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Guest Editorial

JAMES L. HAYWARD

What About Science?

“What are we to think about science when one of its presuppositions is that God does not exist?” The seminarian who recently asked this question expressed a common perplexity: Despite immersion in a society suffused with a scientific understanding of the universe, many Seventh-day Adventists still don’t know what to think about science. Technology—so-called “applied science”—has always been embraced by Adventists looking for more effective ways to spread the gospel and heal the sick. But basic science, humankind’s attempt to understand nature and its history, continues to be viewed with suspicion by many church members.

The early embrace of technology by Adventists, however—especially in medicine—meant that the church required the service of skilled and knowledgeable practitioners. They needed to know about the physics of blood flow, the chemistry of nutrition, the biology of cancer cells—all of which demanded an understanding of basic science. The only way to furnish this knowledge was to provide these practitioners with the requisite scientific backgrounds. In other words, the church needed scientists.

And scientists it now has—hundreds of them. Seventh-day Adventist colleges and universities offer training in the basic sciences from the elementary through the doctoral level. Adventist scientists and their students carry out extensive research, often in collaboration with colleagues at other universities. The results of this research are presented at national and international professional meetings and published in standard, peer-reviewed, scientific journals. In some cases, Adventist scientists serve as editors of these journals. A significant fraction of this research takes place in sciences with a strong historical bent like geology, paleontology, and geochronology—disciplines once suspect among Adventists.

The fact that scientific training and research are carried out by a sizable cadre of Seventh-day Adventist Christians clearly belies the sentiment expressed by my seminarian friend: Quality science can be and is carried out under the presupposition that God exists and that He is the Creator of this vast cosmos! An important task of Adventist science educators at all levels is to help students understand this fact and to encourage a healthy appreciation of scientific methodology and knowledge.

This special issue of the JOURNAL provides something of a progress report on Adventist thinking about science and its teaching in denominational schools. To prepare this report, we have assembled a panel of thoughtful scholars and educators to guide us through a maze of knowledge, viewpoints, and opinions on this complicated topic.

We begin with three essays that offer context and perspective. Historian Gary Land discusses how Adventist science developed and describes Adventist attitudes toward science over the past century and a half. Philosopher Del Ratzsch explains some of the shifting views about scientific epistemology, and argues that while science may not have the last word, it cannot be ignored. Ethicist David Larson examines moral issues surrounding the teaching and doing of science, a highly pertinent topic in today’s complicated society.

The insights of several Adventist scientists follow. As a biologist, I argue that quality science education happens only when faith, evidence, interpretation, and humility assume their proper roles in the teaching process. Physicist Ben Clausen reminds us that science as a human endeavor developed with the view that God created a lawful universe, one open to rational inquiry. Paleontologist Tom Goodwin demonstrates that it is possible for an Adventist science educator to address the history of life, an often controversial topic, with commitments to both faith and integrity. Geneticist Anthony Zuccarelli highlights some of the ethical dilemmas posed by recent advances in biotechnology, dilemmas that should receive attention at all educational levels. Finally, Susan Mentges, a graduating biology senior, opines that teaching science in the context of faith means helping students to shape their own views rather than attempting to indoctrinate them with our own.

We hope that our efforts will generate discussion and enhance the process of science education at all levels in Seventh-day Adventist schools.

James L. Hayward is a Professor of Biology at Andrews University in Berrien Springs, Michigan, and the Coordinator for this special issue on science. The editorial staff expresses their appreciation for his enthusiastic and diligent contributions to the planning and production of the issue, ranging from careful oversight of article content, to providing photos and illustrations, and answering hundreds of questions by phone and E-mail.