

## Not-So-Quick But Nonetheless Dirty Review of the *Kitzmiller* Decision

By Casey Luskin

### Introduction:

This is a response to the *Kitzmiller v. Dover Area School Board* (hereafter "*Kitzmiller*") decision (see [http://www.pamd.uscourts.gov/kitzmiller/kitzmiller\\_342.pdf](http://www.pamd.uscourts.gov/kitzmiller/kitzmiller_342.pdf) to download the full opinion). This response is adapted from an e-mail I sent out to a bunch of friends in late December, 2005, just a few days after the *Kitzmiller* ruling was released. I've been asked by some friends who received the e-mail to post it on the internet in presentable fashion, and so I'm finally getting around to it in February, 2006.

The *Kitzmiller* ruling declared intelligent design is religion, not science, and unconstitutional to teach in public schools. This response here is by no means an exhaustive response to the problems with the Judge's ruling. In fact, a more extensive discussion of many of these issues may be found in the Response to the ACLU ID FAQ (at <http://www.ideacenter.org/contentmgr/showdetails.php/id/1280>) which I wrote in February, 2005, about 7 months before the trial started. In some cases I simply provide links to other places which provide more complete discussions and refutations to the assertions made in the *Kitzmiller* decision. However, I hope this will help the reader see 4 things clearly:

### Summary:

- (a) The fact that some Dover Area School Board members had religious motivations and may have even lied on the witness stand is a sad thing, but it is irrelevant to the important question of whether intelligent design is a scientific theory which is constitutional for teaching in public schools;
- (b) The *Kitzmiller* decision was predicated upon a false definition of intelligent design that is not endorsed by design theorists;
- (c) The *Kitzmiller* decision delved into numerous scientific controversies which were not only unnecessary to address in order to resolve this case, but should not have been touched by a court or a judge who is not an expert in scientific disputes. Most poignantly, Jones inappropriately ruled that religious people who view evolution as antithetical to the existence of God are wrong;
- (d) The *Kitzmiller* decision stated many inaccurate conclusions surrounding the scientific issues at stake in this debate.

### An Unfortunate Ruling:

The ruling in the *Kitzmiller* case came out strongly against the school board. This did not surprise me because from what I had read, it seemed that the school board members had religious motivations. Whether or not one thinks motivations should matter in constitutional analysis, the law says that predominantly religious motivations are unconstitutional for government action, and the Dover Area school board members probably enacted their policy requiring the teaching of intelligent design in an illegal fashion.

Additionally, some contradictory testimony from school board members made it seem that they may have lied under oath. This was very inappropriate and unfortunate and, based upon courtroom exchanges, seemed to have (rightfully so) made the Judge very angry. Even more unfortunate is the apparent fact that this emotion may have affected the opinion itself.

### However, there is a silver lining to the decision:

- (1) This ruling will have a very limited legal effect because it comes from the lowest levels of the federal courts and will not be appealed, and
- (2) a legal analysis of the Judge's ruling shows that it is based entirely upon a false understanding of ID.

Thus people who understand the actual nature of ID will be unlikely to be phased by this ruling.

I'd like to first share my top 10 problems with the ruling and then provide a little legal / scientific analysis .

## **Part I: Briefly, the top 10 problems with the ruling:**

- (10) It mischaracterizes ID as a supernatural explanation even though it isn't and even though both pro-ID expert scientists testified it wasn't (Day 11 PM, pg. 95; Day 20 PM pg. 45, 135). In short, it lets the critics define ID rather than the proponents.
- (9) It overreaches the judicial arm by ruling that the nature of science is characterized by methodological naturalism and that intelligent design is not science (pg. 65).\*\*
- (8) It overreaches the judicial arm by ruling that evolution is compatible with religion (pg. 136).\*\*
- (7) It overreaches the judicial arm by ruling that evolution is a solid theory (pg. 41) and that irreducible complexity has been refuted (pg. 64).\*\*
- (6) It sadly threatens the teaching of evolution by making religious motivations of public proponents a relevant factor in deciding whether or not a theory can be taught.
- (5) It wrongly approves of the "it's wrong to single out evolution" argument which was actually rejected in Selman. (pg. 39-40) and wrongly claims "evolution is theory ... not fact" language is unconstitutional based upon Selman (which may be overruled on that point anyway).
- (4) It sadly threatens the teaching of evolution by using the endorsement test to determine if a scientific theory of biological origins would endorse (or presumably "dis-endorse") religion in the eyes of the average citizen.
- (3) It asserts the factually false claim that ID proponents haven't published peer reviewed papers (pg. 64).
- (2) It completely ignores ALL of the statements in the *Of Pandas and People* (hereafter "*Pandas*") textbook making it clear that ID is NOT a supernatural explanation--the Judge doesn't even mention with these statements, much less explain why the Court disagrees with them.
- (1) Incredibly, this trial court decision describes itself as the final answer for all courts, behaving and talking like it was handed down from the Supreme Court, as precedent for all. (pg. 63-64).

\*\* Even if these points are true, which some people may believe they are, courts have no business ruling on such matters. These are not issues for courts to rule on.

## **Part II: Clear Judicial Activism which makes the whole ruling less credible:**

Regarding the "overreaching," I'd first like to explain this point in more detail with regards to my point number 8 above. The Judge's ruling that evolution IS compatible with religion is a clear case of judicial activism. Judicial activism is when a Judge tries to create law that he or she is not authorized to make. My reasons for this are simple: It is clear from previous decisions from our U.S. Supreme Court that courts have no business ruling on the validity of religious beliefs. This will be seen further below.

First, here is what Judge Jones wrote in his ruling:

"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." (pg. 136)

Thus, the Judge ruled that it is "utterly false" to believe that "evolutionary theory is antithetical to a belief in the existence of a Supreme being." While I actually agree with the Judge that it may be possible to believe in God and evolution, I also recognize as in a legal ruling, it is inappropriate to call the religious beliefs of some people "utterly false."

The great thing about our First Amendment is that it preserves the rights of religious persons to believe whatever they want. Consider these clear statements from the U.S. Supreme Court which make it clear that what Judge Jones did was inappropriate for a court ruling:

"Thus the [First] Amendment embraces two concepts,-freedom to believe and freedom to act. The first is absolute but, in the nature of things, the second cannot be." (Cantwell v. Connecticut, 310 U.S. 296; internal citations removed)

"Laws are made for the government of actions, and while they cannot interfere with mere religious belief and opinions, they may with practices." (Reynolds v. United States, 98 U.S. 145, 166 (1878))

"The law knows no heresy, and is committed to the support of no dogma, the establishment of no sect. ... Freedom of thought, which includes freedom of religious belief, is basic in a society of free men. It embraces the right to maintain theories of life and of death and of the hereafter which are rank heresy to followers of the orthodox faiths. Heresy trials are foreign to our Constitution. Men may believe what they cannot prove. They may not be put to the proof of their religious doctrines or beliefs. Religious experiences which are as real as life to some may be incomprehensible to others. Yet the fact that they may be beyond the ken of mortals does not mean that they can be made suspect before the law. ... The religious views espoused by respondents might seem incredible, if not preposterous, to most people. But if those doctrines are subject to trial before a jury charged with finding their truth or falsity, then the same can be done with the religious beliefs of any sect. When the triers of fact undertake that task, they enter a forbidden domain. The First Amendment does not select any one group or any one type of religion for preferred treatment. It puts them all in that position." (U.S. v. Ballard , 322 U.S. 78 (1944); internal citations omitted for clarity)

To help elaborate a bit, if people believe that evolution conflicts with their religion, they have the constitutional right to believe as such, regardless of whether that the belief is true or "sound." If people want to believe that "evolutionary theory is antithetical to a belief in the existence of a Supreme being," then that is their constitutional right to do so. Perhaps for many people, their views about the nature of God preclude the possibility that He used evolution. But Judge Jones ruled from the federal bench that this religious belief is "utterly false." This is not an appropriate statement for any branch of our government to make. **With tongue-in-cheek, I say that Judge Jones' ruling is "unconstitutional": it establishes state theistic evolutionism as the only appropriate mode of theistic religion.**

This is a clear-cut case of judicial activism, at least in this regard. So while the Judge did have the right to determine constitutional issues about teaching ID (I don't question his right in that regard), his clear judicial activism and overreaching in other areas makes the entire decision less credible. He literally was preaching from the bench, and his over-extending of his rights to power make it clear that his ruling has questionable authority. If you don't believe me, reread the passage from Jones ruling carefully before moving on to the next section:

"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." (pg. 136)

Jones clearly ruled that people who hold religious beliefs that say that evolution is antithetical to the existence of God are wrong.

### **Part III: Analysis of the Ruling and the Judge's reasoning about whether or not ID is science:**

The Judge's reasons that ID isn't science, but rather religion, were all based upon inaccurate characterizations of ID or false statements of facts. Given that the Judge got simple facts incorrect such as whether or not ID proponents have published peer-reviewed papers in favor of ID (this is a black and white issue: such papers have been published, as discussed below; yet the judge incorrectly claimed they haven't), it's hard to see this opinion as properly informed and credible.

Here is a passage from the decision which summarizes this part ruling from Judge Jones:

"(1) ID violates the centuries-old ground rules of science by invoking and permitting supernatural causation; (2) the argument of irreducible complexity, central to ID, employs the same flawed and illogical contrived dualism that doomed creation science in the 1980's; and (3) ID's negative attacks on evolution have been refuted by the scientific community. As we will discuss in more detail below, it is additionally important to

note that [4] ID has failed to gain acceptance in the scientific community, [5] it has not generated peer-reviewed publications, nor [6] has it been the subject of testing and research." (pg. 64)

### **Analysis of each of the items (1)-[6]:**

**(1) Decision:** "We find that ID fails on three different levels, any one of which is sufficient to preclude a determination that ID is science. They are: (1) ID violates the centuries-old ground rules of science by invoking and permitting supernatural causation;"

My comment: ID is not an argument for a supernatural causation. Here, the Judge premises his entire decision upon a false understanding of ID. Please see Does intelligent design postulate a "supernatural creator?" (at <http://www.discovery.org/scripts/viewDB/filesDB-download.php?command=download&id=565>) or Is Intelligent Design Theory Really an Argument for "God"? (at <http://www.ideacenter.org/contentmgr/showdetails.php/id/1341>) to understand in more detail why ID does not invoke a supernatural explanation. Perhaps the fullest rebuttals to this charge come from the Amicus Briefs submitted in the case, which the Judge completely ignored. Follow any of these links to see extensive documentation of how intelligent design does not postulate a supernatural cause, but simply postulates intelligent agency:

- **Discovery Institute Amicus Brief** [Explains how "The Theory of Intelligent Design Does Not Postulate a Supernatural Creator and Is Distinct from Creationism"; see pages 22-25] (at <http://www.discovery.org/scripts/viewDB/filesDB-download.php?command=download&id=646>)

- **Discovery Institute Amicus Appendix** [This entire appendix to Discovery's Amicus Brief provides 'Documentation showing that the scientific theory of intelligent design makes no claims about the identity or nature of the intelligent cause responsible for life.'](at <http://www.discovery.org/scripts/viewDB/filesDB-download.php?command=download&id=647>)

- **Foundation for Thought and Ethics Amicus Brief** [This Amicus Brief submitted by the publisher of *Pandas* explains how "Intelligent design, as described in *Pandas*, is distinct from creationism because it does not use science to postulate a "supernatural creator," nor does it attempt to validate the Biblical account in Genesis"; see pages 5-12] (at <http://www.discovery.org/scripts/viewDB/filesDB-download.php?command=download&id=648>)

### **Foundation for Thought and Ethics Amicus Appendix**

[Provides documentation via scans of early drafts of *Pandas* and quotes from published versions of the textbook showing the textbook was never attempting to postulate a "supernatural creator." ] (at <http://www.discovery.org/scripts/viewDB/filesDB-download.php?command=download&id=649>)

The Judge ignored all of the evidence contained in these briefs. In light of these briefs, the Judge clearly misunderstands and/or misconstrues ID because ID simply isn't a supernatural explanation.

Additionally, consider this unambiguous testimony from pro-ID biologist, defense expert witness Scott Minnich, which apparently had no influence upon the Judge's decision:

Q. Do you have an opinion as to whether intelligent design requires the action of a supernatural creator?

A. I do.

Q. What is that opinion?

A. It does not.

(Day 20 PM, pg. 46; see also Day 20 PM, pg. 135)

Moreover, it is incredible that the Judge ruled as such in spite of the fact that the *Pandas* textbook made it absolutely clear that intelligent design was not a supernatural explanation:

"If science is based upon experience, then science tells us the message encoded in DNA must have originated from an intelligent cause. But what kind of intelligent agent was it? On its own, science cannot answer this question; it must leave it to religion and philosophy. But that should not prevent science from acknowledging evidences for an intelligent cause origin wherever they may exist. This is no different, really, than if we discovered life did result from natural causes. We still would not know, from science, if the natural cause was all that was involved, or if the ultimate explanation was beyond nature, and using the natural cause." (*Of Pandas and People*, pg. 7)

"Surely the intelligent design explanation has unanswered questions of its own. But unanswered questions, which exist on both sides, are an essential part of healthy science; they define the areas of needed research. Questions often expose hidden errors that have impeded the progress of science. For example, the place of intelligent design in science has been troubling for more than a century. That is because on the whole, scientists from within Western culture failed to distinguish between intelligence, which can be recognized by uniform sensory experience, and the supernatural, which cannot. Today we recognize that appeals to intelligent design may be considered in science, as illustrated by current NASA search for extraterrestrial intelligence (SETI). Archaeology has pioneered the development of methods for distinguishing the effects of natural and intelligent causes. We should recognize, however, that if we go further, and conclude that the intelligence responsible for biological origins is outside the universe (supernatural) or within it, we do so without the help of science." (*Of Pandas and People*, pg. 126-127)

So clearly the *Pandas* textbook explains that intelligent design cannot refer to the supernatural, but rather appeals to intelligence because "intelligence ... can be recognized by uniform sensory experience, and the supernatural ... cannot." Thus intelligent causes are an appropriate explanatory tool for science--and that is all that the theory of intelligent design, and the *Pandas* textbook used in this case refer to. To refer to a "supernatural cause" would go beyond what can be inferred by the scientific method. Thus the *Pandas* textbook makes it clear that it is not inferring a supernatural cause using the science of intelligent design.

Regardless of the outcome of this case, one would have expected these 2 passages from *Pandas* to weigh heavily in the nature of the decision, given that they address how intelligent design deals with the question of the supernatural. In fact, the Judge completely ignored these passages, except for a brief quote where he quotes *Pandas* as if it is stating the precise opposite of what it is actually stating:

"In fact, an explicit concession that the intelligent designer works outside the laws of nature and science and a direct reference to religion is *Pandas*' rhetorical statement, 'what kind of intelligent agent was it [the designer]' and answer: 'On its own science cannot answer this question. It must leave it to religion and philosophy.'"

In reality, this passage (quoted in full above) is meant to show that that the scientific theory of intelligent design does not try to address the question of the identity or nature of the designer. If taken accurately, the Judge would have recognized that this passage shows that the scientific theory presented in the *Pandas* textbook refuses to get into religious discussions about the identity of the designer. Amazingly, the Judge quotes this passage as if it implies a religious answer, when it is saying that because this is a religious question, the book cannot address this matter.

If there were any doubts that *Pandas* is not trying to give a particular religious answer regarding the question of the identity of the designer, consider this quote from the "Note to Teachers" at the end of the textbook:

"The idea that life had an intelligent source is hardly unique to Christian fundamentalism. Advocates of design have included not only Christians and other religious theists, but pantheists, Greek and Enlightenment philosophers and now include many modern scientists who describe themselves as religiously agnostic. Moreover, the concept of design implies absolutely nothing about beliefs and normally associated with Christian fundamentalism, such as a young earth, a global flood, or even the existence of the Christian God. All it implies is that life had an intelligent source." (*Of Pandas and People*, pg. 161)

The Judge also makes various other arguments about *Pandas*, such as that the presence of the word "creation" in early pre-publication drafts implies that intelligent design is the same as creationism. This is a complex issue which is easily and aptly addressed in the Foundation for Thought and Ethics Amicus Brief (at <http://www.discovery.org/scripts/viewDB/filesDB-download.php?command=download&id=648>), which Defends the *Pandas* textbook and deals extensively with the "early drafts used creationist language" argument of the Darwinists.

(2) Decision: "(2) the argument of irreducible complexity, central to ID, employs the same flawed and illogical contrived dualism that doomed creation science in the 1980's;"

My comment: This is not true at all. Irreducible complexity (IC) does not employ contrived dualism because irreducible complexity is a form of specified complexity which is a hallmark of something which was produced by

intelligent agency. The Judge again misunderstands ID: irreducible complexity is an argument against evolution but it is also a "purposeful arrangement of parts" which is central to intelligent design. As Michael Behe writes:

"Closely matched, irreducibly complex systems not only are tall problem for Darwinism but also are hallmarks of intelligent design."

(Michael Behe, "Intelligent Design Theory as a Tool," in *Mere Creation*, pg. 179)

Thus IC is both an argument against ID and a POSITIVE argument for design. There is no "contrived dualism" in this argument. If there is "dualism" it's real dualism, because irreducible complexity is a purposeful and complex arrangement of parts which we typically recognize as being produce by intelligence.

The Judge badly misunderstood ID as simply a negative argument against evolution. This could not be further from the truth. Consider these quotes from leading ID theorists regarding the positive arguments we make for design. These quotes explain that design is inferred because of our positive understanding of the types of information produced when intelligent agents act:

"Intelligent design provides a sufficient causal explanation for the origin of large amounts of information, since we have considerable experience of intelligent agents generating informational configurations of matter." (Meyer S. C. et. al., "The Cambrian Explosion: Biology's Big Bang," in *Darwinism, Design, and Public Education*, edited by J. A. Campbell and S. C. Meyer (Michigan State University Press, 2003)

"Though defined as a negation, design delivers much more than a negation ... To see why the filter is so well suited for recognizing intelligent agency, we must understand what it is about intelligent agents that reveals their activity. The principal characteristic of intelligent agency is *directed contingency*, or what we call *choice*. ... Specification is the only means available to us for distinguishing choice from chance, directed contingency from blind contingency." (William A. Dembski, *The Design Inference*, pg. 62, 64 (emphasis in original).)

"As I testified, the ID argument is an induction, not an analogy. Inductions do not depend on the degree of similarity of examples within the induction. Examples only have to share one or a subset of relevant properties. For example, the induction that, ceteris paribus, black objects become warm in the sunlight holds for a wide range of dissimilar objects. A black automobile and a black rock become warm in the sunlight, even though they have many dissimilarities. The induction holds because they share a similar relevant property, their blackness. The induction that many fragments rushing away from each other indicates a past explosion holds for both firecrackers and the universe (in the Big Bang theory), even though firecrackers and the universe have many, many dissimilarities. Cellular machines and machines in our everyday world share a relevant property — their functional complexity, born of a purposeful arrangement of parts — and so inductive conclusions to design can be drawn on the basis of that shared property. To call an induction into doubt one has to show that dissimilarities make a relevant difference to the property one wishes to explain." ("Whether Intelligent Design is Science A Response to the Opinion of the Court in *Kitzmiller vs Dover Area School District*," by Michael Behe) (at <http://www.discovery.org/scripts/viewDB/filesDB-download.php?command=download&id=697>)

See also A Positive Case for Design v. 3.0 (at <http://www.ideacenter.org/contentmgr/showdetails.php/id/1394>) for further evidence that design is based upon positive arguments.

Clearly Judge Jones mischaracterized ID as merely a negative argument against evolution. Behe himself explains these positive arguments. I will end this section with an excellent piece of testimony from Scott Minnich, completely ignored by Judge Jones in the ruling, which explains how ID is a positive argument based upon our experience of what intelligent agents produce:

"In other words, you're saying, it's an argument out of ignorance. And I don't think it is. Again, it's an argument out of our common cause and effect experience where we find these machines or information storage systems. From our experience, we know there's an intelligence behind it." (Day 21, pg. 86)

Again, this testimony was ignored by the Judge.

**(3) Decision:** "(3) ID s negative attacks on evolution have been refuted by the scientific community."

My Comment: The judge should have shown more restraint than to adjudicate scientific matters related to evolution. These were issues which should not have been decided by the judiciary. Whether or not ID is accurate is not for judges to decide. This is why one court correctly observed:

"the wisdom of an educational policy or its efficiency from an educational point of view is not germane to the constitutional issue of whether that policy violates the establishment clause." (*Smith v. Board of School Commissioners of Mobile County*, 827 F.2d 684, 694 (11th Cir. 1987).)

So he had no business declaring ID scientifically flawed. That's not an issue within the jurisdiction of federal courts to decide. That's for bodies which fit under the legislative branch.

At this point, it would be appropriate to critique the Judge's claims that Behe ignores exaptation (i.e. "co-optation") in his writings. The Judge writes:

"By defining irreducible complexity in the way that he has, Professor Behe attempts to exclude the phenomenon of exaptation by definitional fiat, ignoring as he does so abundant evidence which refutes his argument." (pg. 76)

Does Behe really ignore exaptation in his arguments? Consider what Behe wrote regarding the origin of the cilia in *Darwin's Black Box*:

"Because the cilium is irreducibly complex, no direct gradual route leads to its production. So an evolutionary story for the cilium must envision a circuitous route, perhaps adapting parts that were originally used for other purposes." (*Darwin's Black Box*, pg. 65-66)

In fact, Behe goes on to address the exaptation explanation in extensive detail both in a theoretical sense and then also in a practical sense with regards to the origin of the cilium:

"For example, suppose you wanted to make a mousetrap. In your garage you might have a piece of wood from an old Popsicle stick (for the platform), a spring from an old wind-up clock, a piece of metal (for the hammer) in the form of a crowbar, a darning needle for the holding bar, and a bottle cap that you fancy to use as a catch. But these pieces couldn't form a functioning mousetrap without extensive modification, and while the modification was going on, they would be unable to work as a mousetrap. Their previous functions make them ill-suited for virtually any new role as part of a complex system. In the case of the cilium, there are analogous problems. The mutated protein that accidentally stuck to microtubules would block their function as "highways" of transport. A protein that indiscriminately bound microtubules together would disrupt the cell's shape--just as a building's shape would be disrupted by an erroneously placed cable that accidentally pulled together girders supporting the building. A linker that strengthened microtubule bundles for structural supports would tend to make them inflexible, unlike the flexible linker nexin. An unregulated motor protein, freshly binding to microtubules, would push apart microtubules that should be close together. The incipient cilium would not be at the cell surface. If it were not at the cell surface, then internal beating could disrupt the cell; but even if it were at the cell surface, the number of motor proteins would probably not be enough to move the cilium. And even if the cilium moved, an awkward stroke would not necessarily move the cell. And if the cell did move, it would be an unregulated motion using energy and not corresponding to any need of the cell." (*Darwin's Black Box*, pg. 66-67)

So Behe clearly addresses the possibility that parts can be "co-opted" from other systems and does not shy away from this objection at all. Behe explains that having all of the parts for a system are not enough: you have to have the proper assembly instructions as well. Behe also rebuts this evolutionist claim by noting that just having these proteins around doesn't solve the problem when it comes to assembling irreducibly complex structures.

Indeed, it is worth noting that the popular-level lay pro-ID video "Unlocking the Mystery of Life" deals with this objection with respect to the bacterial flagellum, where it discusses the fact that evolutionists claim that subsystems, or whole systems of irreducibly complex features may have once performed different functions in the cell. William Dembski's expert rebuttal refutes this objection for the bacterial flagellum, although the Judge decides that Ken Miller's deficient arguments are correct (see [http://www.designinference.com/documents/2005.09.Expert\\_Rebuttal\\_Dembski.pdf](http://www.designinference.com/documents/2005.09.Expert_Rebuttal_Dembski.pdf)).

The pro-ID arguments were never soundly refuted, regardless of what the Judge said. The Judge simply accepted whatever the plaintiffs said, hook line and sinker.

**[4], [5], [6]:** Decision: “[4]As we will discuss in more detail below, it is additionally important to note that ID has failed to gain acceptance in the scientific community, [5] it has not generated peer-reviewed publications, [6] nor has it been the subject of testing and research....”

My comment: This again is simply a false statement. While it's clear that ID is a minority viewpoint, the central holding of the U.S. Supreme Court ruled in *Daubert. V. Merrell Dow Pharmaceuticals* that an “acceptance” test is inappropriate as a litmus test for determining if something is science. Regarding peer review, the Judge simply ignored the evidence and invented the facts as he pleased. Please see also [this page](#) for more information. But here is a listing of just a few peer-reviewed books or articles published in mainstream literature supporting and testing ID:

- 1. Stephen Meyer, “The Origin of Biological Information and the Higher Taxonomic Categories” *Proceedings of the Biological Society of Washington*, 117 (2004):213-239.
- 2. Lönnig, W.-E., "Dynamic genomes, morphological stasis and the origin of irreducible complexity," *Dynamical Genetics*, Pp. 101-119.
- 3. Øyvind Albert Voie, "Biological function and the genetic code are interdependent," 28(4) *Chaos, Solitons and Fractals*, pg. 1000– 1004 (May 2006).
- 4. William A. Dembski, *The Design Inference: Eliminating Chance through Small Probabilities* (Cambridge: Cambridge University Press, 1998).

These publications simply reveal that the Judge was wrong to say there is no peer-reviewed support for ID. This is a simple black and white issue which the Judge simply got wrong.

Finally, there is much positive evidence for intelligent design which has been tested experimentally. At trial, Scott Minnich testified about his experiments testing irreducible complexity. Minnich begins by explaining how molecular machines can be tested for the presence of irreducible complexity:

Molecular machines are comprised of a core set of components that are arranged for purpose essential for function of that machine. If one of these components is removed from the machine, there's a resulting overall loss of function. If there's no function, then there's nothing to select, you know, from a Darwinian perspective, or you have to assume that there would be some selective advantage for an intermediate, but this implies that mutations in genes encoding pieces of a molecular machinery will yield selectable phenotypes based on this loss of function.  
(Day 20 pm, pg. 103-104)

This is the bread and butter of molecular genetics. If these systems we worked on weren't irreducibly complex, we would know very little about them. This is a mechanism how the fact that we want to identify all the components of a given molecular machine, we make mutants that trash the system, sort out, map the mutations, how many genes are involved, and then start piecing it back together. It's a very reverse engineering procedure more attuned to, you know, this concept of intelligent design or reverse the design process to understand how these systems work.  
(Day 20, pm pg. 104-105)

Thus by knocking out genes, one can determine if the machine is irreducibly complex. When the function ceases without a gene, then that part is vital to the machine and forms a part of its irreducibly complex core.

Minnich then explained his methods:

A. I work on the bacterial flagellum, understanding the function of the bacterial flagellum for example by exposing cells to mutagenic compounds or agents, and then scoring for cells that have attenuated or lost motility. This is our phenotype. The cells can swim or they can't. We mutagenize the cells, if we hit a gene that's involved in function of the flagellum, they can't swim, which is a scorable phenotype that we use. Reverse engineering is then employed to identify all these genes. We couple this with biochemistry to



essentially rebuild the structure and understand what the function of each individual part is. Summary, it is the process more akin to design that propelled biology from a mere descriptive science to an experimental science in terms of employing these techniques.

(Day 20, pm, pg. 105)

Minnich then showed slides from his own experiments:

A. I do, in the next slide. Hopefully this will cut to the chase and show you what we're talking about. This is an organism that my students and I work on. This is a petri dish about 15 millimeters size, filled with this soft agar food source for the organism.

(Day 20, pm, pg. 106)

He explained how he mutated all of the flagellar genes and found that it loses function if one gene is missing. Thus, the flagellum is irreducibly complex:

One mutation, one part knock out, it can't swim. Put that single gene back in we restore motility. Same thing over here. We put, knock out one part, put a good copy of the gene back in, and they can swim. By definition the system is irreducibly complex. We've done that with all 35 components of the flagellum, and we get the same effect.

(Day 20, pm pg. 107-108)

Minnich makes this point explicit:

Q. Are both of these systems irreducibly complex?

A. By definition I mean all the components for the type three system were identified by mutational analysis, and in this case attenuation of virulence.

(Day 20, pm pg. 112)

Thus the irreducible complexity of the flagellum has been tested, and Minnich has tested it, and he found that it is irreducibly complex. Finally, Minnich specifically stated that there is research going on which tests intelligent design. During cross examination he stated:

Q. None of that research is going on right now, is it?

A. Some of the work. The theoretical work is. I mean, Mike Behe published this paper. Axe published his paper in terms of evolution and proteins. That addresses these issues.

(Day 21 pg. 85)

So basically, the Judge chose to ignore this testimony that design proponents are testing their ideas.

This reveals a consistent theme throughout the trial: if the defense experts said it, the Judge ignored it. If the plaintiffs said it, the Judge believed it. This held true for black and white issues which the Judge got wrong, such as "Have ID proponents produced peer-reviewed literature?" to more difficult ones such as "Does the Type III Secretory System refute irreducible complexity?" or "Does intelligent design postulate a supernatural creator?" (It is actually quite simple to address the latter question if one simply reads the writings of ID proponents – see (at <http://www.discovery.org/scripts/viewDB/filesDB-download.php?command=download&id=647>)) In each case, the defense gave full rebuttals to the arguments of the plaintiffs. And the Judge ignored them. That the Judge got the simple black & white issues wrong gives pause to wonder, "Perhaps he got the bigger issues wrong as well."

#### **Part IV: Is this ruling the final word?**

In my number 1 problem with this ruling above, I noted that "Incredibly, this trial court decision describes itself as the final answer for all courts, behaving and talking like it was handed down from the Supreme Court, as precedent for all." This statement was based upon an incredible statement by Judge Jones in the case:

"[T]he Court is confident that no other tribunal in the United States is in a better position than are we to traipse into this controversial area. Finally, we will offer our conclusion on whether ID is science not just because it is essential to our holding that an Establishment Clause violation has occurred in this case, but also

in the hope that it may prevent the obvious waste of judicial and other resources which would be occasioned by a subsequent trial involving the precise question which is before us." (pg. 63-64)

The message here is that because Judge Jones has settled these matters, there is no need for another tribunal to ever readdress them. Yet it is the business of courts to readdress matters so as to assure that one person does not have the final say on an issue.

Indeed, in America, only the U.S. Supreme Court has the final say on legal matters. And there is a very good reason why the higher up one goes in the federal court system, the more judges there on a panel deciding a given case: cases which are binding over larger parts of the country require larger numbers of judges, to ensure more accuracy in legal decisions that impact more people. This case will only impact the parties which were involved. Judge Jones did not have the right to think that he was the final word on this matter. In fact, there are very good reasons to believe that in the future, other courts may come to different outcome....

I hope this brief analysis has shown that many of the Judge's holdings in this case were not rooted in reality. In fact, I observed 6 days of this trial firsthand, and having eye-witnessed various parts of the trial, I came away quite encouraged: the nature of the plaintiffs' scientific and legal arguments presented at trial were incredibly weak. This should actually encourage that design proponents have the science and law on our side. It is no surprise that the Darwinists are trumpeting this case as a big win or the final word in this debate. But it isn't. I find great confidence in the fact that the plaintiffs won only by misrepresenting intelligent design. It is simply unfortunate that the plaintiffs' false version of intelligent design became canonized into this particular opinion.

Here are 4 of their misrepresentations which the judge believed but are refuted by reality:

- (1) ID is a supernatural explanation and therefore the same as creationism;
- (2) ID proponents haven't published their research or tested their ideas;
- (3) Irreducible complexity is NOT an argument for design, but just a negative argument against evolution, making ID simply a negative argument against evolution.
- (4) Irreducible complexity has been refuted by the presence of structures such as the Type III Secretory System.

These are all false claims and plaintiffs could only win by misrepresentation. Unfortunately the Judge bought their arguments, but ID proponents should be encouraged that misrepresentations are the best arguments that the critics have got!

While this was an unfortunate ruling, readers should keep in mind that one cannot force the empirical evidence for design out of the cell by judicial decree. Thus, this ruling is not the final word and this debate is most certainly not over.

#### **Links for Further Reading:**

##### **- Judge John E. Jones' Full Decision**

[from Middle District of Pennsylvania Website] (at [http://www.pamd.uscourts.gov/kitzmiller/kitzmiller\\_342.pdf](http://www.pamd.uscourts.gov/kitzmiller/kitzmiller_342.pdf))

##### **- Discovery Institute Amicus Brief**

[Defends the legality of teaching intelligent design] (at <http://www.discovery.org/scripts/viewDB/filesDB-download.php?command=download&id=646>)

##### **- Discovery Institute Amicus Appendix**

[Provides documentation of peer-reviewed and scholarly literature demonstrating that ID is not a supernatural explanation] (at <http://www.discovery.org/scripts/viewDB/filesDB-download.php?command=download&id=647>)

##### **- Amici Curiae Brief of 85 Scientists**

[Explains why courts should not define science and should provide academic freedom to scientists regardless of their religious or anti-religious motivations] (at <http://www.discovery.org/scripts/viewDB/filesDB-download.php?command=download&id=558>)

- **Foundation for Thought and Ethics Amicus Brief**

[Defends the *Pandas* textbook and rebuts the assertion that ID is creationism; deals extensively with the "early drafts used creationist language" argument of the Darwinists] (at <http://www.discovery.org/scripts/viewDB/filesDB-download.php?command=download&id=649>)

- **Foundation for Thought and Ethics Amicus Appendix**

[Provides documentation via scans of early drafts of *Pandas* showing the textbook did not use the word "creation" in an unconstitutional fashion] (at <http://www.discovery.org/scripts/viewDB/filesDB-download.php?command=download&id=649>)

- **Discovery/FTE Reply Brief**

[Corrects the record with documentation of how leading ID proponents did NOT favor Dover's policy to mandate ID] (at <http://www.discovery.org/scripts/viewDB/filesDB-download.php?command=download&id=650>)

- **Response to the ACLU Intelligent Design FAQ** (Written before the trial, but responds to many assertions made by plaintiffs, and the final decision, in this case) (begins at <http://www.ideacenter.org/contentmgr/showdetails.php/id/1280>)

**Other Informational and Response Links:**

- **Dover In Review** by John G. West

[A critique of the *Kitzmiller* decision which originally occurred as a four part blog post on the Evolution News & Views Blog in December, 2005.] (at <http://www.discovery.org/scripts/viewDB/index.php?command=view&id=3135>)

- **A Visitor's Guide to the Dover Intelligent Design and Evolution Case** by Casey Luskin

[A "FAQ" for the interested layperson about the case from the Evolution News & Views Blog] (at [http://www.evolutionnews.org/2005/12/a\\_visitors\\_guide\\_to\\_the\\_dover.html](http://www.evolutionnews.org/2005/12/a_visitors_guide_to_the_dover.html))

- **The Dover Intelligent Design Decision, Part I: Of Motive, Effect, and History** by Albert Alschuler (at [http://uchicagolaw.typepad.com/faculty/2005/12/the\\_dover\\_intel.html](http://uchicagolaw.typepad.com/faculty/2005/12/the_dover_intel.html))

- **The Dover Intelligent Design Decision, Part II: Of Science and Religion** by Albert Alschuler (at [http://uchicagolaw.typepad.com/faculty/2005/12/the\\_dover\\_intel\\_1.html](http://uchicagolaw.typepad.com/faculty/2005/12/the_dover_intel_1.html))

[University of Chicago Law Professor Albert Alschuler critiques the Dover Decision in a 2 part series posted on the University of Chicago Faculty Blog]

- **The Dover Decision** by Richard Cleary (at [http://www.wscleary.com/pov/html/dover\\_decision.html](http://www.wscleary.com/pov/html/dover_decision.html))

[A good analysis critiquing arguments that ID is creationism.]

- **The False Duality Argument Debunked in Kitzmiller** by Kevin Wirth (at [http://kevs-korner.com/CREVO/REPORTS/GRINCH\\_DECISION/FalseDuality2.pdf](http://kevs-korner.com/CREVO/REPORTS/GRINCH_DECISION/FalseDuality2.pdf))

[A good analysis of a key portion of the Kitzmiller decision. See Kevin Wirth's main Kitzmiller resource page as well (at <http://www.kevs-korner.com/CREVO/>)]

- **Whether ID is science isn't semantics** by Alvin Plantinga

[A rebuttal to Judge Jones from philosopher Alvin Plantinga, published in *Science & Theology News*, March 7, 2006.] (at <http://www.stnews.org/Commentary-2690.htm>)

- **Whether Intelligent Design is Science: A Response to the Opinion of the Court in *Kitzmiller vs Dover Area School District*** by Michael Behe

[A point-by-point response to the Judge's rulings on the scientific validity of ID from a pro-ID biologist and expert witness for the defense in the *Kitzmiller* trial] (at <http://www.discovery.org/scripts/viewDB/filesDB-download.php?command=download&id=697>)