

**STATEMENT OF LARRY FRANKEL
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ON HOUSE BILL 1007

**PRESENTED AT INFORMATIONAL MEETING OF
PENNSYLVANIA HOUSE OF REPRESENTATIVES
SUBCOMMITTEE ON BASIC EDUCATION
MONDAY JUNE 20, 2005**

**ROOM 60 EAST WING
MAIN CAPITOL BUILDING
HARRISBURG, PENNSYLVANIA**

Good afternoon members of the Pennsylvania House of Representatives Subcommittee of Basic Education. My name is Larry Frankel and I am the Legislative Director for the ACLU of Pennsylvania. Thank you for inviting me to make a presentation at today's informational meeting on House Bill 1007. HB 1007 would permit a school board to include the teaching of the "theory of intelligent design" in public school science courses.

Eighty years after the infamous Scopes trial, there is continued resistance to the teaching of science and the theory of evolution in our public schools. In 1987 the United States Supreme Court made it clear that public schools cannot advance a religious doctrine by presenting religious viewpoints in science classes, as an alternative to the theory of evolution, *Edwards v. Aguillard*, 482 U.S. 578. Nevertheless, there is a persistent effort to undermine that decision and inject religious belief into public school science classes. In the face of mounting evidence that our children desperately need to be better educated in science and the scientific method, there are some who would compromise the quality of the

science curriculum by permitting the teaching of intelligent design as science even though intelligent design is anything but science.

Even though our society has made great advances in treating many human illnesses and diseases thanks to research and experimentation based on the theory of evolution, there are those who wish to impede further progress by recklessly challenging the enormous amount of evidence collected by biologists, geologists, paleontologists and other scientists that supports Darwin and the theory of evolution by natural selection.

The ACLU of Pennsylvania urges you to uphold the United States Constitution and promote the teaching of sound science by rejecting House Bill 1007. For those of you who wish to become thoroughly versed in why the First Amendment would be violated were House Bill 1007 to be enacted, I refer you to the attached copy of the complaint we have filed on behalf of a group of parents who oppose the teaching of intelligent design in the Dover Area School District science classes as a supposed critique of evolution. As the allegations set forth in that complaint make clear, the teaching of intelligent design in science classes violates the Establishment Clause of the First Amendment.

The gist of the matter is set forth on page 19 of that complaint where it states that the teaching of intelligent design serves no secular purpose and that:

Singling out evolution from all other scientific topics in the curriculum for special, negative treatment detracts from science education of students in the Dover Area School District, and misleads them about the established position of the scientific theory of biological evolution in the scientific community. The purpose and effect of the policy are to advance and endorse the specific religious viewpoint and beliefs encompassed by the assertion or argument of intelligent design.

Our courts have held that the United States Constitution does not permit the teaching of religious doctrine in science courses. Intelligent design is just the latest alias for creationism and it should be recognized for what it really is – a faith based explanation of the origin of life. While it may be permissible for such a religiously infused theory to be taught in philosophy or comparative religion courses, there is no place for teaching it in a science course in a public school.

After all, we don't let our science teachers teach other theories that have no scientific basis such as spontaneous generation of the idea that the sun revolves around the earth. The same should be true when it comes to the teaching of the origins of humanity. As the recently adopted academic standards make clear, in Pennsylvania we expect our science teachers to teach science not religion.

But let's not get bogged down in debates over the First Amendment. Rather, let us consider what is currently happening right here in Pennsylvania. As we sit here in Harrisburg, Philadelphia is playing host to BIO 2005 Annual Convention. Upwards of 18,000 visitors and 1,525 exhibitors from more than 60 countries and 3,000 companies are gathering to learn more about the biotechnology industry. Biotech is a huge growth area, one that will generate lots of investment and lots of jobs.

The biotech industry is already a major player in Pennsylvania. It is estimated that there are 125 biopharmaceutical companies in Pennsylvania. Over the last 18 months, the state of Pennsylvania has awarded \$44 million in assistance for biotech projects that are expected to create nearly 3,000 new jobs

and retain many existing ones. Pennsylvania's investment in this field has already generated considerable additional private investment.

Your colleagues in the legislature have demonstrated an awareness of the potential for biotech. I want to mention two of those bills that have been introduced this session: Representative Dan Frankel has introduced House Bill 75, with more than 35 cosponsors, promoting biotechnology enterprises in the Commonwealth; and Senator Robbins has introduced Senate Bill 414, the Science Technology Partnerships Act (with more than 25 cosponsors). While not limited to just promoting biotechnology, Senator Robbins' legislation like Representative Frankel's bill recognizes that Pennsylvania has much to gain by tapping into the wave of investment in biotech.

Thus it is supremely ironic, that we are discussing the teaching of intelligent design at the very moment when most of the Commonwealth's policy makers are focused (as they should be) on building a solid economic future for Pennsylvania and its children. Our children will not be able to fully take advantage of that future unless they learn good science and truly understand the scientific method.

How many new biotechnology companies will want to locate here in Pennsylvania if our students are being taught a watered down version of the complexities of evolution? Will Pennsylvania be able to retain existing biotech companies if their managers perceive that their potential workers have not been trained to think like scientists?

We already know that American students are being outperformed in the sciences. We also know that other countries are making great strides in catching up to us, and surpassing us, when it comes to having an educated middle class that understands and uses the latest scientific developments. Those societies invest in scientific learning and in biotechnology because they are truly interested in improving the lives of their citizens. For those of you who wish to learn more about how America is falling behind, I would recommend that you take a look at what is being written by Thomas Friedman, a Pulitzer Prize winning author and New York Times columnist.

Professors of biology at several of Pennsylvania's colleges and universities have written to the Dover Area School Board and expressed their strong belief that Pennsylvania's high school students need to learn real science if they are to go on to good institutions of higher education and good jobs. They fear that the teaching of intelligent design as science will hurt the next generation of Pennsylvanians.

The reality is that Pennsylvania's students need to leave school with a solid understanding of science and scientific theory if they hope to become doctors, medical researchers, DNA analysts, engineers, or biochemists. We all need the Pennsylvania General Assembly to direct its efforts to improving science education in our public schools and not dilute it with the teaching of a subject that has no scientific basis.

The ACLU urges you to focus on the future. The days of fighting over the validity of evolution have passed. Please get about the business of promoting the

teaching of real science and preparing our youth for what could and should be an exciting future.