) research on living humans who cannot “know good” or make

moral decisions because of brain dysfunction. Serious deficiencies in these approaches are analyzed, first, in a review of neuroscientist Sam Harris, who rejects cultural relativism when evaluating morality, emphasizing that consciousness is the only true moral context and science has access to states of conscious “well being.” The authors turn to the evolutionary origins of morality by using neuroscience, cognitive science, and information science to propose a model of human phenotypic morality, and then they discuss its Human Lineage Specific characteristics.

BIOSKETCHES

Dr. Margaret Boone Rappaport, née Margaret S. Boone, is a cultural anthropologist who works as a futurist, lecturer, and science fiction writer in Tucson, Arizona. She earned her doctorate at the Ohio State University in 1977. Her dissertation was on the adjustment of Cuban refugee women and families. For fifteen years she lectured in sociology and anthropology at Georgetown and George Washington Universities, and testified twice to Congress on infant mortality. She is a past chair of the Ethics Committee, American Anthropological Association. She has authored *Computer Applications for Anthropologists*, *Capital Cubans: Refugee Adaptation in Washington*, *Capital Crime: Black Infant Mortality in America*, along with first authorship of many articles, including in *Zygon: Journal of Religion and Science*.

As President, Policy Research Methods, Incorporated, Falls Church, Virginia, she was a contractor to federal and state agencies for over twenty years. Recently, she co-founded The Human Sentience Project, which does research on and offers speaking services in science and religion topics. Dr. Rappaport is also a prize-winning short story and poetry writer.

Rev. Dr. Christopher Corbally is a Jesuit astronomer for the Vatican Observatory Research Group in Tucson, Arizona, for which he has served as vice-director, and liaison to its headquarters at Castle Gandolfo, Italy. He is associate professor at the Department of Astronomy, University of Arizona, and ministers to a wide variety of Catholics, including Native Americans. He is a past president of IRAS, was co-organizer for their conference on “Life in the Universe,” and is the other co-founder of the Human Sentience Project. Chris is looking forward to singing in the IRAS choir again.

SMALL GROUP DISCUSSIONS

Elliott, 11:00–12:10 P.M.

WEDNESDAY AFTERNOON

CROSS CULTURAL CONVERSATION AS A NEW WAY OF LEARNING

Anindita Balslev, Shapley-Booth Fellow

Elliott, 2:00–3:30

ABSTRACT

Despite that a global sharing of advanced scientific technology has made it possible for us today to traverse even the most rough and rugged geographical distances in terms of travel and communication, it has still not bridged the gaps that are profoundly cultural. So, my answer to the central question of this conference, “What does knowing and living reliably and humanely now require of us—as persons, communities, institutions and whole societies?” is simply that we make a sincere effort to openly engage in ‘cross cultural conversation’, cutting across the boundaries that we have erected along the lines of nationality, gender, ethnicity, race, religion and others. This conversation calls for a setting where ‘we’ do not simply speak ‘about’ or ‘to’ the other but ‘with’ each other. This is worth trying as it may well turn out to be “a new way of learning” about matters of which we were unaware, helping us in the process to ‘unlearn’ our prejudices.

If we are to combat a system of violence and polarities, which seems to be slowly but surely engulfing us, it appears upon analysis that it is often based on mono-categorization of people that perpetuate the ‘we-they’ divide. A careful examination of various ramifications of our multiple identities—allowing inputs from multiple disciplines and various walks of life—can be expected to bring about a sense of a ‘larger identity’ and raise a state of ‘global consciousness’ where the world will not be seen merely as a marketplace or as a battlefield where greed and hegemony set the tone for human interrelationships.

Today neither a religious nor a scientific community must insist on being the sole repository of knowledge and wisdom but must treat science and religion as undoubtedly the forces that can bring about major transformation in our collective life, transcending all borders—geo-political and cultural.

BIOSKETCH

Dr. Anindita N. Balslev [M.A. (Cal), Ph.D (Paris)], is at present Jawaharlal Nehru Fellow at JNMF, New Delhi. Based on her professional experiences in India, Denmark, USA and France, she has created a forum entitled, ‘cross-cultural conversation’ (CCC) and organizes CCC international conferences. She is the author of *A Study of Time in Indian Philosophy*, 3rd ed., New Delhi, 2006; *Cultural Otherness: Correspondence* with Richard Rorty, 2nd ed. USA, 1999; *Indian Conceptual World*, New Delhi, 2012; *The Enigma of I-consciousness*, New Delhi, 2013. She is also the editor of several books as *On India: Self Image and Counter Image*, Sage, 2013 and *On World Religions: Diversity, Not Dissension*, Sage, 2014.

A CONVERSATION WITH WENTZEL

Wentzel van Huyssteen

Lawrence, 2:00–2:45 P.M.

ABSTRACT

A chance for informal conversation with Wentzel van Huyssteen, one of our keynote speakers, facilitated by Jerry Stone.

BIOSKETCH

For Wentzel's biosketch, see page 13.

WEDNESDAY EVENING

DIALOGUE WITH THE DIALOGUERS

Elliott, 7:45–9:00 P.M.

An opportunity for informal conversation with the two persons who were in dialogue in the morning session. Facilitated by John Teske or Pat Bennett.

IRAS WORKING GROUP MEETINGS

Lawrence, 7:45–9:00 P.M.

The five IRAS Working Groups will meet in order to plan the major objectives and activities for the coming program year. Come and see how and where your interests and talents can make a difference. The Working Groups are: Membership Engagement (Jennifer Whitten, chair); Organizational Relationships (Karl Peters, chair), Summer Conferences (Whitney Bauman, chair), Administration (Jane Bengtson, chair) and Finance, (David Klotz, chair).

THURSDAY MORNING

DIALOGUE ON KNOWING OURSELVES: HOW DO WE KNOW OURSELVES?

Elliott, 9:30 A.M.–10:40 P.M.

*Knowing Ourselves as Embodied, Embedded and
Relationally Extended*

Warren S. Brown

ABSTRACT

This essay explores the nature of the "self" that we seek to know. It outlines a view of ourselves as persons that departs from the dominant Cartesian model—that is, the idea that there is within us a soul, or self, or mind that is our hidden, inner, and real self. The alternate idea that is explored comes from recent moves in the philosophy of mind that are more consistent with modern neuroscience. This view emphasizes the bodily, active, contextual, relational, often simulated, and sometimes extended nature of the selves that we are. Finally, the impact of this alternate view on the theology (particularly theological anthropology) of the author is described.

BIOSKETCH

Warren S. Brown is professor of psychology and director of the Lee Travis Research Institute at the Fuller Graduate School of Psychology. He is a research neuropsychologist/neuroscientist currently most interested in the cognitive and psychosocial impact of agenesis of the corpus callosum in older children and adults. He has also studied callosal function in dyslexia, attention deficit hyperactivity disorder, multiple sclerosis, and Alzheimer's disease. In addition, he has done research on brain wave changes associated with aging and dementia, language comprehension, dialysis treatment for kidney disease, and attention deficits in schizophrenia. Most recently, Brown and colleagues from other institutions have been involved in research into the psychology and neuroscience of exemplars of the virtues of compassion and generosity. Brown is author or editor of four books on science and philosophy/religion (*Whatever Happened to the Soul*, edited with Nancey Murphy and H. Newton Malony; *Did My Neurons Make Me Do It?*, with Nancey Murphy; *Neuroscience, Psychology and Religion*, with Malcolm Jeeves; and *Physical Nature of Christian Life* with Brad Strawn).

How Do We Know Ourselves? From the Outside In

John A. Teske

ABSTRACT

Part of the epistemological crisis of the 20th century was in establishing that introspection provides very little in the way of reliable self-knowledge, on philosophical as well as empirical grounds. My position takes little contention with the likelihood that embodied and even external forms of cognition must play a large role in how our knowing, our self-knowing in particular, is generated by and constituted within our embodied, embedded, situated and even external and symbiotic relationships with our material, technological, and symbolic culture. Nevertheless, I believe much of this knowledge is unconscious and implicit, knowledge by doing, knowledge *of* rather than knowledge *that*, and, however adaptive it may be, is not part of our self-represented selves. While we all recognize that we have full actual selves to which our self-representations do not do full justice, we hold our narrative accounts more central to our conscious experience of ourselves in the world. Hence, my position focuses on the formation and existence of this narrative self, and its relationship to the realities of our lives for which the reliability of its account is problematic. We will explore its relationship to the comprehensibility and meaning of our actions, as well as the cognitive neuroscience behind its limitations. These include an understanding of its relationship to pathological forms of confabulation, the generation of plausible but insufficiently grounded accounts of our actions, and the normal patterns of narrative creation and checking functions. The focus here will be on the clues about self-deception which this may provide. We will then examine the evolutionary logic of self-

deception, particularly in the service of deceiving others, and its tactical and strategic advantages. We can recognize that such deception may produce adaptive results, particularly in service of the “commitment strategies,” over and above kin-selection or reciprocal altruism, that give our species access to results otherwise unobtainable. I will suggest that it is largely in our close relationships with other human beings, the relationships so well served by these very strategies, that we may also find the powerful counterbalancing feedback which may provide a route to positive change and self-transcendence. Nevertheless, we will also warn about a shadow side for which our ideological, philosophical, or religious contexts can provide both acknowledgement and hope.

BIOSKETCH

John A. Teske, PhD, is professor of psychology at Elizabethtown College, Elizabethtown, PA 17022 U.S.A. He teaches about emotion, personality, and the history of psychology, as well as interdisciplinary courses such as “Narrative and Identity,” “Brain, Mind, and Spirit,” and “Neuromythology.” He has published empirical research on nonverbal behavior, environmental psychology, cognitive development, and close relationships. His post-empirical focus has been in the science-religion dialogue, particularly on the cognitive science of spirit, and he has published regularly in *Zygon: Journal of Religion and Science*, including “From Embodied to Extended Cognition” (2013), “Externalism, Relational Selves, and Redemptive Relationships” (2011), “Narrative and Meaning in Science and Religion,” (2010), and “Neuromythology: Brains and Stories” (2006). He is a member of the International Society for Science and Religion. He was president of the Institute on Religion in an Age of Science (IRAS) from 2005–2008, was voted an Academic Fellow in 2010, and is the lead organizer for this year’s conference on “How Can We Know? Co-creating Knowledge in Perilous times.”

SMALL GROUP DISCUSSIONS

Elliott, 11:00–12:10 P.M.

THURSDAY AFTERNOON

IRAS ANNUAL MEETING

Elliott, 2:00–3:30 P.M.

This meeting is open to all interested persons. The major items of business are the election of new members to the IRAS Council and the revision of our by-laws. Only persons who are members of IRAS at the beginning of the meeting may vote.

Memberships will be accepted in the lobby each day from 1:30–2:00 P.M.

CROSSING BOUNDARIES: PROMOTING CONSTRUCTIVE DIALOGUE IN AN AGE OF RELIGION AND SCIENCE

Spencer S. Stober and Donna Yarri

Lawrence, 2:00–2:45 P.M.

ABSTRACT

This workshop will draw upon the shared research and teaching of a theologian (Professor Donna Yarri) and a biologist (Professor Spencer S. Stober). They have been working together at the intersection of religion and science for 12 years, including book projects, articles/essays, and co-taught classes. They seek to engage workshop participants in a discussion of how religious and biological perspectives may inform our understanding of morality and the complex issues of our time. In the workshop, they will discuss their concept of “biologist,” with a striving to include both scientific and faith-based understandings in respectful dialogue concerning issues such as genetic technologies, the origins of life, and creating a sustainable future. They will play discipline-specific roles during the workshop—sometimes literally wearing the “hats” of their disciplines—while at the same time seeking common ground as “Biologists.” They will then utilize a case study entitled “My Genes Made Me Do” from their published book, in order to encourage participants in active dialogue to illustrate and help us better understand various perspectives on moral issues, both social and environmental. Their role-play will create a workshop atmosphere where participants feel free to express thoughts, while at the same time encouraging everyone to defer judgment and seek a better understanding of issues and perspectives. The intent is for us to better understand the underlying assumptions of our disciplines in order to promote a shared understanding of the moral issues that confront our species so that we might achieve a sustainable future.

BIOSKETCH

Dr. Spencer S. Stober (Biology) and Dr. Donna Yarri (Theology) are professors at Alvernia University in Reading, PA, and they have worked together at the intersection of science and religion for over 12 years. Both Dr. Stober and Dr. Yarri have received the Christian R. & Mary F. Lindback Foundation Award for Excellence in Teaching, as well as being named as the first two Neag scholars, which recognizes excellence in teaching and research. They have co-taught classes entitled “God, Science, and Designer Genes” (also the title of their book, published by Praeger/ABC-CLIO in 2009), and “God, Darwin, and the Origins of Life” (the title of their forthcoming volume). Dr. Stober also teaches graduate courses in education and leadership, and does research on environmental sustainability. Dr. Yarri primarily teaches courses in Christian ethics, and her other research interests include the ethical treatment of animals, religion and popular culture, and social justice.

THE BIRTH AND DEATH OF THE UNIVERSE

Herb Fried

Elliott, 4:00–4:45 P.M.

ABSTRACT

Beginning with a QED-based Model of a realistic Quantum Vacuum Energy, associated with electrically-charged leptons and quarks, we are able to construct a Dark Energy which agrees nicely with that required by current Astro observations to understand the continuing, and small, acceleration of the Universe "outwards", in opposition to the continuous, classical forces of Gravity which tend to attract all masses to each other. In order to apply the same QVE model to Inflation, which represents the huge initial burst of energy/matter coming from the Big Bang, out of which our present Universe was formed, it was necessary to introduce the idea of electrically-charged, fermionic tachyons and anti-tachyons also fluctuating in the QV, one pair for each lepton and quark pair. And this leads to a perfectly acceptable model of Inflation, whose beginning and ending times as well as energy densities at those times are in accord with those conventionally accepted; and, it should be noted, that the mass chosen for such tachyons can be less than, or on the order of, or greater than that of the Planck mass.

Can such tachyon pairs ever escape from the QV, and be able to travel freely throughout space-time? Most definitely, since they could be torn out of the QV by the explosion of a nearby Supernova. And now a charming possibility appears, since a high-energy, electrically-charged, fermionic tachyon is a perfect candidate for a particle of Dark Matter: for while it can absorb photons it meets during its motion through galactic space, it will reabsorb almost all photons that it emits. At this point we have a sequential picture of how Inflation could be related to Dark Matter and Dark Energy. But what is the possible origin of Inflation? Where and why did the Big Bang occur?

Suppose that a very high-energy tachyon is quietly moving through some distant galactic region when it suddenly, and unexpectedly, meets a similar anti-tachyon; and the two annihilate. At that spot of annihilation, if the tachyon's energy is larger than M_P , the energy density could be much larger than that associated with the Planck mass; and something in one of the above three theories: gravity, quantum mechanics, or special relativity must break down.

A few moments' thought provides the needed answer: At that spot of annihilation, and just like an immense balloon bursting at that spot, the immense amount of energy stored in the Quantum Vacuum is able to burst into the Real Vacuum of everyday particles; and this is the Why and the How of the Big Bang, as the Vacuum Energy of the existing Universe explodes into what then becomes a New Universe, with no memory of its origin. The Old Universe's Vacuum Energy now fills the New Universe with matter and energy, as well; as a growing component of New Vacuum Energy.

And what is the fate of the Old Universe, which continues to lose essentially all of its original Vacuum Energy? A possible answer to that question will, most appropriately, be left for the very end of the Workshop.

BIOSKETCH

Herb Fried is currently an emeritus and research professor of theoretical physics in the Physics Department of Brown University, and a long-time member of IRAS, he has long specialized in various aspects of Quantum Field Theory. He is the author of four textbooks on these subjects, of which the most recent, published by World Scientific Press, is entitled *Modern Functional Quantum Field Theory*. What continues to amaze the author is how such extremely small quantum effects can lead to such huge, classical results.

GOD IS RANDOM: A NOVEL ARGUMENT FOR THE EXISTENCE OF GOD

Serkan Zorba

Elliott, 4:45–5:30 P.M.

ABSTRACT

Applying the concepts of Kolmogorov-Chaitin complexity and Turing's uncomputability from the computability and algorithmic information theories to the irreducible and incomputable randomness of Quantum mechanics, a novel argument for the existence of God is presented. Concepts of 'transintelligence' and 'transcausality' are introduced, and from them, it is posited that our Universe must be epistemologically and ontologically an open universe. The proposed idea proffers a new perspective on how humankind would perceive an infinite intelligence. The paper can be viewed on PhilPapers at <http://philpapers.org/rec/ZORGIR>.

BIOSKETCH

Serkan Zorba is Professor of Physics at Whittier College, Whittier, CA. His research and scholarship interests span a wide range of seemingly disparate disciplines: nanoscience, speculative cosmology, and the intersection between physics, philosophy, and theology. In addition to numerous articles in the area of nanophysics, he has authored a new argument for the existence of God from the irreducible randomness of quantum mechanics: "God is random: a novel argument for the existence of God," and propounded a potentially revolutionary hypothesis in cosmology in a paper titled "Dark energy and dark matter as inertial effects" to explain the two most outstanding and vexing problems in modern cosmology today, namely, dark energy and dark matter, with a single paradigm: a larger Universe with a disk-shaped topology—encompassing our observable universe—rotating globally. He has shown that in such a larger rotating Universe, dark energy and dark matter would be nothing but a reflection of cosmic centrifugal and Coriolis forces.

THURSDAY EVENING

DIALOGUE WITH THE DIALOGUERS

Elliott, 7:45–9:00 P.M.

An opportunity for informal conversation with the two persons who were in dialogue in the morning session. Facilitated by John Teske or Pat Bennett.

FRIDAY MORNING

STAR ISLAND DIALOGUES – A RE-VIEW

Elliott, 9:30 A.M.–10:45 P.M.

We will end our week of dialogues with a re-view of the week.

SMALL GROUP DISCUSSIONS

Elliott, 11:00–12:10 P.M.

We will meet in our small groups for the last time and then move to a final morning plenary session.

FRIDAY AFTERNOON

KNOWING THE PAST TO CO-CREATE THE
FUTURE

Tom Uytterhoeven, Shapley-Booth Fellow

Elliott, 2:00–3:30 P.M.

ABSTRACT

In cognitive science of religion, a distinction is often made between reflective and unreflective elements of religion. While this distinction might seem to be a reason for conflict between cognitive science of religion, which focuses on the latter, and theology, which identifies foremost with the former, this paper will use it as a starting point for a dialogue between both fields. Unreflective elements in religion, we will argue, are part of the information which the human species accumulated throughout its evolutionary history (Bellah 2011). It is the reflection upon these elements, illuminated by knowledge about their emergence, which enables theology to connect humanity with its deep past. This connection, we will suggest, is of crucial importance in the light of current global challenges.

First, we will argue that the study of the emergence of religion's unreflective elements helps to understand the context of religion in deep history, or religion's 'deep context'. Second, we will discuss Philip Hefner's view on religion as the connection or, as one might add, the 'interface', between the human species and nature (Hefner 1993). Third, we will apply Lieven Boeve's notion of 'recontextualisation' on the dialogue between theology and scientific studies of religion to

show the relevance of this dialogue for a world in search of wisdom (Boeve 2003).

BIOSKETCH

Tom Uytterhoeven (Bonheiden, born 1972) graduated in 1993 as teacher in primary education. Since 2003 he combined a full-time job, first as a teacher and later as a lecturer in religious education at Thomas More Mechelen University College with the study of theology at KU Leuven. Since 2012, he is a doctoral researcher preparing a dissertation on evolutionary explanations of religion. He is a member of the Research Unit of Systematic Theology and the Study of Religions at the Faculty of Theology and Religious Studies, KU Leuven.

MEETING OF IRAS COUNCIL

Sandpiper, 4:00–5:30 P.M.

This meeting is open to all interested persons.

HOW WE KNOW: THE PRIME MEME

James Clement van Pelt

Elliott, 4:00–4:45 P.M.

ABSTRACT

The wisest from many traditions agree on this much: very few of us perceive reality as it is. Instead we know what we know by means of cultural constructions, which filter our perceptions into the representations and significations we mistake for the real. "Awake, O Sleeper," urges the Christian Bible, while the Zen Master defines the goal beyond all goals as "Direct Seeing". Yet little has been done by Western culture to investigate how to penetrate systematically the veils that allegedly enshroud us so as to keep us from truly knowing.

Life evolves via biological dynamics toward the advent of sentience, which rapidly evolves to the point when cultural forms appear, even before humanity itself. Those forms, now called memes, then develop via dynamics parallel to natural selection, except that they often originate from intentional innovation rather than random mutation, and they evolve much more rapidly as mental and affective forms. Culture thus evolves as a vast conglomeration of unfolding memetic systems in which each meme interacts with others to help sustain the overall process. As they knit together into the all-embracing construct we call culture even while competing for niches within the ideological and affective ecology, those memetic systems can facilitate the survival and flourishing of persons who depend on it, or they can endanger, impoverish, and even condemn those held in thrall. People trapped in an unsustainable system must either break out or go down with it, but they are helpless if they cannot somehow fight free of its occluding shroud.

The wisest voices from the aborning alliance between science and religion now tell us: our own global

civilization is unsustainable; we are overspending the planet's resources by a factor of six; we are plunging headlong into a planetary mass extinction; yet we are charged with planetary stewardship. Something has gone terribly, terribly wrong. Turning aside from their prophecy, we continue to pursue our quotidian affairs, unquestioningly dependent on the global memetic system we call civilization that has brought unprecedented prosperity and god-like powers. But along with those divine gifts comes unprecedented peril springing from a fatal and essential error—a lie so central to the ways we know that only the wisest can guess at its nature even as we all must face its consequences.

One way of approaching that most necessary investigation is to work backward through human history toward the originary cultural source, the ur-culture, until we arrive at a hypothesis as to the origin of the memetic system at the foundations of human civilization. This can be called the Prime Meme: that cultural form which first differentiated humanity from our evolutionary precursors. Once that Prime Meme is disclosed and defined, it becomes possible to trace its development forward via myth and scripture, tradition and cultural history until we reach our own time. We can then extend its trajectory to determine whether and to what extent the regnant memetic system is in fact parasitical on us, its human hosts, and if so, what can be done to purge and supplant it with a beneficent successor under conscious human control for the benefit of all sentient beings.

There is no time for everyone to become a Zen Master. Our only choice, it seems, is to turn to technology. Yet this much we can know for sure: If there is a technology to this yet to be discovered, it will be a technology of planetary awakening.

BIOSKETCH

James Clement van Pelt co-founded and led Yale's Initiative in Religion, Science & Technology from 2003 to 2012 and since 2003 has been the Yale presence at many conferences and symposia relevant to science-

religion and consciousness studies. He has also co-produced eight international conferences at Yale featuring leading scholars in the Euro-American academic community. He has authored, co-authored, edited, and contributed to various articles and books, including *Seeking Home in a Strange Land: True Stories of the Changing Meaning of Home* (Utrecht: Stili Novi Publishers), available during this year's conference on Star Island, and *Different Cultures, One World* (Amsterdam: Rozenberg Publishers). He has coordinated the Working Group in Religious and Spiritual Perspectives on Bioethics for Yale's Interdisciplinary Center for Bioethics, has co-taught science-religion courses at Yale, and has presented lectures on science-religion topics there and at other institutions. He has also co-taught the Stimson Seminar at Yale's MacMillan Center for International and Area Studies.

He holds the master of arts in religion (*magna cum laude*) from the Yale Divinity School, where he was a research fellow from 2003 to 2005 and an instructor/lecturer from 2005 to 2007.

He has been the co-founder and director of alternative institutions such as the Connecticut Folk Festival and Green Expo, Promoting Enduring Peace, the Miccosukee Land Cooperative, and the Center for Participant Education at Florida State University. During his technology career he was the director of advanced solutions for Dun & Bradstreet; authored the first consumer software catalogue for American Express; and served as technology consultant to other corporations, nonprofits, and institutions.

FRIDAY EVENING

TALENT SHOW

As is our custom, we close the week with a bang-up talent show.

PEOPLE

Conference Planning Committee

John Teske	Cochair
Pat Bennett	Cochair
Ruben Nelson	Cochair, Operations

Jane Bengtson, Marion Griswold, Mark Kuprych,
Karl Peters, Jennifer Whitten

Conference Administrators

Conference Coordinator	Jane Bengtson
Registrar	Marion Griswold

Conference Facilitators

Announcements	Ruben Nelson
Archi Pelagos Coordinator	Jennifer Whitten
Archi Pelagos Staff	Alice Austin, Belinda Bodnar, Malcolm Dawkins, Nina Habibi, Henry Jorgensen, Susan Treleaven
Art Workshop	Jane Penfield
Banquet Coordinators	Carol Orme-Johnson, Dolly Ferver, Rosie Ferver, Ruth Orme-Johnson, Amy Pooley
Chapel Speaker	Pat Bennett
Choir Director	Jane Penfield
Memorial Service	Edmund Robinson
Minister of the Week	Edmund Robinson
Music Director	Frank Toppa
Program Book (Orange Book)	David Klotz
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Social Hour Coordinator	Mark Kuprych
Social Hour Mixologist	Alice Austin
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Josh Ruzsala

Shapley-Booth Fellows

Anindita Balslev, Christina Early, George Gantz,
Jeremy Kidwell, Tom Uytterhoeven

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Solomon Katz	Vice President, Science
Ursula Goodenough	Vice President, Interdisciplinary Affairs
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Edwin Laurenson	Vice President, Development
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Patricia Bennett	Roger Brown
Paul Carr	Marion Griswold
Stanley Klein	Sehdev Kumar
Mark Kuprych	Tariq Mustafa
Ruben Nelson	Ruth Orme-Johnson
Edmund Robinson	Eugene Troxell
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Karl Peters	CASIRAS Representative

Others with Official Responsibilities

Solomon Katz	AAAS Representative
Marjorie Davis	Historian
Dan Solomon	Membership Coordinator
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Jane Bengtson	Parliamentarian

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Interest Groups	John Teske
IRASNet	Ursula Goodenough
Long-Range Conf. Planning	Whitney Bauman
Newsletter	Jennifer Whitten
Nominating	Jane Bengtson
Publicity	(vacant)
Student Scholarships	Jane Bengtson

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It is with deep gratitude that we acknowledge the following persons for their gifts to IRAS during the past year. It has made an enormous difference to our sense of the future.

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Note from David Klotz: If I have made a mistake with this listing, please see me so that it can be corrected in the archive copy of this book.

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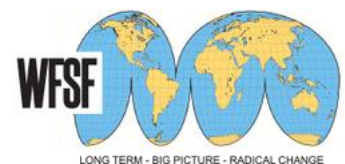
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Evolution Weekend
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ACKNOWLEDGMENTS

First, we are grateful for every person who was on Star Island this week, for whatever reason and of whatever age. Your presence among us is appreciated. Much of the work of making a successful event possible is done by those who are unseen—kitchen staff, grounds keepers, babes in arms, carers for children—to name but a few.

Second, we are grateful for every person who was not with us this week, but who contributed over the past year in ways that made this week possible.

Third, we are grateful for all persons who participated in any of the events of the week. To the best of our ability we did this for you. Without you our work would have been sterile. With you we have lift-off.

Fourth, we are grateful for each person who spoke, dialogued, presented and facilitated. Your stimulating leadership moves us.

Fifth, we are grateful for the present generation of Star Island staff, both permanent and temporary. You have made our life easy and contributed to our success in ways we cannot measure.

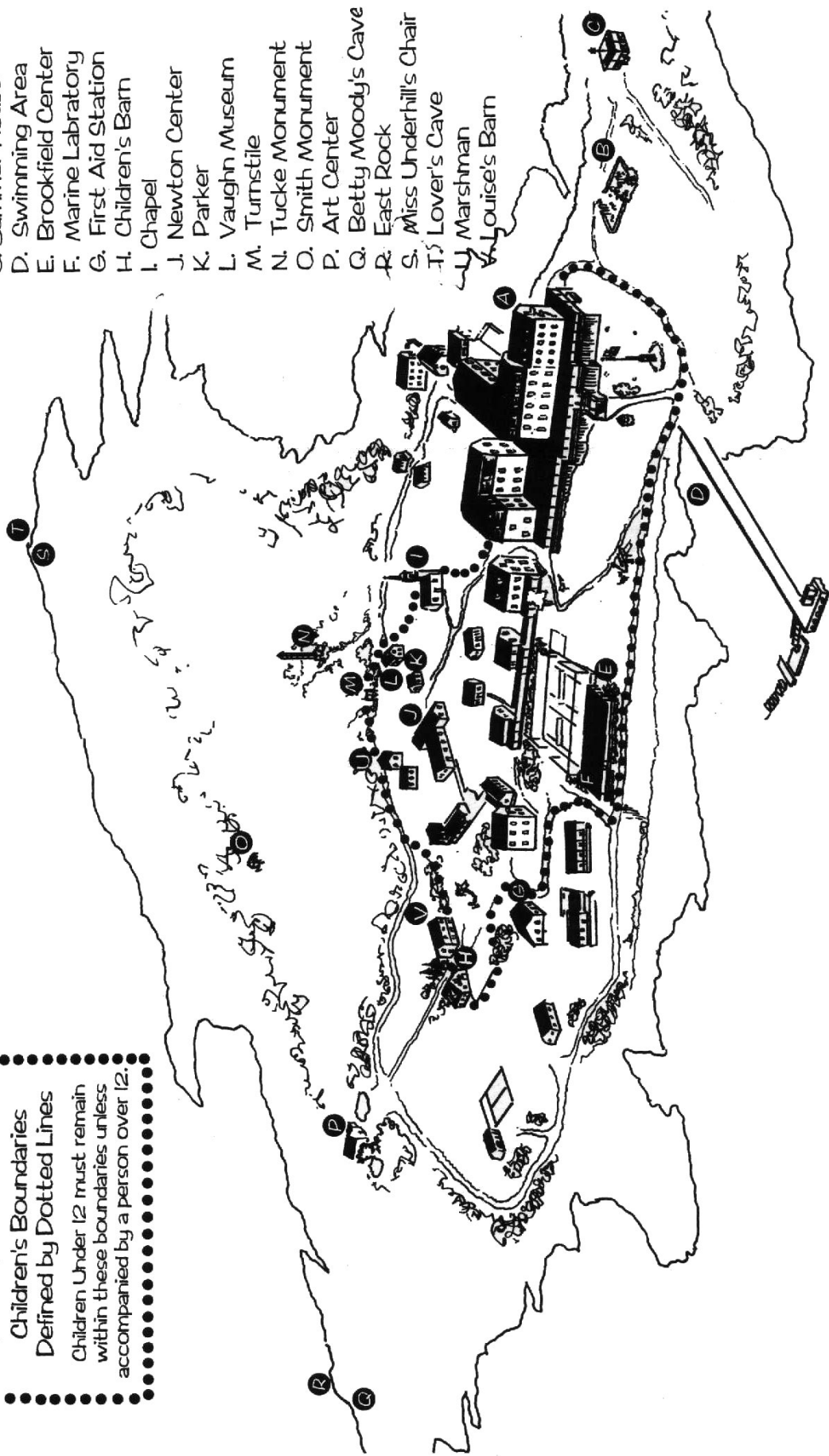
Finally, we are thankful for all of the generations of those who over many decades have kept both IRAS and Star Island alive as a source of love, courage, and faith.

Co-chairs, 2016
John Teske
Pat Bennett
Ruben Nelson

A Guide to Star Island

●●●●●●●●●●
 Children's Boundaries
 Defined by Dotted Lines
 ●●●●●●●●●●
 Children Under 12 must remain
 within these boundaries unless
 accompanied by a person over 12.

- A. Oceanic Hotel
- B. Caswell Cemetary
- C. Summer House
- D. Swimming Area
- E. Brookfield Center
- F. Marine Labratory
- G. First Aid Station
- H. Children's Barn
- I. Chapel
- J. Newton Center
- K. Parker
- L. Vaughn Museum
- M. Turnstile
- N. Tucke Monument
- O. Smith Monument
- P. Art Center
- Q. Betty Moody's Cave
- R. East Rock
- S. Miss Underhill's Chair
- T. Lover's Cave
- U. Marshman
- V. Louise's Barn



62nd Annual IRAS Conference Saturday, June 25 thru Friday, July 1, 2016

PERIOD	ACTIVITY	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
7:00-7:30 A.M.	Polar Bear Swim					Polar Bears (Brrri!)		
7:45-8:30 A.M.	Breakfast				Breakfast			
8:40-9:15 A.M.	Chapel				Pat Bennett			
9:30-10:40 A.M.	Star Island Dialogues (EI)		Star Island Dialogue Overview	Van Huyssteen & Marks	Louise Sundararajan & Phillip Cary	Margaret Rapaport & Christopher Corbally	Warren Brown & John Teske	Star Island Dialogue Review
10:40-11:00 A.M.	Break				Break			
11:00-12:15 P.M.	Small Groups (EI)				Groups			
12:30-1:30 P.M.	Lunch				Lunch			
1:30-2:00 P.M.	Break			Break		Break (Council)	Break	
2:00-3:30 P.M.	Shapley-Booth Papers Workshops Art Barn (2:00-4:00)	2:25 P.M. Travel to Star on the Thomas Laighton	S-B Lecture (EI) - George Gantz Workshop (La) - David Buller & Curtis Baxter Art Barn	S-B Lecture (EI) - Christian Early Workshop (La) - Ruben Nelson Art Barn	S-B Lecture (EI) - Jeremy Kidwell Workshop (La) - Paul Carr Art Barn	S-B Lecture (EI) - Anindita Balslev Workshop (La) - Jerome Stone Art Barn D	IRAS Annual Meeting (EI) Workshop (La) - Spencer Stober & Donna Yarrri Art Barn	S-B Lecture (EI) - Tom Uytterhoeen Art Barn
3:30-4:00 P.M.	Break				Break			
4:00-5:30 P.M.	Competitive Papers Playful Learning Council	4:15 P.M., Elliott "Fire and Water" Orientation (Required)	Paper - Ardon Shorr A	Papers (EI) - Whitney Bauman and Maynard Moore Playful Learning (La) Pat Bennett B	Paper (EI) - Carolyn Love Playful Learning (La) Pat Bennett C	Extended Break	Papers (EI) - Herb Fried and Serkan Zorba (Council)	Paper (EI) - James Van Pelt (Council)
5:30-6:30 P.M.	Social Hour (Newton)							Social Hour Art Show
6:30-7:30 P.M.	Dinner	Dinner	Dinner	Dinner	Lobster Dinner	Dinner E	Dinner	Banquet
7:30-8:30 P.M.	Choir (PP)			Choir				
7:45-9:00 P.M.	Evening Sessions	Formal Opening	Paying Attention (EI) Pat Bennett	Dialogue (EI) Update on IRAS (La)	Dialogue (EI) IRAS WGs (La) Pel Show 8:30 (Ly)	Dialogue (EI) IRAS WGs (La)	Dialogue (EI) (IRAS Executive)	Talent Show (EI)
9-15-9:45 P.M.	Candlelight Services (Chapel)				Candlelight			
10:00 P.M. - ?	Informal Time				Informal Time			Farewell Party (Newton)

Note: Breakfast begins at 7:45 A.M., rather than 8:00 A.M. We have two 1¼-hour morning sessions, a ½-hour break after lunch, and two 1½-hour afternoon sessions with a ½-hour break between them. All of this is intended to slow the pace, allow for deeper encounters, more ad hoc conversations, and time for reflection. Note the new time for morning chapel.

Room Key: Elliott (EI), La (Lawrence), PP (Pink Parlor), Ly (lobby)

A. Sunday: A Catholic mass will be held Sunday at 5:00 P.M. in the Chapel. All are welcome.

B. Monday: Boat trip to Appledore Island and Marine Lab; optional, \$25.

C. Tuesday: A Memorial Service for members of IRAS who have died since we last met; in the Chapel at 4:00 P.M.

D. Wednesday: Intergenerational Olympics on the front lawn from 3:00-4:00.

E. Wednesday: Ministry Interest Group meets over dinner at one of the side tables.