



volume 54 number 3



ASA Annual Meeting 2012



Dear Friends,

Over the few fast-moving years that I've been a member of the National Association of Science Writers, I've enjoyed many opportunities to speak with scientists about how their work is represented in various forms of popular media, thus how it is understood (or not) by the general public.

It doesn't surprise me anymore that their replies are rarely optimistic. When I got into science writing, I learned quickly that many, maybe even most,

continued on p. 2





PO Box 668 Ipswich, MA 01938-0668 Address Service Requested

NONPROFIT ORGANIZATION U.S. POSTAGE PAID Ipswich, MA Permit No. 46

The Director's Corner



The first reaction of many people to this year's theme at our annual meeting was a pause, then some contemplation, and finally a response along the lines of "that could be interesting." Jim Buchholz had proposed the theme of "Science, Faith, and the Media: Communication Beyond Books" based on his connections with several prominent Christians in the film industry. As a physicist at California Baptist University, he knew very well the need for cross-disciplinary communication. But it was a new venture for many scientists, moving to a domain in which few scientists venture. It wasn't clear how the meeting would work.

To the delight of everyone, the meeting worked extremely well. Jim gathered a group of plenary speakers that included movie producers, film directors, journalists, and media experts, as well as a biochemist who excelled in using video clips to show his work. This issue of the newsletter gives a summary of that meeting but the real impact came in the personal interactions. Once again it became clear how important it is for us to meet in person in addition to all the electronic and printed communication we do. There is no substitute for a couple of hundred scientists standing together

continued from p. 1

scientists tend to be wary of journalists, reporters, and other purveyors of news and information in the modern world.

This is, sadly, understandable. Many of the scientists I interviewed—scientists who have had papers published in major journals or who have helped shape their field of research in meaningful ways—have had a disagreeable experience of being misquoted in a newspaper,

misunderstood by the journalist whose job it

was to summarize their research, or never even contacted for a story in which their work was prominently figured. Some had participated in documentaries in which an hour-long interview got chopped up into its most confrontational minutes by directors who desired punch rather than perspective. The list goes on.

What then, do scientists who happen to be Christians have to say on the matter?

This year's ASA Annual Meeting was the first of its kind, addressing

a topic outside the area of expertise of most working scientists and theologians: communication.

At this year's meeting, held at Point Loma Nazarene University (PLNU) in San Diego, speakers enlightened attendees on opportunities and pitfalls new to media and communications in the 21st century, with a special focus on how Christians in science might

enhance the way their ideas are presented and disseminated.

We

heard from Hollywood producers, authors, documen-

tarians, social media experts, educators, and journalists. We asked questions to determine where, when, and how to publish our stories and ideas—and also, how to avoid the unhappy journalistic experiences so common to much of the scientific world.

We learned that in today's infosavvy culture, many of the barriers that used to exist between academics and the general public have been lifted. The internet is rife with opportunities to connect with other curious Christians, students, or fellow scientists.

The Director's Corner

continued from p. 2

and raising their admittedly untrained voices in joyful praise to our Creator. As we worshipped together, the differences in intellectual opinions faded to the background, and we shared the awe and wonder of the glory of God as seen in nature.

Organizing a meeting on this scale is hard work, and we wish to express our profound gratitude to the many people who did so much to make it happen: Jim Buchholz organized the program; Michael McConnell and LeAnne Elizondo took care of so much of the local details; Marty Herdrich and Lyn Berg did their usual heroic effort at organizing all the registration and logistics, a task made particularly challenging this year because of the use of a brand new online event management system; moderators and speakers kept the program alive and energetic. Many others, too numerous to mention, played key roles in making the meeting a success.

The connections we made at this meeting will be valuable for a long time to come. Friendships between scientists and professional communicators are an effective way of making our resources available in a way that is useful to a broad audience. The success of this meeting encourages us to redouble our efforts in planning each annual meeting in the most effective way possible and to focus on new channels of communication that will reach a diverse generation. After more than 70 years, ASA continues to play a vital role in sharing perspectives on science and Christian faith.

Kanty

Although traditional news and publishing outlets are still a powerful influence over public opinion, DIY (do it yourself) avenues abound, and for many ASAers, all that remains is to determine exactly what our message is and how our unique perspectives can pierce through the glut of voices that vie for public attention online.

Fortunately, says plenary speaker and PR expert **Chris Perez**, we in the ASA really do have an engaging message to send out into today's world. Before joining us at PLNU, Perez researched our website and online publications and he gave us good news from a PR perspective. "Congratulations!" Perez said from the podium on Monday morning. "You have an important message."

If you think about it, that's actually rather rare in the world of PR and marketing—think of how much trivial nonsense is peddled every day by people spending millions of dollarsbut Perez assured us that ASA would be hard-pressed to craft a more significant mission. While some people might assume the ASA would be too neutral, even passive, on trending issues to craft a "sexy" slogan, the deep value of our shared conviction that science and faith need not conflict is a rare and worthy enough worldview that it can make a powerful impression, as it did for Perez.

Perez gave a few hints on how we as an organization and as individuals can become "opinion-makers" for the general public. Despite what you might think, he said, opinionmakers can be anyone—you don't have to be famous or have reached a high level of distinction in your field to start changing how people think. "Opinion-makers are just people who have taken the time to sift through, evaluate, and form an opinion on a subject. They embrace channels

WELCOME, NEW MEMBERS!

April–June, 2012

Addicott, Katherine R. - Chino Hills, CA Baghchehsara, Ali - Karaj, Iran Berg, Jeremy L. -Waxhaw, NC Bishop, Reid -Clinton, MS Brandkamp, John W. -South Hamilton, MA Brown, Gordon W. - Penney Farms, FL Carl, Kimberly -Honolulu, HI Chai, Amy F. -Ellicott City, MD Chang, Jodie - Ithaca, NY Cho, Yang Hee - Yeonsu-gu, South Korea Coulter, Neil R. – Ukarumpa, Papua New Guinea Crompton, Bryan R. - Madison, WI Dicken, Carl M. - Richmond, VA Dickerson, Willard, Jr. -Hudson, MA DiLallo, Jennifer N. -St. Louis, MO Ester, Martin – Burnaby, BC Fischer, Jeff –Westminster, CO Franklin, Jared S. – Torrington, CT Friesen, William L. - Tonawanda, NY Furlong, Eme – University Park, MD Furman, Keith – Gaithersburg, MD Gabrielse, Kari A. - Minneapolis, MN Gambone, Billy -Pottstown, PA Ghali, Fed -Temple City, CA Gharibjanian, Varag – Tustin, CA Goertz, Jacob – Oregon City, OR Hansen, Gregory - Azusa, CA Herrmann, Anders -Beverly, MA Hoffman, W. Howard -Las Vegas, NV Huxley, Mary-Pat-Ventura, CA

continued on page 7

WELCOME, NEW MEMBERS! (continued)

Johnston, Zach - Lancaster, PA Jude, Deborah L. - Escondido, CA Juhl, Robert A. - Tokyo, Japan Jun, Gyo-Yeonsu-gu, South Korea Kollar, Gyorgy O. –Zsambek, Hungary Kolossvary, Istvan - Madison, NJ Lui, Chung Dao – Quincy, MA Lukianov, Stefan - Pittsburgh, PA Maginn, Robert A., Jr. -Boston, MA Maynard, Beca - Auburn, CA Meyer, Katie - Columbus, IN Miller, Joyce C. -Howard, OH Mowery, Kelly A. -Harleysville, PA Nelson, Dean -San Diego, CA Odom, Peter – Tulsa, OK Osae-Oppong, Roland, Jr. - Deerfield, IL Osborne, Chris - Menifee, CA Perez, Christopher – Corona, CA Pointon, Barry –Burnaby, BC Richardson, William J. -Sumter, SC Roberts, Daniel - Colorado Springs, CO Ryan, John A. - Mzuzu 2, Malawi Schinski, Vernon - Brookeville, MD Sebo, Zach - Kansas City, MO Shahzad, Monas - Orlando, FL Smithers, Emily R. -Rochester, NY Sprinkle, Mark E. - Richmond, VA Stevenson, Gary -Langley, BC Su, Francis E. - Pasadena, CA Watts, William F. -Griffin, GA Wightman, Daniel L. - New Woodstock, NY Willberg, Dean -Salt Lake City, UT Winter, Ralph -Hollywood, CA Yang, Gao – Saint Paul, MN Zecena, Ivan – Austin, TX

Symposium: Science & Faith in the Curriculum

The Science & Faith in the Curriculum sessions provided a wealth of examples and ideas for faith & learning integration in an impressive variety of disciplines and settings.

Wheaton college biologist **Ray** Lewis's sabbatical semester teaching biology at the Yanbian University of Science and Technology in the Yainbian autonomous region of China provided a wonderful example of science-faith integration through practical Christian service. Indeed, the model of using "Science Higher Education as Christian Service" is characteristic of Yanbian University as a whole since it was a largely funded by South Korean Christians and employs numerous Christian faculty.

Science educator and chemist John Staver reminded ASA members that the creation wars are alive and well in the arena of public school biology education. In particular, John described last year's efforts by Indiana house legislators to mandate the teaching of "various theories concerning the origin of life, including creation science" in Indiana public schools. The remainder of the Science & Faith in the Curriculum session focused on various aspects of the undergraduate curriculum.

Physicist **Glenn Marsch** illustrated the value of incorporating science & faith into the undergraduate curriculum by describing his experiences team teaching Studies in Science, Faith, and Technology (SSFT) with a philosopher at Grove City College in Pennsylvania. The Grove City students in this required general education course are well served by its impressively interdisciplinary approach and coverage of a wide spectrum of science, technology, and faith topics.

Chemist **Stephen Contakes** of Westmont College suggested that episodes from chemistry's history



The ASA/CSCA Newsletter

could be used as a tool for engaging in discipline-specific discussions of contemporary science-faith issues. He provided an example of how this technique might be applied in a general or physical chemistry course by comparing physical chemistry founder Wilhelm Ostwald's energeticist worldview and public church withdrawal campaigns with the New Atheist movement, developing striking parallels between Ostwald and the New Atheists, not only in broad outline but in detail.

Another Westmont College chemist, **Michael Everest**, described his use of a guided-inquiry exercise and handout for helping introductory chemistry students evaluate radiometric data supporting an old earth in the context of Augustine's teaching on the importance of reason and experience for interpreting scripture. Provocatively, he asks students whether Augustine would be worried about Christians claiming that the earth is only 6,000 years old.

Claremont Graduate School of Religion PhD-student **Blake Horridge** further championed the use of active-learning pedagogies. Not only did Blake expound on the wealth of research supporting their effectiveness, he provided several practical suggestions for incorporating problem-based learning strategies into science & religion courses.

-Stephen Contakes

Symposium: Information, Genetics, and Origin of Life

The symposium on Information, Genetics, and Origin of Life was organized to address the latest perspectives on research on the origin of life, especially from the aspect of information, and to present the contrasting opinions of the ID community.

Steve Freeland, probably the only ASA member actively carrying out research on the origin of the genetic code, moderated the session and led with a fascinating overview talk of the field. He showed how the prevailing theory is still the RNA world approach but that it has significant difficulties that cause some to favor a protein-first scenario. He particularly emphasized the role *continued on p. 6*

Know any homeschoolers? Point them to Test of FAITH's new resource...

Science and Christianity: An Introductory Course for Homeschoolers

- ARE SCIENCE AND CHRISTIANITY IN CONFLICT?
- HAS THE BIG BANG PUSHED GOD OUT OF THE UNIVERSE?
- IS EVOLUTION COMPATIBLE WITH FAITH?
- IS CLONING ETHICAL?
- ARE HUMANS NO MORE THAN BIOLOGICAL MACHINES?

Praise for the Test of FAITH homeschool course:

"Very useful and absolutely worthwhile." - Parent

"Not only focuses students' attention on the important sciencefaith questions raised by the film, but provides parents and other educators with a flexible framework that can be adapted for a range of grade-levels and schedules. This curriculum could be used at home or in co-op and academy settings, helping young people get the big picture of why Christians need to study, understand, and be engaged in science. An important and timely resource for homeschoolers."

 Dr. Mark Sprinkle, Senior Fellow of Arts and Humanities & Senior Web Editor, BioLogos, and homeschooler. This **FREE** 3-8 week course for homeschooled students **aged 13-18** unpacks a range of hot topics. The course is designed for use with the award-winning documentary *Test of FAITH* (available online for \$14.40).

- Ready-to-use lessons (no lesson preparation required)
- Study notes, key vocabulary, follow-up questions, and essay topics
- Emphasizes personal engagement and reflection
- · General introduction to the philosophy of science and religion
- Opportunity for more in-depth exploration of current issues
- Accessible to high school students and advanced junior high students

10 FREE COPIES OF THE DVD AVAILABLE TO HOMESCHOOLING ASA MEMBERS OR THEIR FRIENDS! CONTACT US TO RESERVE YOURS TODAY: ABIGAIL@TESTOFFAITH.COM

Available for FREE download www.testoffaith.com/homeschool

The ASA/CSCA Newsletter *continued from p. 5* of the environment in shaping the information in living cells.

In a similar vein, Loren Haarsma presented a detailed analysis of different types of information. He showed that informationbased arguments against abiogenesis and evolution of complexity were not valid in light of the different types of information that exist and the way in which we observe DNA information to arise.

Similarly, Randy Isaac argued that "information apologetics," that is, the argument that the origin of DNA information is best explained by an indeterminate intelligent agent, is not valid. He showed that no argument has been presented for a necessary causal link between intelligence and DNA information. While there might be a causal link to abstract meaning, such abstraction is not found in living cells. Mark Shelhamer noted that random information does not appear random to us and that randomness is an inherent part of God's creation.

Walter Bradley led the ID perspective by pointing out that intelligent design was not necessarily an alternative to biological or chemical evolution, but to naturalism and reductionism. He outlined the key difficulties with current theories of abiogenesis and stressed the key role of teleology. Casey Luskin asserted that life involves high complex specified information which is not necessarily semantic information. His view is that such information matches many aspects of designed systems and indicates a designer.

Ann Gauger discussed the origin of enzymes, reporting on her work with Doug Axe in analyzing the mutations required for a protein to evolve from one functional form to a closely related form. They concluded that at least 7 independent mutations were required, representing an impossibly low probability of random occurrence.

Paul Nelson asked what it would take to falsify common descent. He showed that a significant fraction of genes in rats had no homologous counterpart in closely related species. However, common descent would imply that closely related species descended from a common ancestor and all their genes ought to be homologous.

Other talks in the symposium addressed whether genomic data relating chromosome 2 fusion supported chimp-human common ancestry (**Melissa Antonio**), the effect of mutation rates on studies of human ancestry (**Chris Osborne**), the efficacy of bioinformatics in showing evolutionary relationships (**Deborah Osae-Oppong**), and a discussion of domains of inquiry as related to evolution (**Thomas Walters**).

-Randy Isaac

Dear Mr. Isaac,

I wanted to express my gratitude on behalf of the Board of Directors and staff of METRO United Methodist Urban Ministry for your donation totaling \$839.00. Your support has been vital to our efforts in serving those individuals, families and communities so often overlooked by others. MET-RO is committed to addressing the causes of poverty and we realize that without your dedicated support our work could not be done...

Thanks again for your support of METRO's ministry, and we look forward to continuing our relationship in meeting the challenges of the future. METRO is a 501 (C) (3) organization. No goods or services have been received in exchange for your donations.

(Sent to the ASA office in thanks for the ASA's collection for METRO ministries in San Diego)

The ASA/CSCA Newsletter continued from p. 3

of communication, be it traditional, social, speaking opportunities, and so on. They enjoy sharing their knowledge with those less informed about their issue," said Perez. "So can you be an opinion-maker? The fact is, you probably already are."

Perez concluded his talk by inviting us to "use predefined, clear and concise messaging" to take advantage of social media, community outreach, self-publishing, as well as traditional third-party media.

While opportunities to connect with the public via Facebook and Twitter may seem self-evident (create content, post content, promote content, grow network), getting a message aired in third-party media is more challenging. Dean Nelson, head of the journalism program at PLNU and co-author of Quantum Leap: How John Polkinghorne Found God in Science and Religion gave a few pointers during his Sunday plenary session. Nelson pointed out that you don't have to have published a groundbreaking study to establish relationships with journalists who might be interested in covering a fresh, unique angle of the science/faith conversation.

Nelson spent a large portion of his lecture giving advice on how to talk to reporters to ensure the most accurate coverage. "Don't get complex—boil it down. Reporters aren't stupid, but they only have so much time. If you obfuscate, you will get misquoted." That being said, he also advised ASAers not to get caught up in apologetics in the public sphere. Nelson mentioned that if he learned anything from John Polkinghorne, it's that there's no clinching argument for faith. It's not a knock-down kind of thing-faith is complicated, and almost all reductionist accounts chop off the ends that don't fit. That's ineffective messaging.

While this Letter from the Editor could continue for pages recounting shared nuggets of wisdom from other speakers, or attempting to reconstruct one of the most elegant and inspiring research presentations, by Jack Johnson, many of us had ever seen—on viruses, of all things— I'm going to conclude with something that almost every speaker mentioned, but that Hollywood producer Ralph Winter and director of the L.A. Film Studies Center Rebecca Ver Straten-McSparren drove home in their plenary sessions.

When dealing with third-party media, or striving to promote your own ideas, or even crafting an essay for our own God and Nature magazine, remember that when getting people to care about what you're saying and why you're saying it, according to Winter, "It's all about stories."

Winter knows what it takes to make a multi-million dollar blockbuster film, but he also knows how to get his point across to people he has never met. "You have to make them care," Winter intoned with energy, "Studies have shown that most people

can't even remember the theme of a sermon two hours after it was given. But they can quote movies years and years after they've watched them. That's because of the way that movies are done ... We need to be relevant. We need to be commercial. We need to be marketable. I don't think there are any bad storiesbut does anyone besides your mom want to hear them?... As Christians in the marketplace, I think we need to up our game."

What I took away from this year's ASA meeting is a deep conviction that each of us has a scientific/theological expertise, personal path to faith, or idea that could help someone who is struggling to believe. Every one of us has an interesting story. This means that every one of us could potentially change lives by putting some effort into communicating what we know-

whether we do so through books or beyond them.

-Emily Ruppel ASA Associate Director of Communications



ESTROCTIONS PEOPLE Communications Communications Comparatulations Service Allan Harves JIMMY DAVIS RON LARSON ROBERT FAY ARNOLD SIKKEMA

The ASA/CSCA Newsletter



*photos courtesy of Dave Fisher

Symposium: Communicating Earth Science to the Public

The session "Communicating Earth Science to the Public" at the 2012 ASA annual meeting took a look at some of the opportunities, as well as obstacles, associated with presenting the historical sciences to the church and broader public.

Darrel Falk, the current director of BioLogos, spoke about the efforts of that organization to reach out to science teachers at Christian schools that traditionally view evolutionary science with skepticism. Teacher workshops focused primarily on establishing a level of trust and acceptance founded on the commitment to a common faith. This emphasis helped to overcome perceived conflict, and enabled participants to see that the acceptance of evolution was not a consequence of a godless worldview.

Davis Young, retired geology professor from Calvin and author, presented his vision of a future in which science was a valid partner with theology in the seminaries and in the pulpit. He further looked forward to a time when the positive contributions of theology and the church to the advancement of our scientific understanding of natural history was recognized and taught.

Josh Rosenau, from the National Center for Science Education, discussed the central importance of understanding the nature of science when communicating science to the public. Many of the erroneous views of science held by the public are actually rooted in the failure to recognize that scientific investigation is limited to natural causes and processes, and involves a rigorous process of testThe Newsletter of the ASA and CSCA is published quarterly for its membership by the American Scientific Affiliation. Send Newsletter information to the editor: Emily Ruppel, PO Box 668, Ipswich, MA 01938-0668. E-mail: emily@asa3.org

Send Coming Events information to David Fisher, dfisherasa@gmail.com

Please send Canadian matters to: CSCA, PO Box 63082, University Plaza, Dundas, ON L9H 4H0.

Send address changes and other business items to the American Scientific Affiliation, 55 Market St., PO Box 668, Ipswich, MA 01938-0668. Phone: (978) 356-5656; FAX: (978) 356-4375; E-mail: asa@asa3.org; Web site: www. asa3.org

©2012 American Scientific Affiliation (except previously published material). All rights reserved. Editor: Emily Ruppel

emily@asa3.org

ing and critical review. He specifically reviewed the excellent resources available at the Understanding Science website at <http://www.undsci. berkeley.edu>.

Lastly, Keith Miller, geologist and paleontologist from Kansas State University, spoke about how the media, and scientists themselves, often misrepresent the methods and conclusions of paleontology. The media commonly emphasizes a particular unusual discovery, looks for controversy and conflict, or inflates the importance of individual discoveries. This public face of the science obscures the real substances of science, which is the recognition and documentation of patterns of observations that make possible the reconstruction of the past.

-Keith Miller