

# Evolution issue ‘stirs emotions all over country,’ says biologist

NOTRE DAME, Ind. – Prominent Catholic cell biologist Kenneth Miller called for insistence on rigorous science and a clear distinction between science and a scientist’s personal opinions as he helped open a Darwin conference Nov. 1 at the University of Notre Dame.

Miller, a leading advocate for the compatibility of evolutionary science and religious faith and a leading opponent of nonscientific attacks on evolution in American education, said the battle for science continues despite a long string of court, legislative and election victories.

“Evolution is an issue that divides Americans,” he said, showing a map that indicated local anti-evolution activity in almost every state. “This is an issue that stirs emotions all over the country.”

“We have to come out of the classroom, out of the laboratory. If we do, the American people will choose science every time,” he said.

His talk, “Darwin, God and Design: Evolution and the Battle for America’s Soul,” was the first public lecture at the three-day conference on “Darwin in the 21st Century: Nature, Humanity and God.”

The John J. Reilly Center for Science, Technology and Values at Notre Dame presented the conference, observing the 200th anniversary of Darwin’s birth and the 150th anniversary of his “Origin of Species.”

The international conference drew scholars in a broad range of fields from Italy, Poland and the United Kingdom as well as numerous U.S. universities.

Miller, whose “Finding Darwin’s God” is in its 29th printing, traced the history of anti-evolution activity in the United States, beginning with the 1925 Scopes trial in Tennessee, when a biology teacher was put on trial and found guilty of violating a state law prohibiting the teaching of evolution in schools.

The ban on evolution remained law in Tennessee for more than 40 years, and teaching evolution was banned in five other states until the Supreme Court ruled the Arkansas ban unconstitutional in a 1965 case.

Proponents of creationism lobbied state legislatures arguing for “balanced treatment,” and Arkansas and Louisiana legislated the teaching of creation science. In 1981, a Methodist minister sued Arkansas and the law was overturned.

Since the 1980s, there has been a growing movement to promote intelligent design, which argues that “irreducibly complex” elements of organisms were brought into existence by a force outside nature.

Miller pointed out that the idea is distinct from the transcendent intelligence that theists, including himself, believe created the universe.

He quoted Pope Benedict XVI’s 2007 statement: “This clash is an absurdity because on one hand there is much scientific proof in favor of evolution, which appears as a reality that we must see and which enriches our understanding of life and being as such.”

Also, St. Augustine in “On the Literal Meaning of Genesis” warned that uneducated Christian claims about science based on biblical texts can cause nonbelievers to reject the salvation message of Scripture, Miller said.

Intelligent design proponents often claim that mainstream scientists are doctrinaire evolutionists unwilling to consider the conflicting idea, but Miller said they are unwilling to submit to the peer review critical to scientific advance.

He said intelligent design as a scientific theory collapsed in 2005 when a federal judge ruled against the school board in Dover, Pa., when it sought to incorporate intelligent design into the science curriculum.

Still, Miller said, “the evolution battle is not finished. It’s the result of a continuing attack against scientific reasoning itself. America’s scientific soul is at stake.”

In a 2006 survey, only Turkey had a lower percentage of people who believe in evolution compared to the U.S., he said, adding that the U.S. movement is being

exported to other countries.

“In many respects, intelligent-design creationism appeals to people because it seems to fill a vacuum,” he said. “Intelligent design seems to explain everything. You just say the designer did it.”

Meanwhile, public attacks on religion by some prominent scientists who use evolution as evidence explain some of the hostility and fear that many people feel.

Appearing to exclude God as creator, for example, leaves people feeling no ground for morality. “Evolution is portrayed not simply as wrong but as genuinely dangerous,” Miller said.

Appeals to the abundant scientific evidence, including transitional fossils and genetic fragments, are important, along with resistance to misguided conclusions that humans are the result of random mistakes.

In fact, the “mistakes” of DNA copying that lead to mutations are necessary for adaptation and survival. Some researchers believe the process makes sentient, self-conscious organisms inevitable.

His own view that evolution reflects the purpose of God to create free beings capable of real love is as valid as another scientist’s conclusion that evolution means that the universe is purposeless – and neither is a scientific claim.

“Evolution isn’t random,” Miller said, explaining that evolutionary processes explore what biologists call “adaptive space” and operate within physical and chemical constraints.

“I don’t think we are a mistake of nature. Evolution is a tremendously productive and fruitful process,” he added.