

Newsletter

of the

ASA & CSCA

volume 56 number 2

FROM COSMOS TO PSYCHE

JULY 25–28, 2014

Little more than a month from now, ASA, CSCA, and CiS members from around the world will converge in Canada to reflect on the glory of God and God's

creation through worship, fellowship, discussion, and the study of nature and the biblical world.

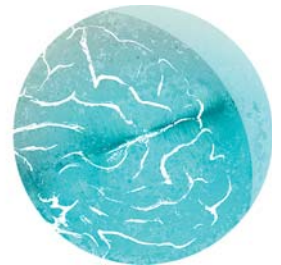
We in the ASA office, along with our brothers and sisters across two inter-

national borders, have been working hard to bring an exciting program to this year's Annual Meeting, featuring top scholars from diverse fields and a record number of parallel sessions

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FROM COSMOS
TO PSYCHE



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the
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The Director's Corner



“All things hold together in Christ,” the apostle Paul wrote to the church in Colosse. His profound insight into the universality of God’s creative and sustaining power through Christ continues to bring us awe and wonder as we study the world of nature. Exploring that comprehensive perspective is the challenge for the ASA/CSCA/CiS* annual meeting this summer. The theme “From Cosmos to Psyche” reflects the entire spectrum of the universe. From the origin of the cosmos to the ability of our minds to have consciousness and to be able to reason, the unifying factor is Christ. As Christians in the sciences, we study nature not only to quell our deep curiosity to understand the world in which we live, but also to glorify and worship our God who created it.

Five outstanding plenary speakers, from Australia, UK, Canada, and the USA, who were profiled in our previous issue, will be addressing topics such as bioethics, cosmology,

neuroscience, and biology. In addition, there will be a record number of contributed papers from our members, nearly 90 talks in four parallel sessions. There will be symposia on the physical sciences, life sciences, mind sciences, and environmental sciences, as well as a focus on emergence, theology, and on the application of science and technology in service to the poor. Some of these are discussed in more detail in this issue.

In addition, we are featuring two workshops by highly regarded leaders in the field. John Walton will teach a workshop on Genesis while Stephen Freeland will lead one on the origins of life. There are fascinating field trips to Niagara, the Royal Botanical Gardens, and a McMaster Campus Tour visiting the Nuclear Research Reactor and the Origins Institute. Our new affiliate, Christian Women in Science, will get together and have a special session. Finally, we are coordinating with “Academy Regained,” a special symposium by the contributors of a forthcoming book by that title. The science chapters will be covered in our meeting on Monday morning while the other chapters will be discussed at Redeemer College on Monday afternoon.

While the intellectual discourse at these meetings is a major attraction, I’d like to emphasize the human interaction factor. In today’s world, we are flooded with audio and video material of all types. It is often difficult to ascertain the

quality and credibility of these materials. Furthermore, the only human interaction is the endless stream of comments that are usually unhelpful. In contrast, in our meetings, there are opportunities for personal interaction with other attendees as well as with the speakers themselves. Most attendees of past meetings report that this is the most valuable part of the meeting. During meals and in between sessions, there is time for discussion and sharing our personal perspectives.

We are interactive human beings with a capability and a need to connect with others. Those connections can be through electronic or written means but nothing can replace the need for direct personal engagement. Our annual meetings continue to provide that interaction in an environment of open discussion and often vigorous debates. Differences of intellectual opinion are respected throughout the meeting. A highlight of our time together is the awesome opportunity to worship God together, singing hymns and giving praise to our Creator.

We invite you to come experience one of our meetings for yourselves. Act now to register by going to <http://network.asa3.org/event/ASA2014-Meeting>. We look forward to seeing you!

*This is a joint meeting of the American Scientific Affiliation, the Canadian Scientific and Christian Association, and Christians in Science (UK).

Welcome, New Members!

JANUARY–MARCH 2014

Ali, Ahmed –East Victoria Park, Perth, Australia
 Ancira, Estefanía –Monterrey, Nuevo León, Mexico
 Anderson, Gregory –Balcones Hts, TX
 Arnold, Michael –Bishop, GA
 Bengner, Kelvin –Langley, BC
 Bernal, Faisal –Barranquilla, Colombia
 Bovill, Mark –Yokine, Western Australia
 Butt, Khizer –Karachi, Karachi, Pakistan
 Chan, Man –Shatin, Hong Kong
 Claasen, Louann –Langley, BC
 Cookingham, Frank –Claremont, CA
 Cortes, Ismael –Montemorelos, Nuevo León, Mexico
 Danial, Michael –Costa Mesa, CA
 Davis, Dimitrian –University Park, IL
 de Zwaan, Joel –Chilliwack, BC
 Deem, Richard –Azusa, CA
 Feldner, Lucas –Sandia Park, NM
 Frohlich, Joshua –Langley, BC
 Gentile, Jesse –La Mirada, CA
 Gomez, Francisco –Winfield, IL
 Holland, Laura –Courtenay, BC
 Ivey, Eva –Weatherford, TX
 Johnson, Gary –LaGrange, GA
 Joseph, Hadly –Rome, Italy
 Kim, Se –Fairfax, VA
 Kung, Bonnie –Mississauga, ON
 Lorrington, Malina –Reno, NV
 Love, Shamain –Milwaukee, WI
 Lum, Sarah –Whittier, CA
 McCarthy, Jordan –Windsor, VT
 Micucci, Ronald –Georgetown, TX
 Middleton, Timothy –Oxford, UK
 Murphy, Jeffrey –Edmonton, AB
 Peterson, Todd –Chambersburg, PA
 Peterson, Joshua –El Paso, TX
 Petzinger, Sharon –Hampton, NJ
 Phillips, Daniel –Louisville, KY
 Reddell, Brandon –League City, TX
 Shaw, Matthew –Golden, CO
 Shi, Ye –London, UK
 Simonin, Paul –Van Etten, NY
 Skaife, Edward –Madison, WI
 Stanton, Christina –East Amherst, NY
 Swartz, Joanna –Newberg, OR
 Torgerson, Ariel –Tampa, FL
 Wiegand, Ellen –Lexington, KY
 Wiensz, J. Truitt –Swift Current, SK
 Wiltberger, Colleen –Naples, FL
 Wooden, Kenneth –Phoenix, AZ
 Woods, Timothy –Omaha, NE
 Wurster, Ted –Fanwood, NJ
 Zabolotniuk, Taryn –Vernon, BC
 Zhou, Wayne –Kirksville, MO

2014 ANNUAL MEETING

B 4 DAYS
Y 5 plenaries
 the **3** science/faith organizations coming together over international borders
N
U 1 BIG FANCY BANQUET
M 85 SESSION SPEAKERS
B 4 Field Trips
2 all-day workshops
R 9 amazing meals to share
S and grow in fellowship

continued from p. 1

and presentations by members and guests of our unique organizations. For many, our annual meeting is the flagship experience of membership in the ASA, where lasting bonds with friends and fellow scholars are forged and strengthened over mealtime discussion, worship, and free time.

We look forward to being hosted by McMaster University near Toronto, Canada, and the travel opportunities that occur along with attending the meeting.

This issue of the ASA/CSCA newsletter features a few more highlights of this year's meeting, including field trips, workshops, and symposia. Our joint meeting with CiS only occurs every few years, so if you can find a way to make the journey, it's an opportunity you won't want to miss!



~ Emily Ruppel, editor

Workshops

Workshop #1: Origins Today: Genesis through Ancient Eyes

John Walton, Leader

The rift between faith and science in Christian circles today often results in the marginalization of Christians engaged in the sciences, impediments to evangelism, and the attrition of young believers who are told that Christianity is incompatible with the acceptance of evolution or an old earth. This presentation on Genesis 1–3 offers a fresh perspective on this complex issue by seeking to understand the message of scripture within its ancient context.

A close reading of the Genesis creation account and an evaluation of its ancient Near Eastern setting raise the question of whether the Bible provides modern scientific information related to our understanding of the natural world (e.g., cosmology, biology, or human origins), or whether it offers a theological, rather than material, framework for thinking about the cosmos—for example, God made everything and is sovereign

over it. This question in turn leads us to inquire whether today's scientific conclusions regarding old earth, common descent, and parentage of the human race necessarily conflict with the Bible or theology. This workshop aims to facilitate a deeper reading of scripture among Christians seeking to take the Bible seriously.

Attendees will receive a free copy of John Walton's DVD on the same topic. Workshop Price: \$50

John H. Walton, professor of Old Testament at Wheaton College, specializes in the ancient Near Eastern backgrounds of the Old Testament, and specifically in Genesis. In recent years he has focused attention on the issue of origins in books such as Lost World of Genesis One (IVP) and Genesis 1 as Ancient Cosmology (Eisenbrauns).

Workshop #2: Progress and Challenges in Understanding Life's Origins

Stephen Freeland, Leader

The origin of life on Earth remains one of science's biggest mysteries. At some point (mainstream science coalesces around an estimate of 3.8+ billion years ago), physics and chemistry became biology on our planet.

On the one hand, there is little agreement about exactly how, when, and where this took place. On the other, there have been remarkable advances on related fronts—from evolutionary biologists using DNA to look back ever further in time to geophysicists detecting life's presence in Earth's oldest rocks; from astronomers discovering ever more-habitable environments within our own solar system and countless solar systems separate from our own to chemists understanding how crucial building blocks may have arisen.

This workshop will present an overview of these topics, with a series of four lectures interspersed by

spaces for discussions of the science and theological implications.

All participants will be given access to copies of the lectures, a selection of articles from *PCSF* that relate to these themes, and a guide to other resources with which to learn. Workshop Price: \$50

Stephen Freeland is an evolutionary biologist who studies how and why life on our planet evolved a system of genetic encoding. He is director of Interdisciplinary Studies at the University of Maryland Baltimore County. He received a Bachelor's degree in zoology from Oxford University, a Master's degree in computing and mathematics from the University of York, UK, and a PhD from Cambridge University's Department of Genetics before crossing the Atlantic to pursue a scientific career in the USA.

Field Trips

Niagara Escarpment and Gorge

The Geology of the Niagara Escarpment and Niagara Gorge will be led by Ken VanDellen and Steve Moshier and will include many classic exposures and sites. It will commence near Hamilton at a place called “The Devil’s Punchbowl” well known for its underfit waterfall, (and an ironic site for Easter sunrise services!). There will also be a stop and reflection time about an old gorge few people are aware of (except geologists). The buried St. David’s Gorge represents a complete former gorge system, now buried by glacial and post glacial sediment. The field trip will also include some tremendous views of the modern Niagara River gorge, referenced in various debates concerning the age of the earth. The trip will examine unparalleled exposures of mid Paleozoic sediment sequences, and the fascinating story around the Whirlpool Rapids. There is, of course, a planned stop at the famous Niagara Falls themselves.



Niagara Falls

If the hand of providence was guiding the timing of the Niagara Falls Field trip, with the participation of American, British, and Canadian participants, surely it is revealed in the Niagara Falls Field Trip. It is 200 years, TO THE DAY, that the last major battle on Canadian soil of the War of 1812, was fought at Lundy’s Lane, at Niagara Falls. A local historian will be lined up to discuss this event, as the tour takes in the memorial site and surrounding area. Oh yes, to prevent any recurrence of hostilities among the field trip participants, there will first be a roaring cruise to the base of the falls themselves. Plus everyone will have a chance to calm down as the trip finishes with some touring and shopping time at historic Niagara On The Lake.



McMaster Campus

This is an opportunity to do some background exploration of the university that will be the host site of the 2014 meeting. The tour of the Nuclear Reactor will be intimate, as the group will be broken into groups of 10. Build in 1959, this is one of the few research reactors operating on a university site, and has become renowned for its research in nuclear medicine. There will be an opportunity to investigate this work in detail, through the oversight of McMaster faculty member David Chettle. Also included in the tour will be some time at the dedicated research center for McMaster’s Origin’s Institute. You will discover a wide variety of origins research, plus hear about one of Canada’s few research centres with a dedicated Astrobiology program.



Royal Botanical Gardens

The “RBG” is Canada’s largest botanical garden and consists of a number of sites and programs. Regardless of the weather and season, the tour will include the site which is the “best in bloom” for that moment. In addition, we have lined up time with the RBG’s science department, and you will hear about some intriguing and important research and conservation initiatives that cover not only plant life, but also fish habitat, wildlife restoration, archeology, and much more. Anyone who visits Hamilton should leave saying they visited the “RBG.”



Symposia

Physical Sciences Symposium

Symposium Chair: Colin Humphreys

The Physical Sciences Symposium aims to relate recent advances in physical science to biblical interpretation and Christian belief. The topics to be considered include is there evidence for a divine mind behind the creation? Why are the laws of nature so fine-tuned as to produce a universe containing intelligent creatures? If the Big Bang was preceded by earlier cosmological phases what theological implications might this have? What are the main points of contact between physics and Christian theology? Why has the global mean surface temperature of our planet stopped rising since 1998 and what should be the Christian response? How useful are models in the search for truth? How should we interpret the early chapters of Genesis? What parts of quantum theory are still debatable? Does understanding some of the Crucifixion events in the light of modern science give evidence for the existence of God?

The symposium will also feature a major project for high-school students showing how modern astronomy is consistent with Christian faith.

Life Sciences: Biology, Medicine, Bioethics Symposium

Chair: Patricia Fitzgerald-Bocarsly

Life on Earth is characterized both by its complexity and diversity as well as by the common threads that link all living creatures. Increasingly, with biological discovery progressing at a dizzying rate, our ability to both understand the biological basis for life and to manipulate living organisms is also progressing at breakneck speeds. In this session, we will be examining how current research informs and is informed by Christian faith.

Topics to be considered include evidences for the inter-relatedness of animals and how evolutionary changes might occur, as well as the biological and Christian moral implications (bioethics) of humankind's ability to pharmacologically and genetically manipulate both ourselves and the organisms around us.

Christian Women in Science Symposium

Symposium Chair: Gayle Ermer

In this session, we will begin to explore issues related to the participation of Christian women in science, technology, engineering, and math (STEM) vocations. Presentations will address concerns at the intersection of Christian faith commitments, scientific understanding and manipulation of our world, and gender-related professional expectations. In ASA, as well as in many other STEM-related organizations, females are currently significantly under-represented, especially in leadership roles.

A major focus of the session will be on the new ASA affiliate that has recently been formed to support Christian women in STEM fields. Evaluation of the extent of under-representation of women and efforts to increase the contributions of women in STEM will be presented. Some of the challenges to female participation in STEM will also be explained from a Christian perspective.

Science & Technology as Service Symposium

Chair: Mike Clifford

In this session, we consider examples of how science and technology are being used to tackle engineering problems and material challenges facing remote communities and the disadvantaged around the world. Christian scientists and engineers must take a wide perspective, and see the potential to improve lives through appropriate use of available materials and technology.

The time is ripe to assess the sustainability of materials and the appropriateness of technology used in the Over Developed World; meeting the physical needs (rather than the social wants) of the present must not be allowed to compromise our ability to meet the needs of future generations.

Symposia contd.

Environment Symposium

Chair: Don Morton

Sessions on the Environmental Sciences will consider our Christian responsibilities to protect God's creation and enhance the lives of all people as well as the scientific basis of our present understanding of natural and man-made effects. In climate science, global temperatures have been essentially constant for the last 16 years while the concentration of carbon dioxide has risen steadily creating uncertainty about our understanding of the predictions and which actions are useful. We anticipate lively discussion.

Mind Sciences Symposium

Chair: Heather Looy

The Mind Sciences sessions explore human experience, thought, and behavior. There are two broad approaches. One draws on natural science and human science approaches to help us understand ourselves. For example, how does research on virtues like gratitude and altruism contribute to theological understanding? The other examines how the practices, power, and consequences of modern science may affect us psychologically, potentially alienating ourselves from our own experience and from the rest of creation.

Emergence: Information Theory, Complexity, and Theology Symposium

Chair: Arnold Sikkema

How did living things arise on a background of purely physical interactions? What features of physical reality are necessary, or perhaps sufficient, for biological reality? How does mind emerge from matter, psyche from cosmos, both in history and moment-by-moment? In what new ways could the creation continue to unfold? What theological, philosophical, and scientific principles and insights might contribute to and benefit from such interdisciplinary considerations?

Academy Regained Symposium

Chairs: Russell Kosits and David Koyzis

In 1987, historian George Marsden described what he called "the triumph—or nearly so—of what may be loosely called Kuyperian presuppositionalism in the evangelical [academic] community."

This "style of Christian thought" involved the rejection of certain forms of Enlightenment thinking widely embraced by North American Christians of previous generations, in which it was understood that contentious intellectual disputes between Christians and non-Christians could be settled through empirical inquiry and "clear thinking."

From a Kuyperian vantage point, by contrast, such disputes are the result of "disagreements about pretheoretical first principles, presuppositions, first commitments, or basic beliefs." From one vantage point, Marsden was right: this "worldview thinking" has become ubiquitous in Christian colleges and universities and in the Christian community more broadly. But from another vantage point, worldview thinking remains a promise unfulfilled.

The insights of Kuyperian presuppositionalism are underapplied, often cordoned off in university faculty mentoring programs or in "foundational" theology or philosophy courses, with the rest of the curricula being taught pretty much the way it's taught anywhere else, and with faculty research often indistinguishable from that conducted by our secular counterparts. Indeed, a decade later Marsden would lament that there are "almost no identifiable Christian schools of thought" in the mainstream academic disciplines.

These presentations—part of a book project tentatively entitled *Academy Regained*—will attempt to redress this situation. Here we hope to show the relevance, usefulness, and power of Kuyperian presuppositionalism (with an emphasis on the biblical narrative of creation, fall, redemption, and consummation) for the academic disciplines. In so doing, we hope to portray the Reformational worldview, not as merely a collection of slogans, but as an emerging school of thought with a worthwhile programme of research.

MEMBERS in GLORY

Robert E. Jervis

On May 21, 2014, Robert E. Jervis passed away, on his 87th birthday. He was a long-time Fellow of the American Scientific Affiliation and the CSCA. He was devoted to his Christian faith and his family. He was a distinguished scientist, a man of principle, but also great humility. Above all he was a man of integrity, greatly admired and respected by his students and scientific colleagues around the world and deeply loved by his family.

Born in Toronto, he came from humble roots. A child of the depression, he achieved an undergraduate degree in math, physics and chemistry in 1949 and an MA and PhD in physical chemistry in 1952, all at the University of Toronto.

He worked at the Chalk River nuclear research facility from 1952–1958, pioneering novel methods of trace element analysis in the environment by applied nuclear chemistry. He joined the University of Toronto Faculty of Applied Science and Engineering where he continued his research in applied analytical and environmental chemistry. He was professor at University of Toronto for five decades, including as Professor Emeritus in his final years. His work took him around the world lecturing and consulting with scientists and scientific bodies and as a visiting professor at the University of Tokyo, University of Cambridge, and University of Kuala Lumpur.

He published over 250 scientific papers. Robert Jervis received numerous awards and honors: the W. B. Lewis Medal, Canada's highest nuclear scientific award; the international Hevesy Medal, for radioanalytical chemistry; the American Nuclear Society's Emmon Medal; and he was the first foreign recipient of the Russian Academy of Science's Ressovsky Medal.

He was a fellow of the Royal Society of Canada, the Canadian Nuclear Society, the Canadian Society for Chemistry and an honorary fellow of the Atomic Energy Society of Japan and the Indian Academy of Sciences.

He lived his faith in all aspects of his life and always travelled with a Bible, seeking to bring God's love to all. His deepest

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professional satisfaction came from instilling first-year students with a love of science. His greatest love was his family—his devoted wife Jean, from whom he was inseparable for 70 years, daughter Ann, son Peter, grandchildren Dylan, Bronwen, and Max—who shared more than a lifetime's worth of happy memories together. He is also survived by his beloved sister Kathleen.

Charles Chaffey writes,

It was he who introduced me to the ASA in 1969. I'll remember Bob Jervis for his fine example of Christian life as a senior colleague of mine in the Department of Chemical Engineering and Applied Chemistry at the University of Toronto.

Kenneth A. Lincoln

On Thursday, May 29, 2014, Ken Lincoln died at 7 a.m. in Santa Barbara, CA. Ken was a long-time Fellow of the ASA, joining in 1963. More information to follow.

GOD & NATURE

magazine

conversing beyond
the controversy

essays : articles : poetry
on science and faith

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