Darwinist Arguments Against Intelligent Design Illogical and Misleading

I recently attended a debate on "Intelligent Design (ID) and the Existence of God." One of the four debaters was Dr. Lawrence Krauss{1} representing an atheistic, anti-ID position. I was looking forward to hearing what Dr. Krauss would say when speaking in the presence of other knowledgeable members of academia. Would he go beyond the tired, illogical talking points passed on without question by the mainstream media? Or would he present some thoughtful arguments *against* the validity of intelligent design concepts and/or *for* the current state of Darwinist explanations for life as we know it?

Since I believe there are some thoughtful, interesting arguments that could be raised against intelligent design, I was sorely disappointed to discover that Dr. Krauss did not deviate from the shallow arguments which consistently appear in media coverage of this topic. As one of the other debaters, Dr. David Berlinski {2}, commented after Dr. Krauss' opening statement, "Everything you have said is either false or trivial."

However false and trivial they may be, these arguments are blindly accepted as reasonable by many people. As thinking Christians, we have a responsibility to be prepared to tear down these façades raised up against the knowledge of God. One way to do this is to be able to discuss with others the prevailing arguments in ways that reveal their weaknesses and inconsistencies. To help in that process, the remainder of this article will list several of the standard arguments offered up by Dr. Krauss and examine their reasonableness and validity.

Argument: **Evolution is a proven fact**. Scientific experiments and observation over the last 100 years have conclusively demonstrated that evolution is a fact.

> ***Analysis: Faulty logic resulting in false conclusion***. *In the context of the debate, "evolution is a proven fact" is implied to mean that random mutation coupled with natural selection is the sole process through which life evolved on this planet.* ***This meaning of evolution is not a proven fact.*** *What has been demonstrated through observation and experimentation is that the frequency of certain characteristics in a species will vary over time through random mutations and natural selection. These results provide some support to the theory that these undirected natural causes could be responsible for the development of life as we know it, but they do not come close to proving it. In logical terms, we would say that what science has demonstrated is necessary for the premise to be true but not sufficient to prove that it is true. That would be like saying, "Since we can demonstrate that wind and water erosion can produce regular geometric patterns, this proves the Statue of Liberty is the result of undirected natural forces."*

Argument: **Origins science is the same as observational science**. Both the study of origins (or other one-time events) and the study of ongoing natural processes are the same because they both look at data that was observed in the past. Therefore we can apply the same criteria to origins science as to observational science. Since observational science depends on repeatable experiments, we should reject out of hand any hypothesis (e.g. ID) that considers intervention by a designer because we cannot recreate it.

> ***Analysis: False premise resulting in faulty conclusion***. *The study of origins is more akin to archaeology and forensic science than to observational science. In these fields, scientists look at the evidence left over by past events to*

help evaluate hypotheses on what caused the event to determine the ones that are most likely. As an example, consider the question, "Why does the earth have a large moon?" Scientists have a number of different theories on when and how our earth acquired a moon, but they would all agree that we can never be certain what actually happened (apart from the development of a time machine which would allow us to go back and observe the event). It is true that in observational science fields, scientists do look at results from experiments done in the past. But, they can choose to repeat those experiments in the future.

Regardless of whether one is considering the role of natural selection or the role of an intelligent designer, when you are developing hypotheses for the origins and development of life on earth the best that can be done is to access which processes had the highest probability of contributing to the end results. If you eliminate all options other than random variations in natural processes, you tie the hands of scientists in considering how the evidence best fits all hypotheses.

Argument: Some things that have the appearance of being designed are not. Therefore, we cannot detect the presence of design.

***Analysis: Faulty logic resulting in false conclusion**. Yes, there are things found in nature from the geodesic shapes of carbon structures to the results of erosion that mimic shapes designed by man. Yet, most of us seem to have no problem distinguishing between the remains of ancient civilizations and the results of undirected natural processes. If you search enough beaches and tidal pools, you can probably find every letter of the alphabet produced by the interaction of tides and currents. But, if you come across the words "John loves Mary" in the sand, you will be very confident that*

these were the result of intelligent intervention.

Argument: The theory of evolution is a foundation of modern science.

> ***Analysis: Switching definitions results in false conclusion.*** *Understanding the processes by which bacteria, viruses, species and societies change in response to changes in their environment are important concepts in modern science. However, whether one believes these processes are solely responsible for the origin and development of life on earth or not has little or no impact on one's ability to make advances in science. To date, I have not been made aware of a single positive advance in modern science or engineering that required the developer to fully believe in Darwin's view of the origins of the species in order to make that advance. One's beliefs on origins are foundational to answering the metaphysical questions of life, but don't preclude someone from making contributions in science. Advances in science have been made by Christians, Hindus, Buddhists, Jews, atheists, etc.*

Argument: Scientists understand how the bacterial flagellum evolved, disproving the concept of irreducible complexity.

> ***Analysis: False statement coupled with faulty logic.*** *The bacterial flagellum is a complex device used to propel some types of bacteria. It is comprised of over 30 different proteins. Not only do these proteins perform different complementary functions, but they must be assembled in the bacteria in exactly the right sequence by other proteins. Since the flagellum will not function without all of these elements in place (i.e., it meets the definition of irreducible complexity established by Dr. Behe in his book Darwin's Black Box), the premise is that all of these parts would have to appear simultaneously in order for natural selection to favor carrying forward any of these mutations in*

the gene pool.

Dr. Krauss stated that scientists have shown that the bacterial flagellum is not irreducibly complex. To the best of my knowledge, this is a gross overstatement. The arguments I have seen presented fall far short of developing a plausible explanation for how the flagellum could have evolved{3}. If a plausible argument coupled with experimental evidence exists, I am very interested in having my understanding updated. However, even if such evidence did exist, it would not demonstrate that the concept of irreducible complexity was false or that this unknown plausible path was the way the flagellum came onto the scene.

Argument: Intelligent Design can never be science because it is not falsifiable. You must have ways to prove a scientific theory is false in order for it to be a valid theory. Any observation that does not agree with the theory can be attributed to supernatural intervention.

***Analysis: Arbitrary, inconsistent definition**. Academics in the field of philosophy of science do not agree that the ability to falsify establishes a boundary on what is and is not science. Professor of philosophy and atheist Dr. Bradley Monton {4} pointed this out during the debate. He argued that we should not exclude a potentially valid hypothesis simply on the basis of a narrow definition of science. In addition, origins science cannot meet this standard. Proponents of neo-Darwinism have clearly demonstrated over the last few decades that it is not falsifiable either. Whenever the theory disagrees with the evidence, its proponents claim that natural selection found a way around the problem; we just don't know what it is yet. As Richard Dawkins stated, "Evolution is more clever than we are."*

Hopefully, this summary will help you sort through the

smokescreen of “conclusive” arguments offered up by the proponents of naturalistic Darwinism. Perhaps someday they will engage in a genuine discussion where both sides can state: 1) the reasons they believe their theory has merit and, 2) the observations that create problems for their theory. Such a discussion might actually prove helpful to someone trying to sort through the evidence to make an evidence-based faith decision.

Notes

1. Dr. Lawrence Krauss is the Foundation Professor in the School of Earth and Space Exploration and the Physics Department, Co-Director of the Cosmology Initiative, and Inaugural Director of the Origins Initiative at Arizona State University.

2. Dr. David Berlinski is a lecturer, essayist and a Senior Fellow of the Discovery Institute’s Center for the Renewal of Science and Culture. Dr. Berlinski received his Ph.D. in philosophy from Princeton University and was a postdoctoral fellow in mathematics and molecular biology at Columbia University.

3. Additional information from the Reference Guide to Redeeming Darwin available at *RedeemingDarwin.com*.

Example of Darwinist argument: Since design cannot be considered as an explanation, evolutionists maintain that complex structures like flagellum evolved slowly over time from less complex structures performing other functions in the cell. Kenneth Miller states: “At first glance, the existence of the type III secretory system (TTSS), a…device that allows bacteria to inject these toxins through the cell membranes of its unsuspecting hosts, would seem to have little to do with the flagellum. However, molecular studies of proteins in the TTSS have revealed a surprising fact—the proteins of the TTSS are directly homologous to the proteins in the basal portion

of the bacterial flagellum…. The existence of the TTSS in a wide variety of bacteria demonstrates that a small portion of the "irreducibly complex" flagellum can indeed carry out an important biological function. Since such a function is clearly favored by natural selection, the contention that the flagellum must be fully assembled before any of its component parts can be useful is obviously incorrect. What this means is that the argument for intelligent design of the flagellum has failed." Response to Darwinist argument: The flagellum is an excellent example of an irreducibly complex function in one of the simplest life forms. Different proteins and structures work together to create a swimming mechanism. This complex interaction cannot be adequately explained by evolutionary processes. Mutations creating only one piece of the flagellum in a life form without the other pieces would not create any value to be carried on to the subsequent generations. Miller's statement that "the argument for intelligent design has failed" misses the point of irreducible complexity. The fact that one component of an irreducibly complex system may have another useful function does not remove the barrier that the irreducibly complex system requires the simultaneous appearance of multiple cooperating components to perform a function that has not been performed in that way before. In addition, William Dembski points out another problem with Miller's argument:

> *The best current molecular evidence, however, points to the TTSS as evolving from the flagellum and not vice versa…. Miller has nothing more than the TTSS to point to as a possible evolutionary precursor. Behe and the ID community have therefore successfully shown that Darwinists don't have a clue how the bacterial flagellum might have arisen.*

4. Dr. Bradley Monton is a philosophy professor at the University of Colorado at Boulder. His areas of specialization include the Philosophy of Science (especially Philosophy of Physics), Probabilistic Epistemology, Philosophy of Time and

Philosophy of Religion. Previously he was on the faculty of the University of Kentucky, an Assistant Professor at The American University of Beirut and a Teaching Assistant at Princeton University. He earned his Bachelor of Arts in Physics and Philosophy at Rice University and his Ph.D. in Philosophy from Princeton University.

© 2008 Probe Ministries

"Shouldn't the Statistical Improbability of Evolution Convince Open-Minded Evolutionists?"

Dear Dr. Bohlin,

Thank you for your excellent article "The Five Crises in Evolutionary Development" which I just completed reading. Very, very well done.

Here is a comment/question for you: The statistical improbability (impossibility) of macroevolution, whether Darwinian or sudden leaps, is so overwhelming that no other evidence should really be needed to discredit the theory. However, I've never seen the type of discussion of the statistical/probability aspect that I'd like to see. My feeling is if the statistical aspect were carefully developed and presented it would be sufficient to convince any reasonably open-minded evolutionist (an oxymoron?).

Thanks again for your excellent article. If you know of any good statistical analyses of the probability of evolution

please tell me where to look.

I'm glad you found the article helpful.

Regarding probability, most biologists don't really fully comprehend the argument from probability. To them, evolution happened, therefore the statistical studies must be missing something to come up with such impossible odds. Their eyes tend to glaze over with the many numbers and conditions. In my graduate work at the University of North Texas in the late 70s, the one probability and statistics course we all took was largely seen as necessary evil and we all probably remember being told that statistics can be easily misused and you can prove anything with statistics. So while they all need some probability and statistics to get their population genetics articles published, they largely distrust the figures of others. Therefore anything trying to use probability to debunk evolution must be suspect.

A good book covering the general argument from probability against evolution can be found in Lee Spetner's *Not By Chance*. You can probably still find it at Amazon or at the ID website at www.arn.org.

Respectfully,

Ray Bohlin, PhD

© 2008 Probe Ministries

"What's the Problem with the

Evolution of Amino Acids?”

Dr. Bohlin,

I have heard you describe on “Point of View” the probability of amino acids forming proteins on their own as being astronomical. Can you direct me to an article or will you briefly describe to me why covalence is not a possibility when considering the formation of amino acids and eventually proteins?

There are two primary problems for the origin of proteins on the early earth. The first is chemical and the second is informational.

The chemical problem arises from the nature of the peptide bond which links amino acids in proteins. In linking the carboxyl group of one amino acid to the amino group of the other, a molecule of water is released. Since almost all early earth scenarios take place in the presence of water, the high concentration of water will prevent the linkage from taking place. The high energy needed to cast off a molecule of water in an aqueous solution is very high. Cells overcome this barrier through the action of the ribosome, a combination of RNA and several proteins which allows the linkage reaction to take place in a protein fold devoid of water. But in the early earth there are no proteins or RNA.

The informational problem arises from the fact that not every sequence of amino acids is useful for life-giving processes. Current estimates suggest that as many as 200 different proteins are necessary for life. Each of these proteins requires a specific sequence of amino acids in order to function. One calculation that has been verified experimentally, shows that a 100 amino acid protein requires a specificity of sequence that has only a 1 in 10 to the 65th power probability of occurring by chance alone. This even

allowed for most amino acids to be substituted by similar amino acids in the sequence. So one not only has to manufacture one protein but hundreds, and then bring them together in a membrane like structure, in order for life to take hold. The odds are enormous.

One other problem is also chemical. Amino acids are among the many organic compounds (made of carbon, hydrogen, and oxygen) that exist in two different structural forms called stereoisomers. One form will rotate polarized light to the left (left-handed) and the other will rotate polarized light to the right (right-handed). When amino acids are formed chemically, that is apart from a living system, both forms are produced in equal numbers. However, the amino acids of proteins from living organisms are almost exclusively left-handed. No one knows of a chemical process to achieve this result.

A good technical summary of this and other problems can be found in Thaxton, Bradley and Olson's *The Mystery of Life's Origin*. Probe makes this book available on our website for $10.

Respectfully,

Ray Bohlin
Probe Ministries

=

"How Does the Continental

Divide Relate to Creationism?”

My 10-year-old son is studying the great continental divide in school—how does that relate to creationism? His teacher said it doesn’t affect your view of creation, even though she is claiming it happened millions of years ago.

The fact that the great continental divide exists and how it got there are two very different issues. Honestly, for a 10-year old, he can probably learn all he needs to know about the divide without needing to debate how or when it arose. If the geological development is part of the lesson, your son can always regard the timeframe a separate issue, or simply resolve to understand how most geologists explain it without committing himself to accepting their entire explanation. I would recommend he learn what is required of him and simply resolve to keep his mind open to the timeframe issue. Creationist flood-model geologists would explain the rising of the Rockies (hence the continental divide) by the same mechanisms as evolutionary geologists, just over a much shorter time frame.

Hope this helps.

Respectfully,

Ray Bohlin
Probe Ministries

“In Redeeming Darwin Are You Saying God Used Evolution?”

I read the description of “Redeeming Darwin” and an email supposedly explaining what you mean by “redeeming Darwin.” Neither explain exactly what you do in this program; are you saying that God used evolution? If so, I find this extremely unbiblical. Or are you saying that Darwinism as it now stands (“molecules-to-man” – i.e., macro-evolution) is true but that it can somehow be used to evangelize? Or are you saying that Darwinism as I described above is NOT valid, but that an actual 6-day Creation by God is what IS true?

I apologize that our description is not clearer. We will take another look at it to see what we can do to increase the clarity.

At Probe Ministries we reject the Darwinian evolutionary mechanism proposed for the origin and diversity of life. The *Redeeming Darwin* curriculum explains a few of the problems with Darwinism and explores the alternative provided by the relatively new Intelligent Design Movement.

Since Intelligent Design principles are used by both young and old earth creationist perspectives we use scientists in the film from both ICR (John Morris) and Reasons to Believe (Fuz Rana) to explain what they like and don’t like about ID.

As a ministry we do not take a position on the age of the earth question.

Respectfully,

Ray Bohlin, PhD

© 2008 Probe Ministries

Expelled: No Intelligence Allowed

Dr. Bohlin explores the key points from this documentary from a Christian perspective. He looks at three of the scientists featured on the film who were persecuted for their willingness to consider intelligent design as an option. The film may become dated but the issue of an intelligent creator versus an impersonal, random cause of creation will continue on for many years.

A film was released in April 2008 starring Ben Stein. Titled *EXPELLED: No Intelligence Allowed*,{1} this film documents the dark underside of academia in America and around the world, exposing what happens when someone questions a ruling orthodoxy. In this case, that orthodoxy is Darwinian evolution.

Evolution is routinely trumpeted as the cornerstone of modern biology, indispensable even to modern medical research. Therefore, if someone questions Darwinian evolution and its reliance on unpredictable mutation and natural selection, you are questioning science itself. At least that's how the gatekeepers of science explain it.

Never mind that over seven hundred PhD trained scientists from around the world have openly signed a statement questioning the ability of Darwinism to account for the complexity of life. You'll find my name among them (www.dissentfromdarwin.org). We are usually dismissed as being misguided, uninformed or religiously motivated. We couldn't possibly have legitimate scientific objections to Darwinian evolution.

Many have refrained from signing that list because of the possible repercussions to their career. But isn't there academic freedom in this country? Doesn't science progress by always questioning and leaving even cherished theories open to reinterpretation? Isn't science all about following the evidence wherever it leads? Well, in theory, yes. Practically, scientists are human, too, and often don't like it when favorite ideas are reexamined.

The film *EXPELLED* explores the reality of what happens when evolutionary orthodoxy is questioned by vulnerable scientists who have yet to secure tenure.

In what follows, I will take a detailed look at just three of the scientists featured in the film. In each case I will reveal greater detail than the film is able to explore and provide resources for you to inquire further. Hopefully this will inspire you to learn more about this important issue and attend the film when it opens.

Let me briefly introduce the three scientists.

Richard Sternberg has a double PhD in evolutionary biology. As editor of a scientific journal, he oversaw the publication of an article promoting Intelligent Design and critical of evolution. As a result, he was harassed and falsely accused of improper peer review. He has been blacklisted.

Caroline Crocker taught introductory biology and made the mistake of including questions about evolution contained in science journals. She was accused of teaching creationism and eventually lost her job, and has been unable to find work ever since.

Finally, Guillermo Gonzalez, a well published astronomer, has been denied tenure because he supports Intelligent Design. Trust me, you'll find it hard to believe what you read.

Richard von Sternberg

Richard von Sternberg was the managing editor of the biological journal, *The Proceedings of the Biological Society of Washington,* or *PBSW*. Sternberg was employed by the National Institutes of Health in their National Center for Biotechnology Information. He was also a research associate at the Smithsonian Institution's National Museum of Natural History when he served as the journal's managing editor.

Sternberg was considered a rising scientist and theorist. His multiple appointments demonstrated great confidence in his research ability. By 2004 he had accumulated thirty scientific publications in peer-reviewed science journals and books.

His fall from grace was not for something he said or did, but for what he didn't do. As managing editor for *PBSW*, he did not reject outright an article submitted for publication that supported Intelligent Design as "perhaps the most causally adequate explanation" for the explosion of new, complex life forms during the Cambrian period. He "*mistakenly*" sent the paper out for peer review, and went along with reviewers recommendations for publication after extensive revisions were made.

When the article appeared in the journal's August 2004 edition, the journal and Sternberg were assailed for allowing the publication of this heresy. He was accused of not following proper peer-review procedure. If he had, certainly the paper would have been rejected. He was accused of acting as the editor himself when normal procedure was for the paper to be referred to an associate editor. If he had, surely the article would have been rejected. He was accused of choosing reviewers predisposed to support the ID perspective of the article. If he had chosen true scientists, surely they would have rejected the article.

I think you get the point. Any scientist worth their salt

would have rejected the article out of hand; Sternberg didn't and therefore was guilty of academic sin. Eventually, Sternberg claimed he was harassed by the Smithsonian where he currently worked. He claimed his office was changed, that he was denied access to museum specimens and collections, that his key was confiscated, and that he was subjected to a hostile work environment, all intended to get him to leave.{2}

The White House Office of Special Counsel was eventually called in to investigate, and although they eventually did not take the case because Sternberg was not actually a Smithsonian employee, they did issue a preliminary report documenting the inaccuracy of the charges against him and the accuracy of Sternberg's accusations.{3} He followed very standard and proper peer-review procedures and even got approval for the article from a member of the society's ruling council. You can bet that the editors of other journals were paying attention.

Caroline Crocker

Caroline Crocker, a PhD with degrees in pharmacology and microbiology, is a research scientist and former lecturer at George Mason University.{4}

As Crocker tells her story, she was an instructor at George Mason University, teaching introductory biology. One lecture was devoted to evolution, and she decided it was important for students to hear not just the evidence favoring evolution but published research that questioned certain elements of evolutionary theory. Crocker had come to this conviction not from any religious motivation but from her own research and convictions as a scientist.

The lecture was received very well with spirited discussion and she considered it a success. Days later she was called to her supervisor's office who accused her of teaching creationism. She denied this and claimed she never even used

the word and encouraged her supervisor to look up the lecture herself which was online, as were all her lecture notes. Later she was demoted to only teaching laboratories and eventually dismissed altogether.

Upon getting another teaching job at a local community college, she eventually learned she was targeted for dismissal again and left on her own. Eventually, she applied for other teaching positions and, though initially offered the job at one interview, she was later called and told there was no money for the position. Someone at the National Institutes of Health eventually told her to stop looking because she was blacklisted.{5}

A young lawyer at a local law firm eventually volunteered to take her case *pro bono* [without charge]. His firm agreed with his decision and filed an initial complaint with George Mason University. The complaint was later dropped and the lawyer mysteriously asked to clean out his office. He too has struggled since, trying to find employment.

George Mason denies any wrongdoing, of course, and maintains that academic freedom is honored at their university, but they offer few specifics on just why Crocker was terminated.

Crocker always received high marks from her students and was qualified and effective wherever she went. Suddenly after questioning Darwinism, her scientific career is over. There is another viewpoint, of course. P. Z. Meyer's, for example, defends the decision to let Crocker go at the end of her contract because questioning evolution shows she was incompetent.{6}

Guillermo Gonzalez

Guillermo Gonzalez is a planetary astronomer and associate professor at Iowa State University. Gonzalez has done research and taught at Iowa State for five years and has accumulated an

impressive record. He has accumulated over sixty peer-reviewed publications in various science and astronomy journals. In addition, he has presented over twenty papers at scientific conferences, and his work has been featured in such respected publications as *Science*, *Nature,* and *Scientific American*.{7}

Ordinarily, to become a tenured professor at a research institution there are specific requirements that must be met. The Astronomy Department at Iowa State requires a minimum of fifteen research papers. Gonzalez should have felt quite secure since he published nearly five times that many papers. He also co-authored an astronomy textbook through Cambridge University Press that he and others used at Iowa State. But his initial application for tenure was denied. The faculty senate indicated his application was denied because he didn't meet certain necessary requirements.

However, many suspected he was denied tenure for his support for Intelligent Design through his popular book and film *The Privileged Planet*. While having nothing to do with biological evolution, Gonzalez and his co-author Jay Richards maintain that our earth is not only uniquely suited for complex life but is also amazingly well-suited for intelligent life to observe the cosmos. This dual purpose seems to suggest design.

In denying Gonzalez's initial appeal, the university president specifically stated the denial had nothing to do with Intelligent Design. Gonzalez further appealed to the University Board of Regents. In the meantime, the Discovery Institute obtained internal university emails clearly indicating that the sole reason Gonzalez was denied tenure was due to his support of ID, despite the university's public denials. These emails also indicated that some of these university professors knew what they were doing was wrong and conspired to keep their deliberations secret.

Amazingly, the ISU Board of Regents refused to see this information or provide Gonzalez an opportunity to defend

himself before they voted. Not surprisingly, Gonzalez's final appeal was denied in early February 2008.

Be Prepared for *EXPELLED*

Probe Ministries highly recommends the film *EXPELLED: No Intelligence Allowed* as it highlights the harassment and persecution of PhD scientists at the highest levels of academia and exposes signs of ugly things to come in the culture at large.{8} Usually the scientific establishment tries to cover up these activities, but when exposed, they usually resort to saying that this level of harassment is deserved since a fundamental tenet of science is being challenged, and therefore these scientists don't deserve their positions. Academic freedom apparently only applies to disagreeing with details about evolution but not evolution itself.

These three stories are just the tip of the iceberg. These scenes are being played out around the world, and publicity is an important step in seeing justice done.

Now, let's be clear about something. Just because a few scientists and scientific institutions have behaved badly on behalf of evolutionary orthodoxy doesn't mean that evolution itself is suspect. But as I stated earlier, over seven hundred scientists have now signed a statement declaring their skepticism about Darwinian evolution as a comprehensive explanation of the complexity of life and the list is growing. The scientific underpinnings of Darwinian evolution have been unraveling for over fifty years. I've been personally involved in this revolution for over thirty years, long before Intelligent Design was even a recognized movement.

The *EXPELLED* documentary will certainly raise the visibility of this debate even further in the general public and hopefully within the church. But I have been quite surprised how many in the church are really unfamiliar with the

Intelligent Design movement and are even suspicious of the motives and beliefs of those involved.

In that light, Probe Ministries and EvanTell unveiled last summer, before *EXPELLED* was announced, a small group DVD based curriculum about the Intelligent Design movement, called *Redeeming Darwin*. Check out this material at Redeeming Darwin.{9} There are small group leader kits, self-study kits, and very inexpensive outreach kits meant to be handed out to people wanting to see for themselves. We are thrilled to have Josh McDowell's endorsement, and our curriculum is being recommended to church youth leaders by those promoting *EXPELLED*.

This spring and through the summer the rhetoric will be escalating, and many just won't understand what all the fuss is about. First, make plans to attend *EXPELLED* in a few weeks and take some skeptical friends with you. Then give your friends a copy of our *Discovering the Designer* DVD and invite them to join your small group in studying Redeeming Darwin to help answer the inevitable questions about ID and evolution. In addition, Redeeming Darwin will show you how to take a conversation about ID and evolution and use it to share the gospel. That's how you can "redeem Darwin."

Notes

1. streamingmoviesright.com/us/movie/expelled-no-intelligence-allowed/.
2. www.rsternberg.net/ (last accessed 2/12/08).
3. www.rsternberg.net/OSC_ltr.htm (last accessed 2/12/08). Sternberg used well-qualified reviewers for this paper and has steadfastly refused to identify them, which is normal protocol despite repeated attempts by evolutionists to find out who they were. None of them were "creationists" as has been suggested.
4. www.washingtonpost.com/wp-dyn/content/article/2006/02/03/AR200

6020300822.html (last accessed 5/18/20).
5. www.christianpost.com/news/expelled-exposes-plight-of-darwin-doubters-30277 (last accessed 5/18/20).
6. scienceblogs.com/pharyngula/2006/02/05/heck-yeahcaroline-crocker-shou (last accessed 5/18/20). Also be advised that PZ Meyers is not shy about using vulgar language.
7. To view a full list of online and print articles and to view Gonzalez's academic record, visit the Discovery Institute's section on Gonzalez at www.discovery.org/a/2939 (last accessed 5/18/20). See also post-darwinist.blogspot.com
8. streamingmoviesright.com/us/movie/expelled-no-intelligence-allowed/.
9. Also see www.probe.org and streamingmoviesright.com/us/movie/expelled-no-intelligence-allowed/.

© 2008 Probe Ministries, updated 5/2020

"Why Are You Trying to Redeem Darwin?"

I am curious, why do you call this effort "Redeeming Darwin"? What exactly about Darwin are you attempting to redeem?

Thanks for your question. *Redeeming Darwin* is a part of our *Redeeming the Culture* series of studies. In this series, we take topics that are counter to and/or hostile to Christianity and educate Christians on how to use these topics defend their

faith and to share the gospel. (Our first project was "Redeeming *The Da Vinci Code*.") By equipping Christians to use a negative topic as a bridge to share the gospel, we are in a sense redeeming that topic. So the title does not imply that we are in some way redeeming the *person* of Darwin, but rather using the *topic* of Darwinism as a tool to accomplish a redemptive purpose.

Best regards,
Steve Cable

© 2007 Probe Ministries

Redeeming Darwin: The Intelligent Design Controversy

Dr. Bohlin, as a Christian scientist, looks at the unwarranted opposition to intelligent design and sees a group of neo-Darwinists struggling to maintain the orthodoxy of their position as the evidence stacks up against them. In this article, he summarizes what's happening in academia and the lack of sound scientific basis for their attacks agains intelligent design proponents.

What's All the Fuss?

There's a strange phenomenon popping up around the country. Scientists are stepping out of their laboratories and speaking to the media about something that has them quite concerned. It's not the threat of a new flu pandemic; it's not the threat of nuclear weapons proliferation, or even the possible threat

of global warming. It's something called Intelligent Design.

In this article we will explore what has so many people upset about Intelligent Design. To do that we will need to establish just what ID is and what the major complaints are about evolution that may be answered by a theory like ID. We will take a closer look at some of the most common examples of ID from astronomy and biology. Then we will take a closer look at the cultural confusion and reaction to this rather simple hypothesis.

So what are scientists and journalists saying? A *Baltimore Sun* reporter put it this way: "In the border war between science and faith, the doctrine of 'intelligent design' is a sly subterfuge—a marzipan confection of an idea presented in the shape of something more substantial."{1}

In other words, Intelligent Design is little more than a sugar cookie promising more than it can deliver.

A science journal editorial said this: "The attack on Darwinism by supporters of Intelligent Design is a straightforward attack on science itself. Intelligent Design is not science because it proposes a supernatural designer as explanation for evolutionary change."{2}

Uh-oh! Science and the supernatural indeed rarely go well together, at least over the last 150 years. But is that what ID actually says? We'll explore that a little later but for now let's find out what's really at stake in this debate over evolution and Intelligent Design.

One college textbook said this: "Evolution is a scientific fact. That is, the descent of all species, with modification, from common ancestors is a hypothesis that in the last 150 years or so has been supported by so much evidence, and has so successfully resisted all challenges, that it has become a fact."{3}

Let’s look at a few reasons why some scientists are skeptical of the confidence shown by so many other scientists about Darwinian evolution.{4}

Is There Scientific Proof for Evolution?

Evolution is always portrayed as a slow gradual process. Organisms are portrayed as so well adapted to their environment that they could only afford to change very slowly. But one of the most dramatic events in earth history is something called the Cambrian explosion. The Cambrian is a period of earth history that many earth scientists and paleontologists estimate to have begun over 540 million years ago.{5}

Instead of slow steady evolutionary change, we see a sudden burst of change. The subtitle to a *Time* magazine article put it this way: “New discoveries show that life as we know it began in an amazing biological frenzy that changed the planet almost overnight.”{6}

For most of the previous 3 billion years of earth history only single-celled organisms were found. “For billions of years, simple creatures like plankton, bacteria and algae ruled the earth. Then, suddenly, life got very complicated.”{7}

So the appearance of most of the major categories of animals happened in a very short period of time, some say less than five million years, when it should have taken tens and maybe even hundreds of millions of years. One geologist who helped pinpoint the very short time frame of the Cambrian explosion expressed this challenge: “We now know how fast fast is. And what I like to ask my biologist friends is, how fast can evolution get before they start feeling uncomfortable?”{8}

The evolutionary process that biologists study in nature today is far slower than what is found in the Cambrian explosion. This is evidence that doesn’t fit the theory. Yet the Cambrian

explosion is left out of most textbooks.

Another problem for evolution is its dependence on mutations to bring about major changes in organisms. But for all our studies of mutations we haven't seen much change. The late French evolutionist, Pierre Paul Grasse, said, "What is the use of their unceasing mutations? . . . a swing to the right, a swing to the left, but no final evolutionary effect."{9}

Mutations only produce alternate forms of what already exists. New functions don't suddenly arise by mutations.

Evidence for Intelligent Design, Part One

Intelligent Design is an intellectual movement that challenges Darwinism and its dependence on random/chaotic processes coupled with selection. If people are not alerted to the fact that Darwinism is less than sufficient, then other theories are wasting their time. They will never get a fair hearing.

Intelligent Design is also a scientific research program that investigates the effects of intelligent causes, which are effects of high specificity coupled with extremely small probabilities.

Now that was a mouthful. What do I mean by high specificity coupled with small probability? Think of the lottery. Someone always wins the lottery despite the long odds. So improbable things do indeed happen.

But let's make this specific. Let's say your sister wins the lottery. Now that is someone you specifically know; but again someone always wins the lottery so the fact that it's your sister doesn't warrant any special attention.

Now let's make things a bit *less* probable and much *more* specific. Let's say your sister wins the lottery not once but three weeks in a row. Now what are you thinking? Like most people you're thinking something is not right. The same person

doesn’t win the lottery three weeks in a row.

You suspect cheating. You suspect Intelligent Design. Someone with a clever mind is somehow manipulating the lottery.

In astronomy, it has been assumed for several decades that our earth is not likely to be very special. As huge as the universe is, with billions of galaxies, each with billions of stars, surely there are thousands if not millions of planets like ours that are suitable for life.

But lately, more and more planetary astronomers, astrophysicists, cosmologists, and philosophers are realizing that earth is actually quite unique. The recipe for earth is more than just a planet plus mild temperatures plus water.

Our earth is 93,000,000 miles from the sun. Five percent closer and we would be a hothouse like Venus with no chance for life. If we were twenty percent farther away, we would be a frozen wasteland like Mars. We’re just right. Liquid water is necessary for life and our earth has an abundance all year long.

Evidence for Intelligent Design, Part Two

It’s really quite amazing to realize that biologists universally recognize the design of living things. Oxford biologist and atheist Richard Dawkins said on page one of his book *The Blind Watchmaker*: “Biology is the study of complicated things that give the appearance of having been designed for a purpose.”{10}

Now notice he said, “give the appearance of having been designed for a purpose.” Living things certainly look designed, but according to Dawkins, it’s an illusion. He spends the rest of his book trying to show how mutation and natural selection, the “blind watchmaker,” has created this illusion.

But he does admit things look designed. Well, if it looks designed, maybe it is.

Michael Behe introduced the concept of irreducible complexity in his book *Darwin's Black Box*. Something is irreducibly complex if it is composed of two or more *necessary* parts. Remove one part and function is not just impaired but destroyed. His well-known example is a mousetrap.

A mousetrap is composed of five integral parts: the platform to which everything is attached, the hammer which does the dirty work, the spring which provides the force, the holding bar to keep the hammer in tension, and finally the catch to keep the holding bar in tenuous position. Remove any one of these parts and the mousetrap is not just less efficient; it ceases to function at all. All five parts are necessary. You can't build a mousetrap by natural selection by adding one piece at a time because it has no function to select until all five parts are together.

Behe showed that the cell, Darwin's "Black Box," is filled with irreducibly complex molecular machines that could not be built by natural selection. In Darwin's time, scientists could only see the cell under very low power microscopes that told little about what was going on inside. It was a black box. Over the last fifty to sixty years, the cell has been revealing its secrets. We have discovered a maze of complexity and information.

If it looks designed, maybe it is!

ID, Science, Education, and Creation

The legitimacy of Intelligent Design as science was at the heart of a recent federal court case, pitting a group of parents and students against the school board from Dover, Pennsylvania. The Dover School Board adopted a policy that mandated a statement be read before all biology classes,

indicating that evolution was a theory that needed critical evaluation and that intelligent design was a rival theory that students could seek information about from the library.

Judge Jones not only struck down the policy as unconstitutional, he went further to declare that ID is not science and was motivated purely by religion since it was just a repackaged creationism. His written opinion was scathing. This of course delighted proponents of evolution and many have declared that ID now is dead.

Judge Jones claimed that ID simply is not science and is religiously motivated; therefore it should not even be mentioned in a high school science classroom.

The first question that should occur to you is, Why does a federal judge with no training in science use his courtroom as a means of determining what is and is not science? This problem has been referred to as the demarcation problem. How do we demarcate science from non-science? People putting down ID often refer to it as "pseudo-science" or simply "unscientific." But philosopher of science Larry Laudan writes, "If we would stand up and be counted on the side of reason, we ought to drop terms like 'pseudo-science' and 'unscientific' from our vocabulary; they are just hollow phrases which do only emotive work for us."{11}

Judge Jones claims that ID has been refuted by mainstream scientists. He cites the work of Kenneth Miller in particular. This is rather strange indeed. For ID to be refuted means that it has been tested by science and found wanting. If it is testable scientifically to the degree that it can be refuted, then it is science after all. This logical contradiction does not seem to occur to Judge Jones.

ID uses empirical data to demonstrate the plausibility of a design inference. It's as scientific as Darwinism.

Notes

1. Baltimore *Sun*, August 13, 2006.
2. *Cell*, January 13, 2006.
3. Douglas Futuyma, *Evolution* (Sinauer Assoc., Sunderland, Mass., 2005), xv.
4. To learn more about Intelligent Design and Evolution visit our website, probe.org, or call us at 1-800-899-PROB, for information about our new DVD based small group curriculum, "Redeeming Darwin: The Intelligent Design Controversy." Once again we have teemed up with EvanTell to produce a small group curriculum designed to inform the church about Intelligent Design and how to use a conversation about this controversial topic to share the gospel.
5. Meyer, Stephen C., Marcus Ross, Paul Nelson and Paul Chien, 2003, *The Cambrian explosion: Biology's Big Bang in Darwinism, Design, and Public Education*, John Angus Campbell and Stephen C. Meyer, eds., East Lansing, Michigan: Michigan State University Press, pp. 323-402.
6. *Time*, December 4, 1995 (cover).
7. Ibid., 67.
8. Samuel Bowring, *Time*, 1995, 70.
9. Pierre-Paul Grassé quoted in *The Natural Limits to Biological Change*, Lane P. Lester and Raymond G. Bohlin, Richardson, Texas: Probe Books 1984., p. 88.
10. Dawkins, Richard, *The Blind Watchmaker: Why the Evidence of Evolution Reveals a Universe without Design*, Nerw York, New York: Norton, 1986.
11. Larry Laudan, (1983) "The demise of the demarcation problem," in Michael Ruse (ed.) *But Is It Science?*, Amherst, Prometheus, 337-350.

© 2007 Probe Ministries

Darwinism and Truth

Darwinism and the Fact/Value Split

Nancy Pearcey writes in her book *Total Truth* that Christians must counter the effects of our secular culture and mindset by developing a consistent and comprehensive biblical worldview.{1} In the middle chapters of her book, she demonstrates how Christians should do this with the question of origins.

Earlier in her book she notes that our society has divided truth into two categories. She calls this the sacred /secular split or the private/public split or the fact/value split. They are different ways of saying the same thing. Religion and moral values are subjective and shoved into the upper story where private opinions and values reside. And in the lower story are hard, verifiable facts and scientific knowledge.

There is another key point to this split. The two spheres should not intersect. In other words, it would be bad manners and a violation of logic to allow your personal and private choices and values to intersect with your public life. As the popular saying goes, that would be "shoving your religion down someone's throat."

Ray Bohlin's review of Pearcey's book provides further explanation for how this idea plays out in society.{2}

Darwinists accept this split and have even tried to convince Christians that in this way religion is safe from the claims and conclusions of Darwinian evolution. But a brief glance at the best seller list shows that evolutionists regularly invade this upper story of values with their harsh criticism.

In *The God Delusion*, Richard Dawkins says that religious belief is psychotic, and arguments for the existence of God

are nonsense. Sam Harris echoes that sentiment in his bestselling book, *Letter to a Christian Nation*. Daniel Dennett, in his book *Breaking the Spell*, believes that religion must be subjected to scientific evaluation.

Nancy Pearcey shows that Darwinism leads to naturalism. And this is a naturalistic view of knowledge where "theological dogmas and philosophical absolutes were at worst totally fraudulent and at best merely symbolic of deep human aspirations."{3} In other words, if Darwinian evolution is true, then religion and philosophical absolutes are not true. Truth, honesty, integrity, morality are not true but actually fraudulent concepts and ideas. If we hold to them at all, they were merely symbolic but not really true in any sense.

Daniel Dennett, in his book *Darwin's Dangerous Idea,* says that Darwinism is a "universal acid" which is his allusion to a children's riddle about an acid that is so corrosive that it eats through everything including the flask that holds it. In other words, Darwinism is too corrosive to be contained. It eats through every academic field of study and destroys ethics, morality, truth, and absolutes. When it is finished, Darwinism "eats through just about every traditional concept and leaves in its wake a revolutionized world-view."{4}

Darwinism and Naturalism

Pearcey writes that "Darwinism functions as the scientific support for an overarching naturalistic worldview."{5} Today scientists usually assume that scientific investigation requires naturalism. But that was not always the case.

When the scientific revolution began (and for the next three hundred years), science and Christianity were considered to be compatible with one another. In fact, most scientists had some form of Christian faith, and they perceived the world of diversity and complexity through a theistic framework. Pearcey

points out that Copernicus, Galileo, Kepler, Newton, and others sought to understand the world and use their gifts to honor God and serve humanity.

By the nineteenth century, secular trends began to change their perspective. This culminated with the publication of *The Origin of Species* by Charles Darwin. His theory of evolution provided the needed foundation for naturalism to explain the world without God. From that point on, social commentators began to talk about the "war between science and religion."

By the twentieth century, G. K. Chesterton was warning that Darwinian evolution and naturalism was becoming the dominant "creed" in education and the other public arenas of Western culture. He said it "began with Evolution and has ended in Eugenics." Ultimately, it "is really our established Church."{6}

Today, it is easy to see how scientists believe that naturalism and science are essentially the same thing. They often slip from physics to metaphysics. In other words, they leave the boundaries of science and begin to make philosophical statements about the nature of the universe. While scientists can tell us how the universe operates, they cannot tell us if there is anything outside of the universe.

But that didn't stop astronomer Carl Sagan in the PBS program "Cosmos." The first words you hear from him are: "The Cosmos is all that is or ever was or ever will be."{7} In other words, the universe (or Cosmos) is all there is: no God, no heaven.

Now, Carl Sagan's comment is not a scientific statement. It's a philosophical statement. And it set the ground rules for the rest of the program. Nature is all there is. In many ways it sounds like a creed. It is as if Carl Sagan was attempting to modify the *Gloria Patri*: "As it was in the beginning, is now, and ever will be."

Do those ideas end up in our children's books? Nancy Pearcey tells the story of picking up a science book for her son, *The Bears' Nature Guide*, which featured the Berenstain Bears. The Bear family goes on a nature walk. Turn a few pages in the book and you will see a sunrise with these words in capital letters: "Nature . . . is all that IS, or WAS, or EVER WILL BE!"{8} Sounds like a heavy dose of Carl Sagan's naturalism packaged for young children courtesy of the Berenstain Bears.

If you are looking for a resource to counter this Darwinian and naturalistic indoctrination, let me recommend Probe's DVD series on "Redeeming Darwin." It will give you the intellectual ammunition you need.

In *Total Truth*, Nancy Pearcey discusses many of the so-called "icons of evolution" that Jonathan Wells documents in his book by that title.{9} These examples show up in nearly every high school and college biology textbook. But these examples which are used to "prove" evolution are either fraudulent or fail to prove evolution.

Let's start with a piece of evidence for evolution that was found where Charles Darwin first got his inspiration for his theory of evolution: the Galapagos Islands. The islands can be found off the coast of South America. On those islands are finches, which have come to be known as Darwin's finches. It's hard to find a biology textbook that doesn't tell the story of these finches.

One study found that during a period of drought, the average beak size of these finches increased slightly. The reason cited for this is that during these dry periods, the most available seeds are larger and tougher to crack than at other times. So birds with larger beaks do better in conditions of drought.

I spent an afternoon looking at specimens of Darwin's finches when I was in graduate school at Yale University and should

point out that the changes in beak thickness is minimal and thus measured in tens of millimeters (thickness of a thumbnail). Moreover, the changes seem to be cyclical. When the rains returns, the original size seeds appear and the average beak size returns to normal.

This is not evolution. It is an interesting cyclical pattern in natural history. But it's not evolution. Nevertheless, one science writer enthusiastically proclaimed that this is evolution happening "before [our] very eyes."{10}

If this is evolution occurring then we should be seeing macro changes that would allow these finches to evolve into another species. But this cyclical pattern shows just the opposite. These minor changes in beak size and thickness actually allow them to remain finches under changing environmental conditions. It does not show them evolving into another species.

So what has been the response from the scientific establishment? The National Academy of Sciences put out a booklet on evolution for teachers. The booklet did not even mention that the average beak size returned to normal after drought. Instead the booklet makes unwarranted speculation about what might happen if these changes were to continue indefinitely for a few hundred years. "If droughts occur about once every ten years on the islands, a new species of finch might arise in only 200 years."{11}

Is this an accurate conclusion based upon the facts of natural history? It seems to be a clear example of misleading teachers (who in turn will unintentionally mislead their students). The booklet teaches that the beak sizes in Darwin's finches are directional and evolutionary rather than cyclical and reversible.

A column in the *Wall Street Journal* made this point. "When our leading scientists have to resort to the sort of distortion

that would land a stock promoter in jail," Phillip Johnson said, "you know they are in trouble."{12}

Ray Bohlin's review of Jonathan Well's book, *Icons of Evolution*, provides further detail on some of these examples.{13}

Peppered Moths

One example that appears in most biology textbooks is the story of the peppered moths in England. The moths appear in two forms: dark gray and light gray. During the Industrial Revolution, the factories produced pollution that darkened the tree trunks. This made it easier for birds to catch and eat the lighter colored moths. Later, when pollution was cleaned up, the tree trunks were lighter and it made it easier for the birds to catch the darker colored moths.

On its face, all this example proves is that the ratio of dark colored and light colored moths changed over time. In many ways, this is nothing more than another example of cyclical changes that we just discussed concerning Darwin's finches.

But there is much more to the story. Peppered moths don't actually perch on tree trunks. Actually they are quite torpid during the daylight hours and rest in the upper canopy of the trees.

If you have ever been in a biology class you have seen pictures of these moths on the tree trunks. You might even have seen a film that was made decades ago of birds landing on the trees and catching moths. It turns out that in order to create the photos and the film scientists put the moths in a freezer to immobilize them and then glued them to the tree trunks.

How did this example become such an enduring icon of evolution? Scientists accepted it for many years uncritically

because they wanted to believe it and needed a visual example to show evolution. The peppered moth story fit the bill and quickly became "an irrefutable article of faith."{14}

Now there are journal articles, and even books, that document the scientific scandal surrounding the story of the peppered moths. One leading evolutionist noted that the story was a "prize horse in our stable of examples." He goes on to say that when he learned the truth, it was like learning "that it was my father and not Santa Claus who brought the presents on Christmas Eve."{15}

But what is so amazing is that this example still shows up with regularity in biology textbooks, even though most scientists and textbook writers know the story is untrue. One reporter even interviewed a textbook writer who admitted that he knew the photos were faked but used them in the biology textbook anyway. "The advantage of this example," he argued, "is that it is extremely visual." He went on to add that "we want to get across the idea of selective adaptation. Later on, they can look at the work critically."{16}

The examples of the falsified "icons of evolution" demonstrate the extremes to which many Darwinists will go to "prove" the theory of evolution. They keep an incorrect example in the textbooks simply because it is visual and supports the theory of evolution and worldview of naturalism.

Fraudulent Embryos

Nearly every textbook has pictures of developing vertebrate embryos lined up across the page to demonstrate an evolutionary history being replayed in the womb. These pictures are placed there to show common ancestry and thus prove evolution. During this day, Charles Darwin called the similarity of vertebrate embryos "by far the strongest single class of facts in favor of" his theory of evolution.{17}

In biology class many of us learned the phrase “ontogeny recapitulates phylogeny.” That means that these developing embryos go through similar stages that replay the stages of evolution. So this supposedly was embryological proof of evolution.

But it turns out that the pictures were and are an elaborate hoax. German scientist Ernst Haeckel drew them in order to prove evolution. He deliberately drew the embryos more similar than they really are.

What is so incredible about this hoax is that is was known more than a century ago. Scientists knew the drawings were incorrect, and his colleagues accused him of fraud. An embryologist, writing in the journal *Science*, called Haeckel’s drawings “one of the most famous fakes in biology.”{18}

Now you would think that a hoax uncovered more than a hundred years ago would certainly not make it into high school and college biology textbooks. But if you assumed that, you would be wrong. Many textbooks continue to reprint drawings labeled as a hoax a century ago.

So why do Darwinists continue to believe in the theory of evolution and even use examples to “prove” evolution that are not true. It may be due to a bias in their worldview. The only theories that they believe are acceptable are those that are developed within a naturalistic framework.

Richard Dawkins noted: “*Even if there were no actual evidence* in favor of the Darwinian theory . . . we would still be justified in preferring it over rival theories.”{19} Think about that statement for a moment. Even if there were no evidence for evolution, Darwinists would still believe it because it is naturalistic.

Another professor made an even more incredible statement. He said: “Even if all the data point to an intelligent designer, such an hypothesis is excluded from science because it is not

naturalistic."{20} Now think about that. Even if the evidence points to intelligent design rather than to evolution, it is excluded from consideration because it is not naturalistic.

As you can see from these two quotes (as well as from some of the other material presented here), the commitment to evolution is more philosophical than scientific. Nancy Pearcey concludes that "the issue is not fundamentally a matter of evidence at all, but of a prior philosophical commitment."{21}

Again, let me also recommend Probe's DVD series on "Redeeming Darwin" that is available through Probe's website www.probe.org.

Notes

1. Nancy Pearcey, *Total Truth: Liberating Christianity from Its Cultural Captivity* (Wheaton, Ill.: Crossway Books, 2004).
2. Raymond Bohlin, "Total Truth," Probe, 2005, www.probe.org/total-truth/.
3. Edward Purcell, *The Crisis of Democracy* (Lexington, KY: University Press of Kentucky, 1973), 8.
4. Daniel Dennett, *Darwin's Dangerous Idea* (NY: Simon and Schuster, 1995), 63.
5. Pearcey, *Total Truth*, 207.
6. G. K. Chesterton, *Eugenics and Other Evils* (NY: Dodd, Mead, 1927), 98.
7. Carl Sagan, *Cosmos* (NY: Random House, 1980), 4.
8. Pearcey, *Total Truth*, 157.
9. Jonathan Wells, *Icons of Evolution* (Washington, DC: Regnery, 2000).
10. Jonathan Weiner, "Kansas anti-evolution vote denies students a full spiritual journey," *Philadelphia Inquirer*, 15 August 1999.
11. *Teaching About Evolution and the Nature of Science*, National Academy of Sciences, chapter 2, page 19, www.nap.edu/readingroom/books/evolution98.
12. Phillip Johnson, "The Church of Darwin," *Wall Street*

Journal, 16 August 1999.
13. Ray Bohlin, "Icons of Evolution," Probe, 2001, www.probe.org/icons-of-evolution.
14. Peter Smith, "Darwinism in a flutter," book review of: *Of Moths and Men: Intrigue, Tragedy, and the Peppered Moth*, *The Guardian*, 11 May 2002.
15. Jerry Coyne, "Not black and white," book review of: *Melanism: Evolution in Action, Nature* 396(5 November 1998), 35.
16. Bob Ritter quoted in "Moth-eaten Darwinism: A disproven textbook case of natural selection refuses to die," *Alberta Report Newsmagazine*, 5 April 1999.
18. Michael Richardson, quoted in Pennisi, "Haeckel's Embryos: Fraud rediscovered," *Science* 277 (5 September 1997), 1435.
19. Richard Dawkins, *The Blind Watchmaker* (NY: Norton, 1986), 287, emphasis in original.
20. S.C. Todd, "A view from Kansas on that evolution debate," *Nature*, 30 September 1999, 423.
21. Pearcey, *Total Truth*, 169.

© 2007 Probe Ministries

Is Intelligent Design Dead?

What Is Intelligent Design?

On December 20, 2005, Judge Jones handed down his decision in the lawsuit brought by several citizens from Dover, Pennsylvania, who objected to a new policy adopted by the Dover School Board. This policy mandated a statement be read before all biology classes indicating that evolution was a theory that needed critical evaluation and that Intelligent Design was a rival theory that students could seek information

about from the library.

Judge Jones not only struck down the policy as unconstitutional; he went further to declare that ID is not science and was purely motivated by religion since it was just a repackaged creationism. His written opinion was scathing. This of course delighted proponents of evolution and many have declared that ID now is dead.

In what follows I will examine this "death certificate" and declare it null and void. ID is alive and well, and the coming months and years will demonstrate convincingly the health of ID. But first, let's make sure we know what ID really is.

The media often simply portray ID in a negative context. One student reporter from Southern Methodist University recently put it this way: "Essentially ID is a theory that proposes that there are parts to a cell that are simply too complex to have been evolved." He adds as an afterthought the idea "that rather they have been altered by some sort of 'designer.'"{1} But ID is truly more than just a critique of evolution. The Discovery Institute's Web site describes ID this way: "The theory of intelligent design holds that certain features of the universe and of living things are best explained by an intelligent cause, not an undirected process such as natural selection."{2}

It's interesting to realize that many evolutionists recognize that living things in particular *look* as if they have been designed. British evolutionist Richard Dawkins said, "Biology is the study of complicated things that give the appearance of having been designed for a purpose."{3} Many in the ID community simply reply, "If it looks designed, maybe it is!" So ID is simply an attempt to quantify scientifically what most people clearly recognize: the design of the universe and of living things.

The major contention with evolution is the claim that mutation

and natural selection can account for everything we see in living things. ID accepts that evolutionary processes do account for some change in organisms over time. But ID says certain structures, like the bacterial flagellum that closely resembles a human designed rotary motor, are better explained through an intelligent cause.

In particular, the universal genetic code has all the distinguishing characteristics of coded information or language. Our experience tells us that language only comes from a mind. If so, then the genetic code also likely came from a mind.

Is ID Science?

Judge Jones made several errors in his reasoning. The recent book from the Discovery Institute, *Traipsing Into Evolution,* answers Judge Jones on several levels.{4} I will focus on three areas: first, how a federal judge can tell us what science is and is not when philosophers of science continue to struggle with this; second, Judge Jones' claim that ID has been refuted by scientists; and third, Judge Jones' claims that ID has not been accepted by the scientific community. For these and other reasons, Judge Jones claimed that ID simply is not science and is religiously motivated; therefore it should not even be mentioned in a high school science classroom.

The first question that should occur to you is, Why does a federal judge with no training in science use his courtroom as a means of determining what is and is not science? This problem has been referred to as the "demarcation problem." How do we demarcate science from non-science? Philosopher of science Larry Laudan writes, "If we would stand up and be counted on the side of reason, we ought to drop terms like 'pseudo-science' and 'unscientific' from our vocabulary; they are just hollow phrases which do only emotive work for us."{5}

In addition, philosopher Del Ratzch argues that there are very real possible payoffs for science in considering ID.{6} Judge Jones knew of these positions but chose to ignore them.

Judge Jones claims that ID has been refuted by mainstream scientists. He cites the work of Kenneth Miller in particular. This is rather strange indeed. For ID to be refuted means that it has been tested by science and found wanting. If it is testable scientifically to the degree that it can be refuted, then it is science after all. This logical contradiction does not seem to occur to Judge Jones.

The judge ruled further that ID cannot be science because it is not accepted by the scientific community. But science is not a popularity contest. New and controversial theories are never accepted by a majority of scientists at the beginning, but that doesn't make them unscientific. The Discovery Institute now lists over six hundred scientists from around the world who are willing to sign a list saying they are skeptical of Darwinism. Surely that counts for something.

ID uses empirical data to demonstrate the plausibility of a design inference. It's as scientific as Darwinism.

Is ID Just Reinvented Creationism?

Several parents challenged a directive by the Dover School Board allowing the mention of Intelligent Design in the science classrooms of this district. Judge Jones ruled the directive unconstitutional. One of his reasons was that ID is just reinvented creationism which the Supreme Court has already ruled is substantially a religious doctrine and not appropriate as science.

One of the texts that the Dover school board members made available was the supplemental text *Of Pandas and People.*{7} Having subpoenaed early drafts of the book from the late '80s, the ACLU tried to show that *Pandas* only began using the phrase

“Intelligent Design” after the Supreme Court struck down the Louisiana creation law. Therefore Judge Jones ruled that ID is in fact just creationism with a new label.

While it is true that the Supreme Court decision did indeed affect editorial decisions in *Pandas*, it’s not for the reasons Judge Jones assumed. The authors and editors of *Pandas* knew their ideas were not the same as creationism and were wrestling with what to call it. Once the Supreme Court ruled that “creationism” meant a literal six day creation, the authors of *Pandas* knew they needed to use a different term.{8}

In addition, the term Intelligent Design had been floating around for several years before *Pandas* was in print. Lane Lester and I used the term in our book *The Natural Limits to Biological Change* in 1984, three years before the Supreme Court decision in *Edwards vs. Aguillard* struck down the Louisiana creationism law. We said, “The simple point is that intelligent design is discernibly different from natural design. In natural design, the apparent order is internally derived from the properties of the components; in creative design, the apparent order is externally imposed and confers new properties of organization not inherent in the components themselves.”{9}

Furthermore, none of the leading scientists of the Intelligent Design movement were ever a part of the creationist movement. People like Phil Johnson, Michael Behe, William Dembski, Charles Thaxton, and Steve Meyer never considered themselves to be part of this group. Their ideas were always similar but definitely not the same.

Some creationist groups today even go to great lengths to distance themselves from the ID movement because ID essentially maintains that the Designer cannot be known from the science alone. Therefore, because of ID’s attempts to stop short of naming the Designer, some creationist groups will sell some ID books but not endorse their program. This would

be very strange indeed if ID is just relabeled creationism.

Once again, Judge Jones got it wrong.

Traipsing Into the Dover Court Decision

In their excellent discussion of the Dover decision, the authors of *Traipsing into Evolution* attack six accusations against Intelligent Design used by Judge Jones.{10}

On page sixty-two of the Dover decision Judge Jones said, "ID violates the centuries-old ground rules of science by invoking and permitting supernatural causation."{11} The main problem for Judge Jones is that ID scientists said repeatedly prior to the trial and in direct testimony during the trial that the science of ID is not able to identify the Designer. It was expressly pointed out to Judge Jones during the trial that the type and identity of the intelligent agent supposed by ID is only identified by religious and philosophical argumentation. That does not mean that design itself cannot be detected scientifically. Indeed, if we ever receive an obviously intelligent message from outer space, we will most certainly be able to determine it has an intelligent cause even though we may have no idea who or what sent it.{12}

Judge Jones also states that "the argument of irreducible complexity, central to ID, employs the same flawed and illogical contrived dualism that doomed creation science in the 1980s." What Judge Jones is referring to is his notion that ID is just a negative argument about Darwinism. If Darwinism can be shown to be false, then ID wins.

But this grossly misrepresents ID. Michael Behe's formulation of irreducible complexity asserts that Darwinian evolution does not predict irreducibly complex machines in the cell where Intelligent Design expressly does predict such machines. So there is definitely a negative component to irreducible complexity. But Darwin himself said that "If it could be

demonstrated that any complex organ existed which could not possibly have been formed by numerous, successive, slight modifications, my theory would absolutely break down."{13} Darwin invited a negative critique.

But there is also a clear positive case for irreducible complexity. When we come across a machine, we intuitively understand it to be intelligently caused, whether we think it functions effectively or not. Intelligent agents can and do produce machines. The concept of irreducible complexity is one way to determine what a machine is.

Judge Jones' third complaint against Intelligent Design was that the attacks on evolution by ID advocates have all been refuted by the scientific community. Judge Jones ignored the fact that at the time of the decision, over five hundred scientists had signed a statement acknowledging their dissent from Darwinism. That list now stands at over six hundred.{14} Certainly some scientists have challenged Behe, Dembski, and others. But their criticisms have been answered effectively both online and in print.{15}

Judge Jones' fourth accusation was that Intelligent Design had failed to gain acceptance in the scientific community. But this is clearly a matter of opinion. As I mentioned previously, over six hundred scientists now express their dissent from Darwin, and most of those also support Intelligent Design, many of them at mainline universities.

No doubt there has been and continues to be strident opposition to Intelligent Design in the scientific community, especially among biologists. But there is always resistance in science to new ideas. And much of the opposition is for philosophical reasons, not scientific ones. Many Darwinists such as Will Provine from Cornell and Richard Dawkins from Oxford are very up front that their adherence to evolution and their disdain for Intelligent Design is over the issue of a

Designer by any name. The science is just a backdrop.

Judge Jones' fifth complaint against Intelligent Design was that proponents of ID have not published in the scientific peer-reviewed literature. This is simply not true. De Wolf et al., in their book *Traipsing Into Evolution,* document in Appendix B a list of thirteen different peer-reviewed articles and books by ID scientists advocating different aspects of the theory. This is admittedly a small number, but that is because there is clear evidence, documented in the same book, of editors having to shy away from ID papers and responses for fear of intimidation by the scientific community. One editor who followed established procedure in getting an ID article reviewed and published was nearly run out of his institution for the offense.

Finally, Judge Jones declared that ID has not been the subject of testing and research. Indeed, any scientific theory needs to be testable in some form or it is not likely to be of some use. But ID microbiologist Scott Minnich testified right in Judge Jones' courtroom that in his laboratory at the University of Idaho he has demonstrated the irreducible complexity of the bacterial flagellum. Minnich also testified to other research he was familiar with which also was testing principles from ID.{16}

As I have summarized, Judge Jones failed to make a reasonable and fair evaluation of the evidence. Intelligent Design is far from dead. Rather, such a poor decision in the Dover case may actually serve ID well as it self-destructs in the years to come.

Notes

1. Brian Wellman, April 26, 2006, Merits of intelligent design, evolution debated, www.smudailycampus.com/vnews/display.v/ART/2006/04/26/444ef833078bc

2. The Web site of the Discovery Institute's Center for Science and Culture, www.discovery.org/csc/topQuestions.php.
3. Richard Dawkins, *The Blind Watchmaker* (New York: W. W. Norton, 1986), 1.
4. David De Wolf, John West, Casey Luskin, and Jonathan Witt, *Traipsing Into Evolution: Intelligent Design and the Kitzmiller vs. Dover Decision* (Seattle, WA: Discovery Institute Press, 2006), 25-57.
5. Larry Laudan, "The demise of the demarcation problem," in Michael Ruse (ed.), *But Is It Science?,* (Amherst, MA: Prometheus, 1983), 337-350.
6. Del Ratzch, *Nature, Design, and Science: The Status of Design in Natural Science* (Albany, NY: State University Press of New York, 2001), 147.
7. Percival Davis and Dean H. Kenyon, *Of Pandas and People: The Central Question of Biological Origins* (Dallas, TX: Haughton Publishing Co., 1989), 166 pp.
8. DeWolf *et al.,* 22.
9. Lane P. Lester and Raymond G. Bohlin, *The Natural Limits to Biological Change* (Richardson, TX: Probe Books, 1984), 153-154.
10. DeWolf *et al*., 29-45.
11. *Kitzmiller et al. v. Dover Area School Board*, No. 04cv2688, 2005 WL 3465563, *26 (M.D. Pa. Dec. 20, 2005).
12. I don't expect we ever will hear from any extraterrestrials. Earth appears to be more and more unique with every passing day. See my article "Are We Alone in the Universe?" at www.probe.org/are-we-alone-in-the-universe-2/.
13. Charles Darwin, *On the Origin of Species by Means of Natural Selection or the Preservation of Favoured Races in the Struggle for Life* (New York: New American Library [A Mentor Book], 1958), 171 (this is a reprint of the 1872 sixth edition).
14. From the Web site of the Center for Science and Culture, www.dissentfromdarwin.org/ accessed October 11, 2006. The statement reads; "We are skeptical of claims for the ability of random mutation and natural selection to account for the

complexity of life. Careful examination of the evidence for Darwinian theory should be encouraged."
15. William Dembski, *The Design Revolution: Answering the Toughest Questions About Intelligent Design* (Downers Grove, IL: InterVarsity Press, 2004), 334 pp.
16. De Wolf *et al*., 56.

© 2006 Probe Ministries