

AAAS DIALOGUE: SCIENCE, ETHICS, AND RELIGION

by Alison S. Brooks



In 1995, the American Association for the Advancement of Science (AAAS) established a program, Dialogue on Science, Ethics, and Religion (DoSER), to “facilitate communication between scientific and religious communities.” The director, Connie Bertka, is unusual in that she has a Ph.D. in a scientific field (geology) as well as formal study in theology.

DoSER sponsors many activities for those wondering about religious and ethical perspectives on advances in genetics, or who view religion and science as adversaries, or feel that to embrace one they must renounce the other. Some of these DoSER activities have focused on the science communities’ responses to theories of intelligent design. These AAAS-sponsored activities around the country include:

- multi-day conferences on broad topics of relevance to the scientific and religious communities, such as “Cosmic Questions” about how the universe began, and whether humans are unique in the universe;
- monthly public lectures to explore timely issues at the intersection of science, ethics, and religion on such topics as “Food and Biotechnology” and “Avoiding the Sixth Major Extinction”;
- public forums on emerging areas of public policy significance (e.g. Inheritable Genetic Modifications);
- workshops and working groups in which small research groups work to enhance public discussion of the scientific, ethical, and religious dimensions of emerging public policy issues. These have included such topics as “Islam and Science,” “Judaism and Genetics,” “Genetic Discrimination,” “Astrobiology,” and “Stem Cell Research”; and
- publications, including reports and statements on issues raised by current advances in genetics, an 8-

part video series on “The Epic of Evolution,” an interactive CD-ROM on “Cosmic Questions,” and several edited books that bring together relevant readings on evolution, population growth, and other issues from multiple perspectives.

A 2003 DoSER-sponsored symposium took place at the AAAS annual meeting in Boston. The session, “Primate and Human Nature: Cooperation and Altruism,” organized by anthropologist Robert Sussman (Washington University), focused on the findings of primatologists and other human and biological scientists concerning the evolution of behavior, in particular, cooperative and altruistic behavior. Sussman and his former student Paul Garber (University of Illinois) argued, for example, that primates, including males, spend relatively little time (less than 5-10% of the day) engaged in any kind of social behavior. Of that small percentage, most social behavior is affiliative (grooming, touching); very little is aggressive.

On January 12, 2004, a number of scientists, philosophers, historians, theologians, and educators met at Gallaudet University with representatives from six different Christian denominations in a workshop devoted to “Theology, Education and Public Policy.” In particular, the workshop addressed how religious communities could support the integrity of science education by taking account of contemporary evolutionary theory in relation to their theological, religious, educational, and public policy functions.

In his introduction to the workshop, James Miller, Ph.D. in Theology and DoSER Senior Program Associate, outlined varying views of how science and religion relate to one another. These ranged from a view of non-overlapping but complementary domains of authority, as popularized by the late Stephen J. Gould; to the view that religion can be fully explained scientifically in terms of cultural development, political and economic dynamics, or psychology; to the view that scientific findings must conform to religious doctrine; to more complex views in which religion and science have a long history of mutually constructive interactions in Western culture. A special focus of the workshop was the challenge to science education represented by the intelligent design movement. The issue of the appropriate relationship of science and religion is most acute in the domain of pub-

(continued on page 19)

(continued from page 15)

lic education, as more than 60% of the U.S. public hold that both evolutionary science and some form of creation should be included somewhere in the public school curriculum. (People for the American Way Survey, "Evolution and Creationism in Public Education," November 1999; <http://www.pfaw.org/pfaw/general/default.aspx?oid=2097>)

Two breakout sessions followed presentations of the latest scientific findings on the evolution of humans, life and the cosmos; summaries of historical and philosophical perspectives on religion and evolutionary science; and a Georgia teacher's "view from the trenches." In the first breakout, theologians, religious educators, and public policy staff met across denominational lines to explore common and distinctive issues within their functional categories in relation to the evolutionary sciences and the ideas of intelligent design. (The "intelligent design movement" argues that certain structures or processes of nature, especially at the level of viruses and bacteria, are so complex that they could not be the result of chance and natural law but must derive from an "intelligent designer.") One conclusion of these discussions was that, because the religious communities have tended to adopt a "non-overlapping" stance with respect to science, they have not seen the evolutionary sciences or the integrity of science education as matters for significant attention. The second breakout session was along denominational lines and provided an opportunity to begin to strategize about how these issues could be addressed more adequately in terms of theological reflection, religious education, and public policy advocacy within the denominations.

The following publications can provide interesting topics for classroom debate.

AAAS and AAAS-Sponsored Publications

CBS Religious Broadcasts. 2001. "Religion and Stem-Cell Roundtable" (for a copy, call 1-800-494-6007).

Chapman, A. R., Petersen, R. L., and Smith-Moran, B., eds. 1999. *Consumption, Population and Sustainability: Perspectives from Science and Religion*. Island Press.

Chapman, A. R., ed. *Perspectives on Genetic Patenting: Science, Religion and Industry in Dialogue*. Available from the AAAS, 1200 New York Avenue NW, Washington, DC 20005; 202-326-6400; email: webmaster@aaas.org

Chapman, A. R. Frankel, M., and Garfinkel, M. 1999. *Stem Cell Research and Applications: Monitoring the Frontiers of Biomedical Research*. <http://www.aaas.org/spp/frl/projects/stem/report.pdf>

Chapman, A. R. 1999. *Unprecedented Choices: Monitoring the Frontiers of Biomedical Research*. Fortress Press.

Frankel, M., and Chapman, A. R. 2000. *Human Inheritable Genetic Modifications Assessing Scientific, Religious and Policy Issues*. <http://www.aaas.org/spp/sfrr/projects/germline/report.pdf>

Miller, J. B., ed. 2001. *Cosmic Questions*. (CD-ROM) AAAS distribution center, publication Number PD-03-01A.

Miller, J. B. 2001. *The Epic of Evolution*. (eight-part video series) AAAS publication Number PD-03-2A.

Miller, J. B., ed. 2004. *The Epic of Evolution: Science and Religion in Dialogue*. Advances in Human Evolution Series. Prentice Hall.

Miller, J. B., ed. 1999. *An Evolving Dialogue: Scientific, Historical, Philosophical and Theological Perspectives on Evolution*. 2nd ed. Trinity Press International.

Miller, J. B., ed. 2001. *An Evolving Dialogue: Theological and Scientific Perspectives on Evolution*. Trinity Press International.

Other Publications

Haught, John F. 2002. *God After Darwin: A Theology of Evolution*. Westview Press.

Larson, E. J. 1998. *Summer for the Gods*. Harvard University Press.

Lindberg, David C., and Ronald L. Numbers, eds. 2003. *When Science and Christianity Meet*. University of Chicago Press.

Miller, Kenneth R. 2000. *Finding Darwin's God*. Perennial Press.

Miller, Keith B., ed. 2003. *Perspectives on an Evolving Creation*. Wm. B. Eerdmans Publ.

Padgett, A. G. 2003. *Science and the Study of God: A Mutuality Model for Theology and Science*. Wm. B. Eerdmans Publ.

Pennock, Robert T., ed. 2001. *Intelligent Design, Creationism and its Critics*. MIT Press.

Ruse, Michael. 2000. *Can a Darwinian be a Christian: Sociobiological Issues*. Cambridge University Press.

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