



FROM COSMOS TO
PSYCHE



ASA CSCA CiS
2014
ANNUAL MEETING

July 25 ▶ 28 2014
FRIDAY MONDAY



“All things hold together in Christ”
Colossians 1:17

Meeting Schedule Highlights

WEDNESDAY, July 23, 2014

4:00 PM–11:00 PM Lodging check-in

THURSDAY, July 24, 2014

4:00 PM–11:00 PM Lodging check-in

3:00 PM–9:30 PM Meeting registration

FRIDAY, July 25, 2014

8:00 AM–9:00 PM Meeting registration

8:30 AM–4:30 PM **WORKSHOP I:** John Walton,
Leader

8:30 AM–4:30 PM **WORKSHOP 2:** Stephen Freeland,
Leader

4:00 PM–11:00 PM Lodging check-in

FIELD TRIPS

8:15 AM–4:00 PM Niagara Falls

8:15 AM–5:00 PM Geology of the Niagara Escarpment
and Gorge

8:15 AM–12:00 PM Royal Botanical Gardens

1:30 PM–3:00 PM McMaster Campus Tour

CONFERENCE BEGINS

5:00 PM Dinner

7:00 PM Welcome

7:15 PM Plenary Session: Megan Best,
"Brave New World"

8:30 PM Fellowship Mixer

SATURDAY, July 26, 2014, 8:15 AM–10:00 PM

- Meeting registration
- Plenary Session: Don Page,
"The Optimal Argument for the Existence of God"
- Parallel Sessions
- Christian Women in Science (CWIS) hike/picnic
- Banquet and Plenary Session: C. Barth Netterfield,
"Astrophysics: The Heavens Declare the Glory of God"
- CSCA Annual General Meeting

SUNDAY, July 27, 2014, 9:30 AM–10:00 PM

- Worship Service
- Meeting registration
- Plenary Session: Alasdair Coles,
"Brain, Soul and Psyche: Embodied and in Christ"
- Parallel Sessions
- ASA Business Meeting
- Communications Meeting
- CWIS Open Meeting followed by Board Meeting

MONDAY, July 28, 2014, 8:15 AM–12:00 PM

- Meeting registration
- Plenary Session: Jeffrey Schloss, *"Evolution, Moral
Cognition, and the Question of Human Exceptionalism"*
- Parallel Sessions
- Symposium: Science in the *Academy Regained*

SATURDAY–MONDAY, July 26–28, 2014

- Book Tables
- Exhibit Tables

Parallel Session Topics

- **Physical Sciences:** Physics, Chemistry, Astronomy –Chair: *Colin Humphreys*
- **Life Sciences:** Biology, Medicine, Bioethics –Chair: *Patricia Fitzgerald-Bocarsly*
- **Mind Sciences:** Psychology, Neuroscience, Psychiatry –Chair: *Heather Looy*
- **Environmental Sciences:** Ecology, Geology, Meteorology/Climate –Chair: *Don Morton*
- **Christian Women in Science and Engineering** –Chair: *Gayle Ermer*
- **Emergence:** Information Theory, Complexity, Theology –Chair: *Arnold Sikkema*
- **Science and Technology in Service of the Poor** –Chair: *Michael Clifford*
- **Science and Theology** –Chair: *David Chettle*
- **Science in the *Academy Regained*** –Chair: *Russ Kosits*

Plenary Speakers

FRIDAY, July 25, 2014, 7:00 PM



Megan Best is a bioethicist and palliative care doctor who is employed by HammondCare, a Christian healthcare provider in Sydney, Australia. She studied medicine at Newcastle University and has degrees in theology, palliative care, research and ethics and is currently working on a PhD at the University of Sydney. Her thesis focuses on the spiritual needs of dying patients. A lobbyist and a quiltmaker, her clinical focus is the development of a Palliative Care Day Clinic which aims to support terminally ill patients with advanced disease who wish to remain living at home. Megan has been a strong participant in the Centre for Apologetic Scholarship and Education (CASE) network as an associate and scholar. As a member of the Faculty, she writes papers, delivers lectures, and co-convenes the CASE medical ethics conference. She is author of the books *Fearfully and Wonderfully Made—Ethics and the Beginning of Human Life* and *A Life Already Started*.

SATURDAY, July 26, 2014, 8:45 AM



Don Page is a Canadian theoretical physicist at the University of Alberta, Canada, whose work focuses on quantum cosmology and theoretical gravitational physics. He received his BA at William Jewell College in the United States in 1971, attaining an MS in 1972 and a PhD in 1976 at Caltech. He followed this with a NATO Postdoctoral Fellowship in Science at Cambridge University under the supervision of Professor Stephen Hawking. Don has recently made a number of contributions to the science/faith dialogue. He has been married to Catherine Hotke since 1986. They have five children.

SATURDAY, July 26, 2014, 7:15 PM



Calvin Barth Netterfield is a Canadian astrophysicist and a professor in the Department of Astronomy and the Department of Physics at the University of Toronto. He is a leading expert in developing instrumentation to observe the cosmic microwave background (CMB) radiation, specializing in the development of balloon-borne telescopes. These are lifted into the stratosphere by high-altitude balloons where astrophysicists conduct observations that would be hindered by atmospheric interference if the experiments were done on the ground. He was a key member of the instrument team for BOOMERANG, the experiment that made one of the first accurate determinations of the age, geometry, and mass-energy content of the universe. More recently, he has delved into the field of submillimetre astronomy and the physics of star formation through his involvement with the BLAST telescope. He was featured prominently in *BLAST!*, a documentary film about the 2005 and 2006 flights of BLAST from Sweden and Antarctica.

SUNDAY, July 27, 2014, 11:00 AM



Rev Dr **Alasdair Coles** is a lecturer in neuroimmunology (study of the nervous and immune system together) at Cambridge University and is an honorary consultant neurologist to Addenbrooke's and Peterborough Hospitals in the UK. He is involved in research into new treatments for multiple sclerosis (a disease that causes damage to the nerves) and in the neurological basis for religious experience. Ordained in the Church of England in 2008, he is now an assistant minister at St Mary and St Michael's Church, Cambridge, and chaplain to the staff at Addenbrooke's Hospital, alongside his medical and scientific work. Alasdair is married to Olivia, and they have two young children.

MONDAY, July 28, 2014, 8:45 AM



Jeffrey Schloss is Senior Scholar at the BioLogos Foundation and Distinguished Professor of Biology at Westmont College, USA. His research interests are in the evolution of altruism and moral systems and the theological implications of Darwinism. He has been a Danforth Fellow, a Crosson Fellow at the University of Notre Dame Center for Philosophy of Religion, a Plummer Fellow at St. Anne's College Oxford, a Witherspoon Fellow in Theology & Science at Princeton's Center of Theological Inquiry. Recent publications include *The Believing Primate: Scientific, Philosophical, and Theological Reflections on the Origin of Religion* (with Michael Murray).

Descriptions of Pre-Meeting Workshops

FRIDAY, July 25, 2014

8:30 AM–4:30 PM

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.

\$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). He has also contributed to two recent discussion books, *Reading Genesis 1–2: An Evangelical Conversation* (Hendrickson) and *Four Views of Historical Adam* (Zondervan).

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.

1. An overview of the challenge: where geoscience, chemistry and biology meet;
2. A Biological and geological perspective of life’s origins;
3. A chemical and geoscientific view of life’s origins;
4. Current progress and challenges

All participants will be given 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.

\$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. He has particular interests in the interface of science and religion and in using the full spectrum of creative arts to visualize and communicate social science, natural science, and engineering. Stephen’s personal research uses theory and computers to explore how and why genetic coding came into existence with the particular features we see today.

Descriptions of Pre-Meeting Field Trips

FRIDAY, July 25, 2014

Niagara Falls Field Trip



The Niagara Falls trip will include an “up close” cruise to the base of the Falls. There will be free time to explore views of the Falls, always the most complete from the Canadian side and check out nearby shops and attractions. Also there will be a walking tour of some key War of 1812 events, including the Battle of Lundy’s Lane, fought exactly 200 years to the day, on July 25, 1814, then finishing with some time to sightsee and shop in historic Niagara on the Lake.

Bus will depart at 8:30 am and return by 4:00 pm. Box lunch included; gratuity not included. It will be led by Maxima Tours. **\$120**

Geology of the Niagara Escarpment and Gorge



This trip will explore the Paleozoic rock sequences and scenery of the feature known as the backbone of southern Ontario. It will feature visits to escarpment rock sequences of the Niagara Escarpment, including the Devil’s Punchbowl and the buried “St. David’s Gorge.” It will also include views, hikes, and discussions at various spots along the Niagara Gorge, including Niagara Glen, the famous whirlpool, and a view of the Falls themselves. There will be some hiking and modest climbing.

Bus will depart at 8:30 am and return by 5:00 pm. Box lunch included. It will be led by Ken VanDellen and Steve Moshier. **\$50**

Royal Botanical Gardens



The Royal Botanical Gardens (RBG) is the largest botanical garden in Canada. Its mandate is to strengthen the relationship between the world, society, and the environment. This tour will feature the “Best in Bloom” Garden for that particular day, plus some time in a second garden location with senior scientist David Galbraith, who will explain various science and research projects ongoing at the RBG.

Bus will depart at 8:30 am and return by noon. The tour will be led by RBG guides and members of the RBG science department. **\$40**

McMaster Campus Tour



This walking tour will feature two research activities unique to McMaster: the Nuclear Research Reactor and the Origins Institute (OI). The reactor began operating in 1959, as the first university research reactor in the British Commonwealth. It has become a world leader in the production of critical radioactive isotopes and a renowned base for research in nuclear medicine.

Founded in 2004, the OI features trans-disciplinary approaches to the most fundamental topics in science. Topics range from the origins of space-time through to the origins of humanity. The OI, a member of the Canadian Astrobiology Training Program, runs the Collaborative Graduate Program in Astrobiology. The “tour” will include a presentation of the Institute’s work in their specifically designed meeting and research room.

The tour will commence at 1:30 pm and be completed by about 3:00 pm. It will be led by various McMaster faculty members. **No Cost**

Registration

All registrations must be submitted online. Payment in **US dollars**, however, may be made online or by mail. To register, go to www.asa3.org. We recommend using Firefox or the Chrome browser. If you are an ASA member, sign in to receive your member discount. No refunds after **June 30, 2014**.

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|--------------------------------------|--------------------------------|--------------------------------|
| REGISTRATION: (per person) | | One Day Only |
| ASA/CSCA/CiS Member | <input type="checkbox"/> \$275 | <input type="checkbox"/> \$100 |
| Non-Member | <input type="checkbox"/> \$325 | <input type="checkbox"/> \$135 |
| Spouse/Family Member | <input type="checkbox"/> \$150 | <input type="checkbox"/> \$ 55 |
| Student Premier Member | <input type="checkbox"/> \$ 0 | <input type="checkbox"/> \$ 0 |
| Student Basic or Student Nonmember | <input type="checkbox"/> \$ 20 | <input type="checkbox"/> \$ 20 |
| Social events only –Non-registrants* | <input type="checkbox"/> \$ 45 | |
| Banquet ticket only –Member | <input type="checkbox"/> \$ 35 | |
| Banquet ticket only –Nonmember | <input type="checkbox"/> \$ 50 | |

*Social events includes attendance at the Friday mixer, beverage and refreshment breaks, morning devotions, Christian Women in Science, Sunday worship, ASA business meeting, and communications meeting. Banquet ticket is included in Lodging and Meals or it can be purchased under Off Campus, No Meals, Banquet Only.

Please note:

- A change in registration such as lodging, meals, workshops, or field trips may result in an additional \$75 fee. Please be sure you have carefully selected all your registration items to avoid these additional charges.
- To make a change after your registration has been submitted, you will need to contact the ASA office by emailing marty@asa3.org.

Lodging and Meals on Campus

The conference package is purchased individually (PP). It includes lodging for Friday through Sunday nights, a linen package, and nine meals. Linens provided include a pillow and pillowcase, two sheets, one coverlet, one bath towel, one hand towel, and one washcloth. The meals begin with Friday dinner through Monday lunch and include a Saturday night banquet. For those who need to extend their stay, Thursday night lodging includes three meals: Thursday dinner, Friday breakfast, and Friday lunch. Lodging only is available for Wednesday and Monday nights.

We will be staying in Les Prince, an air-conditioned building that has elevators and free wireless internet access. Each room accommodates one (single) or two (double) guests and has its own bathroom. If you select a double occupancy room and do not have a roommate, we will do our best to match you with a roommate. However, if we can't or if the roommate you have chosen doesn't register or if the roommate doesn't stay the same nights as you, you will be charged the single occupancy rate for the nights that you occupy the room alone. Each resident will receive a room key, a building access card, and a meal card. **All** keys and cards must be returned to McMaster. Lost room keys are \$160; building access cards, \$25; and meal cards, \$10, payable immediately to McMaster University.

Lodging check in begins at 4 pm. Check out is by 10 am the day that you are leaving. Luggage can be stored in a secure area until later in the day. However, the university does not assume any risk associated with luggage storage.

Please note: Prices are in **US dollars**. Campus lodging and meals are **no longer available**.

| Conference Package/PP | Double Occupancy (Pricing is per person) | Single Occupancy |
|-----------------------|---|------------------|
| Fri–Sun (9 meals) | \$360 | \$420 |

| Extended Stay/PP | Double Occupancy (Pricing is per person) | Single Occupancy |
|------------------|---|------------------|
| Wed (no meals) | \$65 | \$85 |
| Thurs (3 meals) | \$115 | \$135 |
| Mon (no meals) | \$65 | \$85 |

Meal Packages for Those Staying Off Campus

There are two meal packages for off-campus participants: (1) a nine-meal package, Friday dinner through Monday lunch, includes the Saturday night banquet; and (2) a six-meal package, Friday dinner through Monday lunch, includes the Saturday night banquet but does not include any breakfasts.

Please note: Prices are in **US dollars**. Campus meal packages are **no longer available**.

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|-------------------------|-------|
| Nine-meal package | \$165 |
| Six-meal package..... | \$135 |

Saturday Night Banquet Selection

The Saturday night banquet is included in all meal packages. There is a choice of three entrées: salmon, turkey, or vegetarian.

Margarita Salmon

cold water Atlantic salmon, oven roasted and topped with pineapple tomato salsa and tequila lime sauce

OR

Roast Ontario Turkey

served with a traditional home style gravy and sage stuffing

OR

Vegan Roast Vegetable Ratatouille

seasoned and marinated roasted vegetables simmered in stewed plum tomatoes served in a filo cup on rice

Served with

Fresh bakery rolls and butter

California greens

Chef's selection of vegetables and starch

Crème Caramel with Seasonal Berries

Ice Tea and Water *** Hot Tea and Coffee

Saturday Night Banquet Only

If you wish to bring a guest to the banquet only, continue to register another person. Under the first section "Please select one of the following (required)," select "Ticket for Banquet Only." You will need to complete registration information for this person.

If you are registering and are not buying a meal package but want to attend the banquet, select "Off Campus: No Meals; Banquet Only" to purchase your banquet ticket.

Banquet ticket only (**no longer available**) \$35, CSCA, ASA, or CiS Member; \$50, Nonmember

Christian Women in Science (CWIS) Special Event

All women are welcome to join us for a hike and picnic box lunch on Saturday, July 26. Fellowship with other women in science and learn more about what's happening with CWIS. This event is led by Janet Warren.

- Wear comfortable shoes, sunscreen, and insect repellent.
- Meet outside the main doors to Les Prince hall at 12:10 PM.
- Box lunch and water provided for those who have purchased "Lodging & Meals" or "Off Campus: with Meals."
- If you did not select a meal package, bring your own lunch and beverage.

Special Symposium: Academy Regained

MONDAY, July 28, 2014

10:15 AM–8:30 PM

The Academy Regained

Russ Kosits and David Koyzis, Chairs

A special symposium is being held that features the authors of the chapters in an upcoming book titled *Academy Regained*. The Monday morning session includes the science-related chapters and will be held as part of the ASA meeting. The symposium will continue in the afternoon at Redeemer University College, also in Hamilton, ON, and will cover the remaining chapters. All registrants of the ASA meeting are welcome to attend both sessions, but they must register to attend the afternoon sessions at Redeemer and/or to stay for dinner at Redeemer. To register, call Darlene Komadan at Redeemer, 905-648-2131 x4521.

Campus Map and Campus Parking

Click [here](#) for Campus map.

Conference parking is in Lots G, H, and I. For those staying on campus, overnight parking is in lots G and H. For those commuting, parking is in lot I.

For those who need handicapped parking, the rates are the same as below.

The conference parking rates are based on *days*, not hours. If your car is parked in the lot any time after midnight up until 11:59 pm, you need to purchase parking for that day. For example, if you arrive Friday night and leave any time on Monday, you need to purchase parking for Friday, Saturday, Sunday, and Monday.

- Monday through Friday, \$12 each day;
- Saturday and Sunday, \$6 each day.

Off-Campus Lodging

ASA has reserved a block of king and double queen rooms at the Visitor's Inn (<http://www.visitorsinn.com/index.php>), 649 Main Street West (at Hwy 403), Hamilton, Ontario, L8S 1A2 until **July 18, 2014**. King rooms can accommodate two people and double queen rooms can accommodate up to four people. Each room is \$99 per night for one person per room. Each additional adult is \$10 extra, plus tax currently at 13%. All rooms at the Visitor's Inn are nonsmoking.

For reservations, call toll free 1-800-387-4620 or local at (905) 529-6979 and mention the group name **American Scientific Affiliation**.

ASA Ride Board and Travel Information

ASA has a travel page with information about getting to campus and to help you find others for shared traveling, www.asa3.org/ASA/education/travel.htm

Airport Shuttle—Airways Transit Service Limited

From Toronto Pearson International Airport to Hamilton, McMaster University is most easily reached using Airways Transit. Airways Transit provides a 24-hour, door-to-door shared ride service. Airways Transit is offering reduced single fares and

group pricing for multiple passenger rides. To make a reservation, click on the following link, [book online](#), quoting code **ASA2014** (exactly as shown). Your pick-up location is McMaster University at 1280 Main Street West, Hamilton, ON.

Reservations must be made by July 21, 2014 to qualify for the discounted fare.

For the return ride from McMaster to Pearson, Airways Transit will group delegates together which will lower your per person cost. Your initial confirmation will **not** reflect the final pickup time and cost. You will be notified *3 days prior* to your departure of the actual pickup time and cost (determined by how many other delegates are in the same van). Your pickup time might be earlier than you want for departure. The online registration asks for departure flight information to be used for grouping, and has a “Notes” box for comments or grouping preferences, such as limits on “how much earlier” is acceptable, and others you want in your group. **Last minute requests for time changes will not be accepted.**

Toronto Pearson International Airport
Per Person Pricing—CDN \$ (includes harmonized sales tax*)

| | | |
|-------------------------|-------------------------|-------------------------|
| 1 passenger \$76.00 | 4 passengers \$35.00 | 7 passengers \$27.43 |
| 2 passengers \$60.00 | 5 passengers \$32.00 | 8 passengers \$26.50 |
| 3 passengers \$41.34 | 6 passengers \$28.67 | |

*Gratuity is optional to the driver and not included in the above fares

For help finding others to form a group for traveling to McMaster from Pearson International Airport, you can use the Ride Board (asa3.org/ASA/education/travel.htm#board) that has a helpful message from Bob Geddes, local chair for the meeting, who arranged this deal with Airways Transit.