

# SKEPTIC

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This issue's cover was created using 3D modeling software for the bench and robot. The same robot model appears again in the illustration on page 31. Reflection maps and background were shot on location in Victoria, Canada. Robot model by Jim Smith; textures and composite by Daniel Loxton.

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# The Dover Decision

A stunning blow against  
Intelligent Design Creationism—  
How the *Kitzmiller et al. v. Dover Area  
School District* Trial Unfolded

BURT HUMBURG  
AND ED BRAYTON

ON NOVEMBER 4, 2005, AFTER 40 DAYS AND NIGHTS OF testimony, the first evolution-Intelligent Design trial of the 21st century drew to a close in Federal court in Harrisburg, PA. While evolution trials in the 20th century had focused more on traditional creationism, *Kitzmiller et al. v. Dover Area School District* pitted the teaching of evolution against a more legally sophisticated challenger, Intelligent Design (ID).

On the morning of December 20, 2005, Judge John Jones III handed down his ruling against the teaching of Intelligent Design:

The proper application of both the endorsement and Lemon tests to the facts of this case makes it abundantly clear that the Board's ID Policy violates the Establishment Clause. In making this determination, we have addressed the seminal question of whether ID is science. We have concluded that it is not, and moreover that ID cannot uncouple itself from its creationist, and thus religious, antecedents.

Both Defendants and many of the leading proponents of ID make a bedrock assumption which is utterly false. Their presupposition is that evolutionary theory is antithetical to a belief in the existence of a supreme being and to religion in general. Repeatedly in this trial, Plaintiffs' scientific experts testified that the theory of evolution represents good science, is overwhelmingly accepted by the scientific community, and that it in no way conflicts with, nor does it deny, the existence of a divine creator.

To be sure, Darwin's theory of evolution is imperfect. However, the fact that a scientific theory cannot yet render an explanation on every point should not be used as a pretext to thrust an untestable alternative hypothesis grounded in religion into the science classroom or to misrepresent well-established scientific propositions.

The citizens of the Dover area were poorly served by the members of the Board who voted for the ID Policy. It is ironic that several of

these individuals, who so staunchly and proudly touted their religious convictions in public, would time and again lie to cover their tracks and disguise the real purpose behind the ID Policy.

With that said, we do not question that many of the leading advocates of ID have bona fide and deeply held beliefs which drive their scholarly endeavors. Nor do we controvert that ID should continue to be studied, debated, and discussed. As stated, our conclusion today is that it is unconstitutional to teach ID as an alternative to evolution in a public school science classroom.

Those who disagree with our holding will likely mark it as the product of an activist judge. If so, they will have erred as this is manifestly not an activist Court. Rather, this case came to us as the result of the activism of an ill-informed faction on a school board, aided by a national public interest law firm eager to find a constitutional test case on ID, who in combination drove the Board to adopt an imprudent and ultimately unconstitutional policy. The breathtaking inanity of the Board's decision is evident when considered against the factual backdrop which has now been fully revealed through this trial. The students, parents, and teachers of the Dover Area School District deserved better than to be dragged into this legal maelstrom, with its resulting utter waste of monetary and personal resources.

To preserve the separation of church and state mandated by the Establishment Clause of the First Amendment to the United States Constitution, and Art. I, § 3 of the Pennsylvania Constitution, we will enter an order permanently enjoining Defendants from maintaining the ID Policy in any school within the Dover Area School District, from requiring teachers to denigrate or disparage the scientific theory of evolution, and from requiring teachers to refer to a religious, alternative theory known as ID. We will also issue a declaratory judgment that Plaintiffs' rights under the Constitutions of the United States and the Commonwealth of Pennsylvania have been violated by Defendants' actions.

Defendants' actions in violation of Plaintiffs' civil rights as guaranteed to them by the Constitution of the United States and 42 U.S.C. § 1983 subject Defendants to liability with respect to injunctive and declaratory relief, but also for nominal damages and the reasonable value of Plaintiffs' attorneys' services and costs incurred in vindicating Plaintiffs' constitutional rights.

—John E. Jones III, United States District Judge

This was a stunning blow against Intelligent Design and creationism, but we were not surprised, given how the trial unfolded. The first handicap that ID advocates had to deal with was the zeal of the law firm representing them—the “national public interest law firm eager to find a constitutional test case on ID” mentioned in the decision. The Thomas More Law Center (TMLC), founded by conservative Catholic businessman Tom Monaghan and former Kevorkian prosecutor Richard Thompson, was itching for a fight with the ACLU from the time of its formation in 1999. Declaring themselves the “sword and shield for people of faith” and the “Christian Answer to the ACLU,” the TMLC sought out confrontations with the ACLU on a number of fronts, from public nativity and Ten Commandment displays to gay marriage and pornography. But the fight they really wanted, it seems, was over evolution in public school science classrooms, a fight that would take five years to come to pass.

The TMLC representatives traveled the country from at least early 2000, encouraging school boards to teach ID in science classrooms. From Virginia to Minnesota, TMLC recommended the textbook *Of Pandas and People* (hereafter *Pandas*) as a supplement to regular biology textbooks, promising to defend the schools free of charge when the ACLU filed the inevitable lawsuit. Finally, in summer 2004, they found a willing school board in Dover, Pennsylvania, a board known to have been searching for a way to get creationism inserted into its science classrooms for years.

On October 18, 2004, the Dover school board voted 6-3 to add the following statement to their biology curriculum:

*Students will be made aware of the gaps/problems in Darwin's theory and of other theories of evolution including, but not limited to, intelligent design. Note: Origins of life is not taught.*

A month later, they added a statement to be read to all ninth grade biology classes. That statement referred again to “gaps” in the theory of evolution and to “Intelligent Design” as an alternative. It also pointed students to copies of *Pandas* available in the 9th grade science classrooms. The ACLU filed suit on December 14, 2004 on behalf of 11 parents from the Dover school district. The battle was joined, and the *Kitzmiller* case promised to provide the TMLC the showdown it craved.

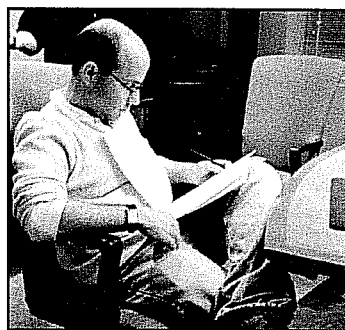
The ACLU was joined by Americans United for Separation of Church and State (AU), a frequent ally in such cases, and by the National Center for Science Education (NCSE), who operated as a *pro bono* consultant in the case. The NCSE has been battling efforts to attack evolution for several decades and their expertise and experience provided many of the key arguments and lines of evidence used in the case.

The first step was to find a law firm which could handle the case and take the risk of not being paid. Most large ACLU cases are handled with assistance from major law firms who do the work *pro bono*. If the suit is filed against a government agency, they can typically expect to have their legal fees covered by that agency if they win the case; if they lose, they have to pick up the costs incurred. The parents represented would have to pay nothing. NCSE Executive Director Eugenie Scott put out the word to that group's legal advisory council that they needed to find a law firm to take the *Kitzmiller* case; within a few short hours, that call was answered.

Eric Rothschild, one of the partners of the Philadelphia-based Pepper Hamilton LLP and a member of the NCSE legal advisory council,



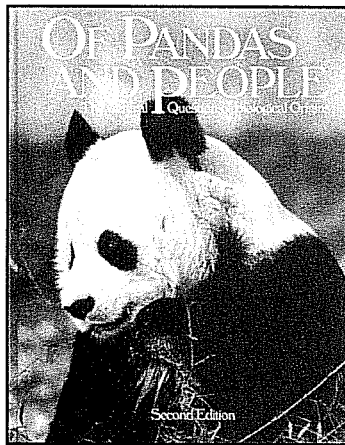
Eugenie C. Scott (left), head of the National Center for Science Education (NCSE), explains a point to reporter Laurie Lebo (right) of the *York Daily Record*.



Eric Rothschild, chief counsel for Philadelphia-based law firm Pepper Hamilton was part of a formidable legal team that answered the call of the National Center for Science Education.



Casey Luskin, (left) of the Discovery Institute and Nick Matzke of the national Center for Science Education pause on the steps of the courthouse.



The early manuscripts of the textbook *Of Panda's and People* contained the word “creationism,” which was systematically replaced by the term “Intelligent Design” before the book was published.

enthusiastically offered to take the case, telling Scott, "I've been waiting for this for 15 years." Most major firms do *pro bono* work, but that work is typically reserved for younger associates without a large and established client list as a good way to get them experience, boost the image of the firm with the charity work, and provide a healthy tax write-off. But Pepper Hamilton would assign five attorneys to *Kitzmiller*, three of them partners. Rothschild himself took on the role of chief counsel. Add in Witold Walczak and Pamela Knudsen of the Pennsylvania ACLU, and Richard Katskee and Alex Luchenitser from AU, and there is no doubt the plaintiffs had established a formidable legal team.

With the two sides now in place, the hard work began. Expert witnesses had to be named, subpoenas issued, depositions taken, and the discovery phase had to begin in earnest. For the plaintiffs, the legal strategy was clear. They would follow the same basic strategy the ACLU had followed in the landmark *McLean v. Arkansas* case in 1981, a case involving a demand for equal time for "creation science" in science classrooms in that state. In *McLean*, they called many expert witnesses to establish that creation science was not a genuine scientific theory but rather an inherently religious idea being dressed up in scientific-sounding language.

*McLean*, like *Kitzmiller*, was a Federal district court case. Because *McLean* was not appealed by the state of Arkansas, it never became a wider precedent, though the influence of this case should not be understated. *McLean* has been widely cited in cases around the country and it formed the basis for the 1987 *Edwards v. Aguillard* ruling, another equal time case involving creation science that made it to the Supreme Court. In *Edwards*, the Supreme Court ruled 7-2 that creation science was inherently religious and therefore could not be taught in public school science classrooms. (See Michael Shermer's history of this case in *Why People Believe Weird Things*.)

As we'll see, in addition to providing the roadmap for the plaintiffs in *Kitzmiller*, *McLean* and *Edwards*, it also prompted the change in terminology from "creation science" or "creationism" to "intelligent design" on the part of the anti-evolution movement, a key point in the plaintiff's case in *Kitzmiller*. In other words, the strategy would be to tie ID to creation science: if it could be established that ID is substantially the

same as creation science, application of the *Edwards* ruling as binding precedent becomes straightforward. Thus, the plaintiffs would need to show that ID is not a genuine scientific theory but rather, to quote Leonard Krishtalka, "creationism in a cheap tuxedo."

As in *McLean*, the ACLU wanted an all-star team of experts for *Kitzmiller* and they quickly assembled one. It included Ken Miller, a Brown University molecular biologist who authored the primary textbook used in the Dover, PA, biology classes; Robert Pennock, philosopher of science from Michigan State University who had written voluminously about ID; John Haught, Georgetown theologian who has written on the compatibility between evolution and Christianity; Barbara Forrest, philosopher from Southeastern Louisiana University and co-author with Paul Gross of *Creationism's Trojan Horse*, an encyclopedic history of the ID movement; Brian Alters, McGill education professor who works on how to improve teaching evolution in the public schools; and Kevin Padian, a UC Berkeley paleontologist and evolution education expert.

One task of these experts was to make the link between creationism and ID. The lead author of *Pandas*, Dean Kenyon, had authored the foreword to *What Is Creation Science?* by Henry Morris and Gary Parker. The second author, Percival Davis, had coauthored *A Case for Creation* with fellow young earth creationist (YEC) Wayne Frair. Discovery Institute fellows Paul Nelson and Nancy Pearcey are both YECs. In fact, Pearcey was the long-time research editor of the *Bible Science Newsletter*, in which she had published long tracts from *Pandas*. Clearly, then, there was enough in common between ID and creation science that the materials and ideas were congruent enough to be exchanged. But would this be enough to convince the judge that the two are essentially the same? How could this link be most clearly demonstrated? The answer, it turns out, was to be found within *Pandas* itself.

*Pandas* was published in 1989, and was hailed by ID advocates as "the first intelligent design textbook" and "one of the milestones" of the early ID movement. In the NCSE's enormous archive was a file of correspondence concerning this book, including a cache of seemingly random things people had sent them over the years. Jessica Moran, the NCSE archivist, reviewed this file and found a 1987 prospectus for an early

version of this book, then to be called *Biology and Origins*, that had been sent by the owners of the book, the Foundation for Thought and Ethics (FTE), to the publishing company Bartlett and Jones encouraging them to publish the book. That document referred explicitly to "creation," not "intelligent design." They also had numerous fundraising letters that had been sent out by the FTE referring to this book as supporting "creation." She gave these documents to Nick Matzke, NCSE's point man working directly with the attorneys, and the search was on for more.

Matzke began to speculate that perhaps there might be language in the earlier version of *Pandas* that used creation science terminology rather than the more legally sophisticated terminology favored by ID advocates today. In an email to the Pepper Hamilton attorneys, Matzke wrote, "I am reasonably sure that the word 'creation' would be substituted for 'design' or 'intelligent design' at many points within that manuscript. This would prove our point in many ways. We have a couple written sources indicating that picking the words 'intelligent design' was one of the very last things that Charles Thaxton did during the development of *Pandas*." Thaxton was the academic editor of *Pandas*. But did that manuscript still exist? If indeed it did refer to creationism or creation science rather than to intelligent design, one would think that the FTE would have destroyed it long ago. The attorneys decided to take a shot and subpoena any early drafts of the book that FTE might have. This turned out to be a key turning point in the case.

In the early part of July, the attorneys received the documents that the FTE produced in response to that subpoena. They could not possibly have imagined in advance the bounty they would find in that batch of documents. It turns out that there was not one early draft of *Pandas* but several, and they had kept copies of all of them. The first was called *Creation Biology* (1983), followed by *Biology and Creation* (1986), *Biology and Origins* (early 1987), and two drafts with the final title *Of Pandas and People*, both from 1987. The final version was published in 1989, with a revised edition released in 1993. Not only did the early drafts use various cognates of clearly creationist language—creation science, creation, creationist, etc.—rather than "intelligent design," they also used the very same definitions for both, with only the change in the word being defined.

In *Biology and Creation* (1986), the definition for the term "creation" was:

*Creation means that the various forms of life began abruptly through the agency of an intelligent creator with their distinctive features already intact. Fish with fins and scales, birds with feathers, beaks, and wings, etc.*

The same definition appears in *Biology and Origins* (1987). In the first draft from 1987, the one using the final title *Of Pandas and People*, this definition is repeated verbatim. But in the later draft with this title from 1987, written after the Supreme Court's *Edwards* decision had ruled creation science out of public school science classrooms, suddenly there was a change in terminology. Now it read:

*Intelligent design means that various forms of life began abruptly through an intelligent agency, with their distinctive features already intact. Fish with fins and scales, birds with feathers, beaks, wings, etc.*



Robert V. Gentry (left) speaks to the press inside the Federal court in Harrisburg, PA. He is a young-earth creationist and was an expert witness in the 1981 *McLean v. Arkansas* trial for the defense.



Tammy Kitzmiller, (left)—one of the plaintiffs who filed suit on behalf of science education—speaks to the press outside of the the Federal courthouse building in Harrisburg, PA.



Patrick Gillen, an attorney for the Thomas More Law Center—which declared itself "sword and shield for people of faith"—is interviewed by a crowd of reporters.



Attorney Stephen Harvey, and legal assistant Hedy Aryan of law firm Pepper Hamilton pose with "Professor Steve Steve," mascot of the weblog *Panda's Thumb* ([pandasthumb.org](http://pandasthumb.org)). Dr. Steve Steve was escorted to Pennsylvania by Wesley R. Elsberry of the National Center for Science Education who edits the blog, and who also shot the photos featured in this article.

This was truly a “Eureka!” moment for the plaintiff’s team. Here was undeniable proof that *Pandas* had begun as a creationist textbook and, after the *Edwards* case ruled creationism out of schools, the creationists simply changed their terminology, replacing “creation” with “intelligent design” and giving both terms an identical definition. This provided substantial evidence that intelligent design was simply creationism retrofitted to adapt to modern court rulings and would bode well for the plaintiffs’ case.

Meanwhile, preparations by the defense team from the TMLC weren’t going so well. Infighting quickly developed between the TMLC and the Discovery Institute (DI), the main ID group that was providing most of the expert witnesses. The DI was in a bind from the start. Generally concerned with the national ID effort, they knew that this could be the test case that decided once and for all whether ID was just warmed over creationism and that the Dover school board had left behind many clues to the religious intent behind their policy. The TMLC, on the other hand, was gung ho to defend the Dover policy itself, possibly due to their encouragement of the board’s efforts over the preceding years, and not merely the scientific nature of ID or the overall ID public relations movement.

This infighting culminated in the withdrawal of three key DI fellows as defense experts—William Dembski, Stephen Meyer, and John Angus Campbell—prior to their depositions. Though there were some conflicting reports on the specifics, both the TMLC and the DI agreed that the withdrawal took place because the TMLC refused to allow the witnesses to have their own attorney present during depositions. Two other DI fellows, Michael Behe and Scott Minnich, having already been deposed, were unaffected by the dispute and went on to testify at the trial.

But the withdrawal of Dembski, Meyer, and Campbell only deepened the rift between the TMLC and the DI. That rift came to a very public head at an American Enterprise Institute forum on ID on October 21st in Washington DC, while the trial was still going on in Pennsylvania. At that forum, TMLC director Richard Thompson publicly accused the DI of “victimizing” the Dover school board and of undermining their case “because we could not present the expert testimony we thought we could present.” He further said that the DI didn’t want Behe or Minnich

to testify either, but that they agreed to do so nonetheless. All in all, preparations for the case were going brilliantly for the plaintiffs and very badly for the defense. And things would only get worse for them.

After a long spring and summer of expert reports, depositions, investigation, and various pre-trial motions back and forth (including an unsuccessful attempt by TMLC to get the case dismissed), the trial finally got underway on September 26th in Federal District Court in Harrisburg, Pennsylvania, with Judge Jones, a 2002 Bush appointee, presiding. The plaintiffs would present their case first, then the defense. It wouldn’t take long for things to heat up in the courtroom.

In his opening statement, Eric Rothschild wasted no time revealing the central argument of the plaintiff’s case, tying ID directly to the “creation science” that was ruled out of public school science classrooms in *Edwards*. “What we will prove at this trial,” he said, “is that the Dover board policy has the same characteristics and the same constitutional defects as the creation science policy struck down in *Edwards*.” To do this, the plaintiffs had to establish two different lines of evidence, one from expert witnesses who would show that ID is conceptually similar to creation science and one from fact witnesses in the Dover community, who would show that the process of adopting the policy indicated a clear intent to endorse or support a religious viewpoint.

The fact witnesses would include former members of the Dover school board, local residents who attended the board meetings where the ID policy was discussed and ratified, and teachers who participated in the behind-the-scenes discussions with the administration and the school board. Aralene “Barrie” Callahan, a Dover school board member at the time the ID policy was adopted, and Bryan Rehm, a former physics teacher at Dover High School, would testify that prior to the adoption of the ID policy, members of the school board had spoken openly of wanting to balance the teaching of evolution with material advocating “creationism.” This testimony helped tie the school board’s actions to the actions struck down in *Edwards*.

Mrs. Callahan testified, and showed her handwritten notes from key school board meetings and board retreats in 2003 and 2004, that school board President Alan Bonsell and chair of

the curriculum committee William Buckingham had repeatedly spoken in favor of creationism explicitly, something both men denied. Likewise, Mr. Rehm testified that at a meeting of the science teachers in the 2003-2004 school year, Bonsell had made clear that he objected to the teaching of evolution by itself and wanted the teachers to balance it with creationism. He also testified that the teachers were unified at that meeting in telling the board that they would not support a dual model approach.

These statements from school board members about creationism, however, were not established merely by the memory of those who attended the meetings; there was also actual videotape of William Buckingham using such language. A week after the June 14, 2004, school board meeting, in an interview with a local Fox station, Buckingham said, "My opinion, it's OK to teach Darwin, but you have to balance it with something else such as creationism." There was also evidence from the local newspapers, both of which reported after the June 14 board meeting that Buckingham had argued that it was necessary to balance the teaching of evolution with creationism because, "Two thousand years ago, someone died on a cross. Can't someone take a stand for him?" Such statements were obviously quite inconvenient for the defense, which was trying to establish that there was no religious intent behind the policy. But with multiple witnesses all recalling the statement, plus the documentation in both local newspapers the day after the meeting, there was little they could do to thwart such testimony.

As powerful as the fact witnesses were, it was the testimony of the experts that would be the key to the plaintiffs' strategy and to the larger efforts to exclude ID from public school science classrooms. The testimony of plaintiffs' expert Forrest would become the first major flashpoint of the trial because it was her testimony more than anyone else's that would link creationism and ID.

From the moment Dr. Forrest took the stand on October 5th, it was obvious that it was her testimony that the defense feared the most, because they engaged in a protracted and emphatic fight to have her qualifications as an expert denied so she could not testify. That fight would last the entire morning of the 5th. Once she was accepted as an expert by the court and her direct testimony began, it became apparent

why the defense tried so hard to keep her off the stand. She would present two different lines of evidence, one about the broader ID movement and one about *Pandas* itself. Regarding the broader movement, Forrest would present statements from the leading lights of ID that spoke bluntly of the religious nature of their ideas. She would quote the Wedge Document, a strategic plan written by the DI in 1996, making explicit that the goal of intelligent design was "to replace materialistic explanations with the theistic understanding that nature and human beings are created by God." She would also quote ID advocate William Dembski's statement that "Intelligent design is just the Logos theology of John's Gospel restated in the idiom of information theory." Dr. Forrest testified that such language was not unusual, despite the protests of many ID advocates that their theory is not religious but purely scientific. She would testify that many of the arguments and concepts common to ID writings were substantively identical to arguments made by earlier advocates of creationism.

In addition, Dr. Forrest would testify regarding the evidence that was found in the earlier drafts of *Pandas* acquired from the FTE during discovery. She testified about the definitions mentioned earlier, establishing that the authors of the book considered "creation" and "intelligent design" equal enough to substitute. Forrest also testified about the results of systematic word count studies of the various drafts of the book from 1983 through the second edition of the book in 1993. Those studies showed that the phrase "intelligent design" was not used at all in the 1983 version, and used very few times in the 1986 and early 1987 versions of the book, while various cognates of creation (creationism, creation science, etc.) were used throughout those books. That same study also showed how, following the 1987 *Edwards* decision, the use of "creation" words or phrases drops to virtually none while the use of "intelligent design" phrases became used extensively.

Forrest also testified about documents written by the editors of *Pandas*, marketing the book to publishing companies as a creationist textbook and showing that the editors were aware of the potential of the *Edwards* decision to alter the market for the book. With these lines of evidence established in the court record, along with the testimony from the other plaintiff's experts, it was

difficult to deny that ID was, to use a biblical metaphor, old wine in new skin.

It was clear that the defense had their work cut out for them to undercut this powerful testimony. It was also clear, as the defense began presenting its experts, how much the withdrawal of Dembski, Meyer, and Campbell had hurt the TMLC's ability to mount a strong defense. They began with Michael Behe, a biochemist from Lehigh University and the author of *Darwin's Black Box*. His testimony continued for the better part of three days as the defense tried to establish the scientific credibility of ID. Unfortunately for the defense, it would also provide fertile ground for the plaintiffs to undermine that credibility.

On the stand, Behe tried to establish that his book had been subjected to peer review, one of the bedrock processes of vetting the credibility of scientific writings. He testified that his book had undergone even more thorough review than a normal journal article would have because of the controversial nature of the subject. He specifically named Dr. Michael Atchison of the University of Pennsylvania as one of the book's reviewers. But NCSE's Matzke remembered an article written by Atchison in which he stated that he had not reviewed the book at all but had only held a ten minute phone conversation with the book's editor over the general content. When the plaintiffs' attorney introduced this article during cross-examination, it was clearly a blow to Behe's claim that his book had "received much more scrutiny and much more review before publication than the great majority of scientific journal articles."

The cross examination of Behe also undermined the credibility of his testimony in several other ways. One of Behe's central claims has been that there is no serious scientific work or progress on how complex biochemical systems like the flagellum, the blood-clotting cascade, and the immune system could have evolved, and he testified as much. Plaintiffs' attorneys, in a Perry Mason-like flourish, pointedly dropped dozens of peer-reviewed books and journal articles about the evolution of such systems in front of him; Behe admitted that he had read virtually none of them. They also questioned him about a paper he had written in 2004, widely regarded by creationists as a peer-reviewed pro-ID paper. That cross examination established that, despite the fact that he and his co-author had essentially

rigged the parameters of their evolution simulation to make evolution as unlikely as possible, biochemical systems requiring multiple unselected mutations—the very type of system he claims could not have evolved in a stepwise fashion—could evolve in a relatively short period of time.

In the face of multiple witnesses, newspaper reports and even videotaped evidence, William Buckingham had a difficult time explaining his denials during deposition that he had never said anything about creationism. Both he and Alan Bonsell had been asked in depositions about where the money had come from to purchase the dozens of copies of the *Pandas* book; both testified that they didn't know where the money had come from, but that it was not taxpayer money. But under cross examination, it was revealed that Buckingham had raised the money at his church, wrote a check out of his own account for \$850 and gave it to Bonsell, who then gave it to his father to purchase the books. This inconsistency angered the judge so much that he interrupted the attorneys and began to question Bonsell himself, demanding an explanation for why he had not mentioned this when asked directly about it. Since the judge was usually relaxed and good natured in court, his anger was all the more noticeable, which gave rise to speculation that he might well charge the two school board members with perjuring themselves. At the very least, it was clear that he did not view them as credible witnesses.

Eventually, the attorneys would make closing statements and summarize their cases. Judge Jones complimented the attorneys on their advocacy, stating "Every single one of you made me aware of why I became a lawyer and why I became a judge."

*Kitzmiller* provides an excellent case study of evolution in action; ironically, in this case how the language of creationists has adapted to changing cultural environments. The defense argued that Intelligent Design is an entirely new species unrelated to creation science, and the plaintiffs expertly demonstrated both the clear ancestral relationship between creationism and ID and the selective pressure of higher court decisions that caused the speciation. With that phylogenetic relationship clearly established in the trial, the judge evidently decided that creationism had not mutated enough to survive as a new species of Intelligent Design. ▼