

The American Scientific Affiliation Booklet Controversy

Jerry Bergman

Many critics of "scientific creationism" advocate theistic evolution, the view that God guided evolution. This communication reviews the responses to a booklet published by the American Scientific Affiliation (ASA) on this topic. Probably most ASA members are theistic evolutionists of some sort. All are active, committed Christians. Some ASA members are supportive of the Intelligent Design (ID) movement; others are critical of ID. Although the statement of faith signed by its members identifies them as evangelical Christians, the ASA resembles a scientific society more than it does a religious group.¹ The ASA as an organization endeavors to investigate matters of science and faith, but it does not feel obliged to settle them by fiat, or to make official pronouncements about them. From its founding in 1941, ASA has remained open to various interpretations of the biblical doctrine of creation and has never advocated "flood geology" or what came to be known as "scientific creationism" or simply "creationism."²



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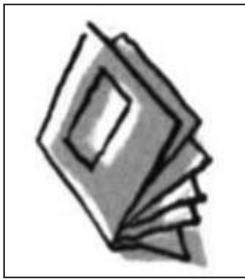
By the early 1980s, advocates of a literal interpretation of the Bible were using legal and political means to influence the teaching of evolution in public schools. Laws passed in Arkansas and Louisiana and a remark by presidential candidate Ronald Reagan convinced leaders of the scientific community that science education was "under attack."³ It had become obvious that a religiously motivated segment of the population was hostile to Darwinian evolution or at least suspicious of it. To prevent such antagonism from getting worse, individual American Scientific Affiliation (ASA) members began taking action, sometimes in the name of ASA.⁴ For example, in February 1982, when the decision in *McLean v. Arkansas Board of Education* was announced during the national meeting of the American Association for the Advancement of Science (AAAS), ASA members attending the meeting issued a press release in the name of the ASA, stating that "Creationists Can Be Evolutionists, Too," resulting in some favorable publicity for the ASA.

In 1984, three ASA members in California formed a Committee for Integrity in Science Education, with authorization from the ASA Executive Council to seek financial support for a publishing project. They were David

Price, John L. Wiester, and Walter R. Hearn. Price was named chairman on the basis of his doctorate in science education and experience teaching biology at both high school and college levels. Wiester, after serving as a teaching assistant in geology at Stanford, had served as financial officer for several high-tech businesses. After becoming a Christian, he published his synthesis of biblical faith and "old-earth" geology in a popular-level book, *The Genesis Connection*.⁵ Hearn has twenty years experience as a researcher and professor of biochemistry at Iowa State University. His Ph.D. from the University of Illinois is in biochemistry. He has been active in the ASA for much of his career and was the editor of the ASA newsletter for two decades. One of the founders of New College Berkeley, he now serves as professor of

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Jerry Bergman, a fellow of ASA, has been an active ASA member for over 25 years and has found his involvement in ASA a very rewarding part of his career. He has taught biology, genetics, chemistry, biochemistry, and anthropology for over 35 years. His nine degrees, including from Medical University of Ohio, Wayne State University in Detroit, University of Toledo, and Bowling Green State University, are all in the sciences. Many of his over 700 publications in twelve languages and twenty books and monographs deal with the creation/evolution controversy. He has taught at the Medical University of Ohio where he was a research associate in the department of experimental pathology, and at the University of Toledo and Bowling Green State University. He is now an adjunct professor at the Medical University of Ohio.



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science and Christianity there. He has contributed chapters to over six edited volumes, from Mixer's *Evolution and Christian Thought Today*⁶ to Templeton's *Evidence of Purpose: Scientists Discover the Creator*.⁷

The committee first toyed with the idea of writing for the conservative Christian public, with whom they were well acquainted, to try to persuade it to broaden its "young-earth" view of the biblical creation narrative. Concluding, however, that those in most immediate need of help were high school teachers "caught in the crossfire," the committee set to work to clarify issues that might come up in a classroom. With foundation grant support, the three authors met several times at Wiester's cattle ranch near Santa Barbara and, by mid-1986, had produced a 48-page booklet titled *Teaching Science in a Climate of Controversy* (see Figure 1).

The ASA booklet was modeled after, and was essentially a response to, the 1984 publication of National Academy Press titled *Science and Creationism: A View from the National Academy of Sciences* (NAS). The Preface to the ASA booklet was provided by a member of both the ASA and the National Academy, Professor John E. Halver of the School of Fisheries of the University of Washington. Halver expressed appreciation for the NAS booklet's summary of the evidence but noted that "to some readers the NAS booklet seemed to overstate its case—particularly with regard to human evolution." He commended ASA's *Teaching Science in a Climate of Controversy* for "its careful treatment of scientific matters and for its practical approach to questions that go beyond science."

The NAS had mailed a free copy of *Science and Creationism* to each of more than 40,000 high school biology teachers and science supervisors in the United States. ASA's Committee for Integrity in Science Education used the same mailing list from the National Science Teachers Association but had enough money to print and distribute only half that many copies of its booklet, targeting the western and southern states in 1986. The following year additional funds became available for a second printing (with slight revisions) that were mailed to teachers in the rest of the country. The ASA booklet was reprinted again in 1989 (with more revisions). In 1993, additions to the 1989 text made the fourth printing of *Teaching Science*

almost a new edition, bringing the total circulation to over 100,000 copies.

The authors of *Teaching Science* occupied what they called in their booklet the "broad middle ground in which creation and evolution are not seen as antagonists." They expected criticism from the narrowest segment of creationists, to whom even the word "evolution" was anathema, but they were unprepared for the virulent criticism hurled at their irenic effort by some scientists and educators. Having emphasized that teachers should focus on the quantity and quality of scientific evidence, why should it matter, they assumed, whether the case for evolutionary science was being made by a theist, an atheist, an agnostic, or someone who gave no thought to religion at all?

Evidently it mattered a great deal to California science writer William Bennetta, who called the ASA

a fundamentalist political movement with political aspirations that are broad, bold, and almost universally underestimated by the public and the press.⁸

He asserted that ASA members were all creationists who

want to bring all science education and all science under religious control. [Bennetta claimed that ASA's activities would] cripple science education in public schools [and would result in schools teaching] pseudoscience that distorts ... physics, chemistry, astronomy, geology, paleontology, and biology.⁹

Bennetta lashed out at the ASA as a

religious group [whose members must affirm that] the Bible is the inspired, unerring Word of God. [Ultimately, he argued, ASA's goal was to] replace science with a system of pseudoscience devoted to confirming biblical narratives.¹⁰

Bennetta seemed to mischaracterize the ASA and *Teaching Science* so thoroughly that the authors wondered if he had actually read the booklet. He called the ASA booklet

an ordinary exercise in creationist pseudoscience. It deserves special attention, however, because it has been distributed widely and because it may seem respectable to lay people.¹¹

Bennetta seemed to be absolutely certain that all ASA members were “scientific-creationists.” Considering science teachers to be the guardians of the “future health” and success of science, he wrote that when “science education comes under attack, teachers can expect their colleagues to help in defending it.” Bennetta cast himself in the role—fending off an “attack against science” by the ASA booklet, which actually was written to help teachers analyze some claims and counterclaims about evolution.

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The director for research for the National Science Teachers Association (NSTA) Russell Aiuto called the ASA booklet “clever and subtle” and those who advocated its position “neo-creationists.”¹² He concluded that the booklet was “very clever nonsense” that achieved

a very high level argument, one that would be so seductive, seemingly innocent, and ostensibly rational, that—at long last—the creationists would save our children from godless Darwinism and finally insinuate creationism into the curriculum.¹³

Aiuto objected to a classroom exercise added to the 1993 edition because of its reference to fossils providing *inference* for evolution (rather than *evidence*). Asking students to distinguish between *evidence* and *inference* was “deceptive” to Aiuto, who called both the book and its sponsoring organization “insidious” and “offensive.” He claimed that the “inspiring quote from a noted author or scientist”—with which each chapter was introduced—had been taken out of context.¹⁴

In response, Wiester called Aiuto’s review “a sad example of the tactics Darwinists use to defend their ideology; *ad hominem* rhetoric, dishonest statements and innuendo, and distortions of science.”¹⁵ Wiester accused Aiuto of assuming that whatever “evolutionists believe” is fact, noting that

beliefs are not what count in science. In science, it is evidence that counts. That evidence must be presented without manipulation by ideological infer-

ence. We hope that NSTA will join us in our efforts to have evolution taught as science.¹⁶

Kent State University Geology Professor Neil Wells wrote that the booklet was not only biased, but that it “belittles science,”¹⁷ and that the authors “lack knowledge” and are “confused.”¹⁸ Wells then revealed his real objection to the Christian position of the authors by repeating common “buzz-word” condemnations against Christianity, such as the Inquisition, the Crusades, etc.

Science writer Robert Shadewald complained that the booklet was “riddled with misconceptions and lacunae” but gave only one putative example.¹⁹ Texas Council for Science Education President Steven Schafersman went farther, calling the booklet “dangerous” because the view it presented, theistic evolution, was “plausible but false.”²⁰ He accused the ASA writers of not knowing how science operates, and *Teaching Science* of containing numerous errors of fact. He was especially concerned because he felt that the booklet gave “theism and religion . . . legitimacy.”²¹

San Jose State University Anthropologist Robert Jurmain dismissed the booklet with the judgment that the motives of the authors were “religious,” implying that, therefore, their conclusions were wrong.²² State University of New York Biology Professor Douglass Futuyma²³ called the booklet a “Creationist tract that uses as its principal tactics innuendo and selective omission.” National Cancer Institute Scientist Biologist Maxine Singer criticized the booklet for not covering material that she regarded as important and by ignoring that material she concluded “the writers of the ASA booklet have made a mockery of their claims of objectivity.”²⁴ (Of course, any booklet designed to be read

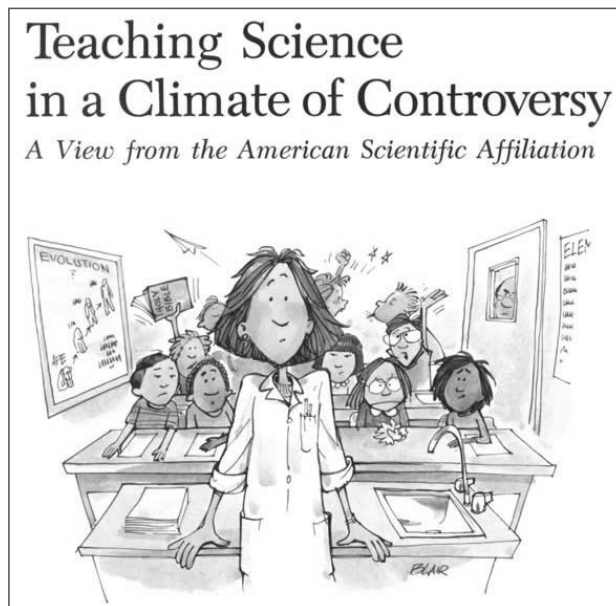
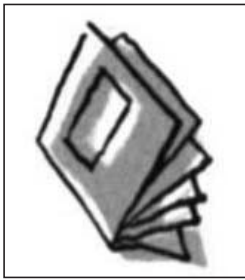


Figure 1. The cover of *Teaching Science in a Climate of Controversy*. Note the subtitle, “A View from the American Scientific Affiliation.”



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in an hour or so could hardly cover every aspect of a controversy that has raged for over 150 years.) Wiester responded to charges of incompleteness by noting that the purpose of the ASA booklet was to complement existing high school textbooks, on which teachers rely to present the evidence on which Darwinists' claims are based.²⁵

Research scientist Michael Ghiselin called the ASA "pamphleteers" who "attempt to disparage unwelcome scientific findings."²⁶ Arguing that "chance" accounts for "organic form or variation" of life, not "divine design," Ghiselin concluded that the ASA was telling "lies to naive and trusting young persons."²⁷

American Museum of Natural History Invertebrate Paleontologist Niles Eldredge accused the ASA booklet of retreating to the "central canon of all creationism—that major groups of organisms may have been separately created."²⁸ Boston University Microbiologist Lynn Margulis called the ASA booklet "insidious ... treacherous ... nefarious propaganda."²⁹ Juliana Texley, editor of *The Science Teacher*, conceded that *Teaching Science* "contains few if any easily recognizable errors in the first half of the text. Yet, buried in it are insidious scientific misrepresentations."³⁰ She insisted that these "implications are far worse than the text."³¹

University of California, Berkeley, Biochemistry Professor Vincent Sarich considered it fruitless to point out the poor evidence for evolution in the fossil record because "the fossil record is not, and never has been, our major source of information about evolutionary relationships."³² (Actually, many high school textbooks do claim that the fossil record is a major evidence for evolution.)

The mild skepticism of the ASA booklet toward some claims of Darwinian evolution was not appreciated by skeptic organizations. Another Berkeley professor, Biochemist Thomas Jukes, wrote a blistering attack in the *Bay Area Skeptic Newsletter*. He charged that Hearn, despite his career in biochemical research, did not comprehend molecular evolution. Jukes bemoaned the fact that *Teaching Science in a Climate of Controversy* had been distributed to tens of thousands of schools "when one of its co-authors, Hearn, has such confused ways of thinking and

writing that are reflected in its text."³³ Jukes did not detail the nature of Hearn's "confusion," but was certain that the ASA was a "creationist pseudoscience" organization that pushed classic "creationist quackery."³⁴

Hearn responded to Jukes' charges by flatly stating, "Well, he is wrong. We are not" a classic creationist organization.³⁵ By "classic" Hearn meant young age, flood geology, biblical literalist creationists. Dennis Wagner, director of Access Research Network, has noted that the spate of negative reviews the booklet received indicate "an orchestrated campaign to discredit the ASA publication." He adds that, to date, all but one of the publishers of the reviews of the ASA booklet "have refused to publish replies from the ASA authors."³⁶ Hearn wrote a detailed response to the *California Science Teachers Journal's* attempt to lambaste *Teaching Science*, which the journal refused to publish. ASA member and science historian Richard Aulie summarized the attack on the ASA by the *Creation/Evolution Newsletter* as a transmutation from a review of the booklet "into a denunciation of the ASA and all its works" that has "gone into the hands of science leaders everywhere."³⁷

Although the ASA booklet was widely attacked, few critics pointed to specific scientific errors, and the authors corrected minor errors that were noted in subsequent printings. The criticism seemed to consist primarily of name-calling.³⁸ In a response to the criticism, ASA fellow Wilbur L. Bullock, professor emeritus of parasitology at the University of New Hampshire (1988), wrote that, as a whole, the attacks were "emotional," "unscientific," and actually an attack on an "imaginary position" that is *not* found in the ASA publication, as noted also by Wiester.³⁹ Several ASA members tried to respond to the attacks by publishing various articles and letters to the editor, most of which were reasoned discussions of the purpose and arguments in the booklet.⁴⁰

Those active in organizations such as the Creation Research Society expressed mixed reactions to the ASA booklet. Many felt it compromised a strict creationist position and ignored many of what they consider the major problems with theistic evolution. We are not aware of any mainline creationist organization that openly supported the booklet.

Before drawing conclusions from this study of the reception of *Teaching Science in a Climate of Controversy*, we should also comment on its reception by those to whom it was addressed. It is possible to do this because the booklet contained a card asking readers to rate the booklet with a grade (A+ to F) and to offer any comments on its contents. Of those returning the score card supplied with the booklet, almost 80% rated the booklet very favorably (A or B), yet almost every review of the booklet published in science journals was very negative.

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Wagner concludes that most of the negative criticism was not aimed at the data presented, but rather was an emotional reaction to the ASA's attempt to "remove the 'ism' from the scientism and evolutionism that was so boldly presented in the 1984 NAS booklet."⁴¹ Responses on the returned cards thus reflect the conclusions of science teachers, not professors of evolution: 27.2% gave it an A+; 42% gave it an A; 6.7% a B; 5.3% a C; 4.6% a D; and 14.1% an F (a few adding a minus to indicate their complete dissatisfaction). Unfortunately, no information is available about those not returning the cards and the data was not analyzed beyond the above percents.

Although the ASA booklet was roundly condemned in scientific journals for being a "creationist tract," not all teachers read it that way. Most of the teachers seemed to consider the booklet a fair analysis of the major claims and counterclaims about evolution. Even those who gave it a C or D tended to give insightful comments. One concluded that it had "too much of an evolution bias."

Several reviewers condemned it and/or gave it an F because they concluded that the booklet promoted evolution. One teacher commented: "Macroevolution has failed every test devised. Why waste time and resources on advertising a poor theory?" Several comments were along the following lines: "Sounds like you support theistic evolution. I'd rather that you took the Bible as the literal word of God" and "As a Christian I definitely would

never guess that the authors of this edition believe in the infallible Word of God as being accurate as to the Genesis account of Creation."

Teachers who read the booklet as an attack on evolution and gave it an F or F- proved to be as eloquent at name-calling as the scientists who panned it. One called the writers "ignoramuses," adding "you guys never quit, do you?" Another said, "Propaganda, if I ever saw it. Trash." Another commented: "You are all mindless. Sober up and kick the religious habit." Others called the booklet "garbage," "silly," and "a thinly veiled attempt to promote a discredited view point." One respondent fumed, "You should rename your group the K.K.K." At least one complained that theistic evolution was even "more insidious than 'scientific creationism.'"

Conclusions

In writing about evolution's impact on Christianity, University of California Anthropologist Donald Symons stated that many

evolutionary biologists and historians of science have argued persuasively that Judeo-Christian theology is profoundly at odds with Darwin's theory of evolution. As Steven Jay Gould has pointed out, Darwin's 20-year delay in publishing his theory did not result from his fear of advocating evolution—evolutionary ideas had been commonplace since the late eighteenth century—but rather from his fear of advocating a *materialist evolutionary ... mechanism*. Other evolutionists of Darwin's day spoke of "vital forces," "directed history," "organic striving," and so forth—vague, mystical notions that were easily reconciled with a Christian God who acts through evolution rather than through special creation. ... Nonfundamentalist Christians are able to accept Darwinian evolution so easily because they do not fully understand its implications.⁴²

It is clear that many critics of ASA's *Teaching Science in a Climate of Controversy* saw the booklet's authors as fostering "vague, mystical notions" out of an unwillingness to "face the facts"—although those authors were trained in scientific disciplines and their booklet presented scientific discoveries in a positive light. As "nonfundamentalist Christians," the booklet's authors were undoubtedly aware of tensions in their own lives between a Christian point of view and a scientific point of view. Critic Alan M. Portis misunderstood the authors' perspective, concluding:

It is inappropriate for a science teacher to offer what the ASA publication implies—a synthesis of science and religion. Just as science develops by internal controversy, so a tension between scientific and religious views may promote the personal development of our students. If we seek to avoid this tension by synthesizing both points of view, we may compro-



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mise science and deny our students an opportunity for growth.⁴³

The question is whether such “personal development” requires resolution of the tension by essentially rejecting a religious view, specifically that of theism. Critic Schafersman expressed concern that the authors of the booklet wanted students’ personal development to take place in science classrooms:

These “classroom guidelines,” if conscientiously followed, would do more to harm science education in this country than not teaching science at all. The science classroom is not the proper place to discuss Gods and Creators. Doing so confuses students in precisely the wrong direction for development of a good appreciation of science, because they will associate such discussion with rational acceptance of deities on the part of the science teacher, an authority figure, and thus mistakenly assume that somehow science and deities are connected in some legitimate fashion. There is no common middle ground between supernatural religion and science; to suggest there is is deceptive.⁴⁴

Although some people, such as the ASA booklet’s authors, feel they have found common ground, Schafersman believes “they are simply holding contradictory views simultaneously.” Regardless of the validity of this claim, Schafersman concludes:

The public school classroom is no place to encourage students to think this way. As for taking sides, it is absolutely essential for the science teacher to tell students that “Science does not recognize or require a Creator.” Postulation of a creator is a faith position that has nothing to do with science. Neglecting to say this confuses the student about the true nature of science and promotes religious thinking in science, certainly something to be avoided.⁴⁵

Critics like Symons and Schafersman do not seem to realize that the fact is students commonly bring religious questions with them into the science classroom, just as their teachers often do—as shown in the responses by teachers to *Teaching Science in*

a Climate of Controversy. For that matter, many practicing theists take up science as a profession—as shown in the membership of the ASA. Furthermore, many theists are citizens who will never enter a laboratory, but who vote for the congressional representatives who supply the funds that support scientific research.

The harshest criticisms of the ASA booklet seemed to come from individuals with an atheistic or materialistic perspective but, to be fair, a few reviewers did defend the ASA. Richard Aulie, an ASA member, wrote a favorable comprehensive review of the booklet.⁴⁶ So did Karl Fezer, editor of the *Creation/Evolution Newsletter*, an agnostic willing to acknowledge theism as a legitimate perspective.⁴⁷

Lessons from This Experience

Although many ASA members feel that far more important issues exist that should be focused on, such as the environment and the depletion of natural resources, the creation/evolution controversy is now a more contentious issue than when the ASA booklet was published twenty years ago. The publication of ASA Fellow Francis Collins’s book, *The Language of God: A Scientist Presents Evidence for Belief* (as of this writing number 12 in sales on Amazon.com, and already reviewed in *Nature* [July 13, 2006]: 110, 114–5) has again raised the issue (and has also created much controversy). In view of this fact, the ASA has no choice but to continue to address this issue in order to cover issues that are on the minds of many Christians in science.

Judging by the cards returned and other feedback, the booklet had positive results, especially from teachers who must deal with the extremes from both sides of this still very contentious issue. No easy answer exists for how best to address the question of secularism in public education today; not only in science, but also in history, social science, and in other areas. Whereas fully 67% of the teachers favored the approach that the booklet took, the booklet’s approach appears to be a viable response to this difficult question, but more research and dialogue is required to reduce the antagonism from the general scientific community as reviewed in this communication. *~

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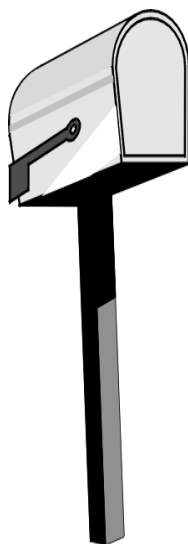
Acknowledgment

I wish to acknowledge the major contribution of Walt Hearn to this manuscript. His careful fact checking and the work he did on several major revisions significantly improved the original manuscript. He also provided several documents and guided the manuscript's development.

Notes

- ¹A number of other Christian academic societies are similar to the ASA in this aspect.
- ²Ronald L. Numbers, *The Creationists* (New York: Alfred A. Knopf, 1992), chapter 9.
- ³*Ibid.*, chapter 19.
- ⁴Some ASA members felt that this activity was a deviation from the traditional ASA stance.
- ⁵John Wiester, *The Genesis Connection* (Nashville, TN: Thomas Nelson Publishers, 1983).
- ⁶Russell Mixer, *Evolution and Christian Thought Today* (Grand Rapids, MI: Eerdmans, 1959).
- ⁷John Templeton, *Evidence of Purpose: Scientists Discover the Creator* (Continuum, 1994).
- ⁸William J. Bennetta, "Scientists Decry a Slick New Packaging of Creationism," *The Science Teacher* 54 (1987): 36.
- ⁹*Ibid.*, 36.
- ¹⁰*Ibid.*
- ¹¹*Ibid.*, 37.
- ¹²Russell Aiuto, "Book Claims Fairness, Tries to Dismantle Evolution," *NSTA Reports* (October–November 1993): 3.
- ¹³*Ibid.*
- ¹⁴*Ibid.*
- ¹⁵John Wiester, "Distorting for Darwinism: NTSTA Attacks the ASA," *Committee for Integrity in Science Education, American Scientific Affiliation* (1994): 1.
- ¹⁶*Ibid.*, 5.
- ¹⁷Neil Wells, "Review of *Teaching Science in a Climate of Controversy*," *Creation/Evolution Newsletter* 7 (1987): 4.
- ¹⁸*Ibid.*, 5.
- ¹⁹Robert J. Shadewald, "Comments about *Teaching Science in a Climate of Controversy* by D. Price, J. L. Wiester, and W. R. Hearn," *Creation/Evolution Newsletter*, 6 (1986): 4.
- ²⁰Steven Schafersman, "Review of ASA Booklet," *Creation/Evolution Newsletter* 7 (1987): 5.
- ²¹*Ibid.*

- ²²Robert Jurmain, "Review of *Teaching Science in a Climate of Controversy*," *Science Teacher* 54 (1987): 42.
- ²³Douglass Futuyma, "Review of *Teaching Science in a Climate of Controversy*," *The Science Teacher* 54 (1997): 37.
- ²⁴Maxine Singer, "The Science Teacher," *Creation/Evolution Newsletter* 7 (1987): 38.
- ²⁵John Wiester, "Response to Reviews of *Teaching Science in a Climate of Controversy*: 'Did the Universe Have a Beginning?' and 'Where Did the First Animals Come From?'" *Perspectives on Science and Christian Faith* 40 (1988): 162.
- ²⁶Michael T. Ghiselin, "Review of *Teaching Science in a Climate of Controversy*," *The Science Teacher* 54 (1987): 38–9.
- ²⁷*Ibid.*, 39.
- ²⁸Niles Eldredge, "Review of *Teaching Science in a Climate of Controversy*," *Science Teacher* (1987), 39.
- ²⁹Lynn Margulis, "Review of *Teaching Science in a Climate of Controversy*," *Science Teacher* (1987), 40.
- ³⁰J. Textley, "Editor's Corner," *The Science Teacher* 54 (1987): 8.
- ³¹*Ibid.*
- ³²Vincent Sarich, "Review of *Teaching Science in a Climate of Controversy*," *Science Teacher* 54 (1987): 41.
- ³³Thomas Jukes, Letter to the editor in a reply to Hearn, *Bay Area Skeptic Newsletter* 9 (1990): 11.
- ³⁴*Ibid.*, 13.
- ³⁵Walt Hearn, "Bennetta v. ASA: Misguided Zeal?" *Bay Area Skeptics Newsletter* 9 (1990): 5.
- ³⁶Dennis Wagner, "Review of *Teaching Science in a Climate of Controversy*," www.leaderu.com/orgs/arn/orpages/or101/101views.htm (2005), 3.
- ³⁷Richard P. Aulie, "Response to Bennetta's Review of the ASA Booklet," *Creation/Evolution Newsletter* (1987): 9.
- ³⁸*Ibid.*
- ³⁹Wilbur L. Bullock, "Scientists Decry a Slick New Packaging of Creationism," *Perspectives on Science and Christian Faith* 40, no. 3 (1988): 165–7.
- ⁴⁰Wagner, "Review of *Teaching Science in a Climate of Controversy*."
- ⁴¹*Ibid.*, 3.
- ⁴²Donald Symons, "Evolution and Christianity," *The Skeptical Inquirer* (1985): 90, emphasis in original.
- ⁴³Alan M. Portis, "Review of *Teaching Science in a Climate of Controversy*," *Science Teacher* 54 (1987): 43.
- ⁴⁴Schafersman, "Review of ASA Booklet," 6.
- ⁴⁵*Ibid.*
- ⁴⁶Aulie, "Response to Bennetta's Review of the ASA Booklet," 9–11.
- ⁴⁷Karl D. Fezer, "Reflections on the ASA Booklet, and on The Goals and Means of Science Education," *Creation/Evolution Newsletter* 6 (1986): 9.



Coming soon! Information about ...

Frontiers in Science and Faith

August 2–5, 2007

University of Edinburgh
Edinburgh, Scotland

The joint meeting of the
Christians in Science and the
American Scientific Affiliation

Abstract submission:
January 10, 2007

Campus lodging reservation:
January 29, 2007

Deposit for Scotland Tour:
February 20, 2007

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to serve a broad range of interests
in the field of science and Christianity.