

# Is Intelligent Design Theory Science?



## The Rap on Theists

Theists are often accused of being unscientific. Perhaps this is due to the much publicized controversy related to the “Intelligent Design” (ID) movement.

Opponents of ID have been quite verbal about the relationship between science and ID Theory. John Marburger (President George W. Bush’s Chief Science Advisor) once said:

*“Evolution is the cornerstone of modern biology... Intelligent Design is not a scientific theory... I don’t regard Intelligent Design as a scientific topic.”*

Marburger is not alone. Literally hundreds of scientists have been vocal opponents of ID and have argued that, as a theory, ID is not ‘science’. Because theists are, by definition, creationists who believe that God was involved as the designer of the universe and everything in it, any critical comment directed toward the ID movement invariably applies to all theists as well.

And let’s face it, when opponents of ID Theory say something like, “ID Theory is NOT science” they are usually saying this as a simple ‘ad hominem’ attack intended to cast the Christian in an unfavorable light. For many critics of ID, the statement, “ID Theory is not science” is really intended to be a statement of condemnation for those who believe that there is an intelligent designer in the first place. They might as well say something like:

1. *“Theists are irrational”*
2. *“Theists ignore the scientific evidence”*
3. *“Theists believe something that is without evidence”*
4. *“Theists believe something that is untrue”*

So let’s begin by taking a look at the definition of science and see if this second set of claims about theists can be drawn from the first claim about ID Theory. Let’s start by taking a look at a rather classic definition of ‘science’ that can be found in our dictionaries today:

1. *The observation, identification, description, experimental investigation, and theoretical explanation of phenomena.*
2. *Methodological activity, discipline, or study*
3. *An activity that appears to require study and method*

You’ll notice that a definition like this, commonly accepted in scientific communities, describes two separate activities. First there is the activity of observing, identifying and collecting data. But there is another activity involved in ‘science’. Once the data is collected, a process of interpretation, ‘experimental investigation’ and ‘theoretical explanation’ takes place. In other words, scientists do more than just observe and collect; they interpret and form conclusions, then devise experiments that will allow them to see if their conclusions are correct. This is the methodology and activity that embodies science. To do true ‘science’, you need to do more than collect data. You need to do more than interpret data. You need to be

able to construct experimental investigations that will help you to collect even more data and confirm your theories about the phenomena you are seeing.



## **ID Theory is Not Science**

Based on this understanding of the definition of ‘science’, let me now say something controversial to my brother and sister Christians who have been tracking with the ID Movement: The Intelligent Design Theory is NOT Science. Why not? Secular scientists are correct when they say that the theory of Intelligent Design may be good at making observations and even interpreting data, but woefully deficient in developing investigative experiments and methodological activities that can move their observations forward. It’s in this second area of experimentation and scientific methodology that ID theorists fail to measure up to the traditional definition of science.

But should that really surprise us? After all, ID Theory is attempting to examine something that really CAN’T be repeated in the laboratory. What kind of investigational experiments COULD really be conducted when examining the possibility of an intelligent designer? How could we EVER design experiments to examine the first creative activities of the universe? Does the fact that investigative experiments and methodological activities cannot be conducted mean that ID Theory should be scrapped along with the ‘Flat Earth Theory’? Not at all. Let’s be clear here; Intelligent Design Theory is not science; it is simply the best and most reasonable conclusion FROM the science. When we say that ID theory is not science, we are NOT saying that:

### **1 Intelligent Design Theory is Irrational**

*Many very rational and reasonable scientists are, in fact, theists who believe that God, as an intelligent designer, has designed and created the universe and all life within it (for a very partial list of great Christian thinkers and scientists, visit [THIS PAGE](#)). When ID proponents take a position in support of intelligent design, they are reasoning through the evidence, utilizing the transcendent laws of logic. Proponents of intelligent design are as rational (they are reasoning through the evidence in a logical way) as opponents of intelligent design.*

### **2 Intelligent Design Theory Ignores or Contradicts the Sciences**

*ID proponents are looking at the same scientific data that ID opponents examine in an effort to understand the origin of life in the universe. They are not ignoring the scientific data at all but let’s face it; their conclusions are certainly different than those of naturalists who oppose them. Both sides in this debate argue that the other is misinterpreting some portion of the data, but it would be unfair to say that proponents of the ID Theory are either unaware or suppressing the science.*

### **3 Intelligent Design Theory is Without Evidence**

*Proponents of ID will point to a number of evidences that they believe support their case (we’ll discuss some of the ‘areas’ of evidence that they interpret in just a minute), and these evidences come from the scientific data and collection that has taken place over the years. They will argue that their case is every bit as evidential as the case for naturalism.*

### **4 Intelligent Design Theory is Untrue**

*In the end, the real issue is whether or not either interpretation of the evidence is*

*the most reasonable conclusion. While there is evidence on either side of the issue, each of us must look and decide if the evidence actually PROVES anything. But there is nothing in the nature of the ID Theory investigation and case that PRECLUDES it from being true on the basis of its relationship to the sciences. In other words, ID Theory may be untrue, but if so, it is NOT because it has ignored the scientific data or is unaware of the data. It's all going to come down to an INTERPRETATION of the data using the reasoning powers that each of us has to examine the evidence before us.*

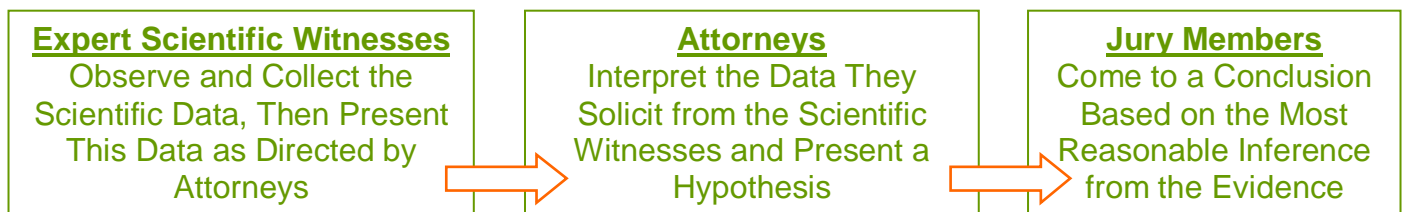


### **The Role of Science (A Courtroom Analogy)**

Perhaps the best way to illustrate the relationship between science and those who are examining the possible existence of Intelligent Agency in the creation of life is to think of the 'courtroom' as an analogy. There are several important 'players' in any trial. You and I, as objective people considering all the possibilities, are most akin to the jurors in the jury box. We are required to be fair and neutral, but we do, of course, bring several potential biases into the jury experience; that's only natural. Our presuppositions don't necessarily prohibit us from doing our best to examine the evidence fairly; after all, NO ONE is without bias of some kind or another and juries all over the nation are somehow able to do their job. They have taken a pledge of fairness, just like you and I.

There are also attorneys in the courtroom. In our analogy, these are both the proponents and opponents of Intelligent Design Theory. It really doesn't matter how we characterize these folks (either as prosecutors or as defense attorneys), it only matters that we recognize that one side is trying to convince us that life is the result of intelligent agency and guidance, and the other is trying to convince us that unguided naturalism is all that has ever been at work in the process.

There are other characters in our courtroom. Over the course of the trial, we will hear from any number of scientific expert witnesses who will present us with the scientific data that each attorney will then interpret in their closing argument to make their case. The witnesses are important; they represent 'science' and the importance of scientific data collection. The attorneys, in turn, represent 'reason' and 'interpretation' as they interpret this science to make their arguments. You and I, as jury members, represent 'knowledge' and 'decision' as we assess the scientific evidence and the interpretation of each side. We will ultimately decide which attorney is inferring the best and most reasonable interpretation from the scientific evidence.



Now in order for this system to operate effectively, each player in the equation must possess certain necessary characteristics:



#### **1 Expert Scientific Witnesses**

*These scientists must be without 'agenda' and perform their duties objectively. Each attorney is allowed to call scientists that can provide them with the data they will*

*need to make their case, but it's fair for the opposing attorney to point out any scientific biases or pre-existing points of view that might have tainted the evidence collection. The attorneys will make the case later, and if members of the jury sense bias in an expert witness that has resulted in a distortion of his or her presentation of the science, the jury will be allowed to minimize or disregard the testimony of the witness.*

### **2 Attorneys**

*It's important for everyone to recognize that the attorneys (the proponents and opponents of Intelligent Design in our analogy) are on equal footing here; neither, by definition and characterization, is to be condemned on a personal basis before they even begin to argue. Neither is to be seen as innately 'unreasonable' or 'irrational'; both are to be given the respect that their humanity deserves. And in truth, neither is more or less 'scientific' than the other; both rely on the witness testimony of scientists, and both will challenge the scientific expertise and methodology of the other's expert scientific witnesses. But while each attorney is to be given the respect due their position, it is fair for the members of the jury to examine and evaluate the 'reasonableness' of their arguments.*

### **3 Jury Members**

*Those of us who are 'in the box' evaluating the case made by each attorney, are required to be passionately interested in the case, attentive to details, and committed to fairness.*

From this courtroom analogy you can see that proponents of ID Theory (and therefore proponents of theism) cannot be described as more or less 'scientific' than the opponents of ID Theory; in fact, these 'attorneys' are not the scientists at all. They are the interpreters; those who look at the scientific data and form an argument for what they believe to be true.



### **The Evidence We Use to Make A Case**

In order to understand the kind of evidence that theists use to make their case from the scientific data, let's use another law enforcement analogy. As we think through this example, pay close attention to the difference between what's 'possible' and what's 'reasonable'; this will be important later...

*Two detectives are called to the scene of a suspicious death. A dead man is laying face down in his living room in a pool of blood. He has a large single edged knife sticking out of his back, right between his shoulder blades. This is the only injury he appears to have suffered. He is lying in the middle of the room. The front door is still ajar; it is propped open at approximately 45%. There is a blood smear on the interior door knob of this door. Approximately 4 feet away from the body, written in the blood, is the short sentence: "USTED LO MERECIÓ". The letters appear to have been calmly written; they are neatly spaced and precise. The room adjacent to the living room is the kitchen, and the large window in this kitchen appears to have been forced open. The drawer adjacent to the sink has been pulled open and several small knives are scattered on the counter adjacent to this drawer. On the refrigerator there are several magnets holding photographs of the victim with his family and a recent shopping list written in English.*

OK, before the two detectives can even begin to 'work' the case, they are going to need to determine if there IS a case! In other words, they are going to need to decide if the victim has died at the hands of another. They need to reason through the crime scene and decide whether or not an intelligent agent (other than the victim himself) is responsible for this death. Perhaps the victim died accidentally. Perhaps the victim died of natural causes. Perhaps the victim did this to himself. These three possibilities need to be eliminated before the detectives can call this a murder scene; before they can begin to look for the perpetrator, they need to decide if there WAS a perpetrator. So, they begin by examining the crime scene, assessing it for signs of intelligent, outside intervention with the following factors in mind:

### **1** *The Connected Complexity of the Scene*

*All aspects of the crime scene must be considered in unison. After all, we might be able to rationalize or reason away the fact that the kitchen drawer is ajar; the victim himself could have opened it and there may be nothing suspicious here at all. But when considered along with the knives lying on the counter, the forced window, and the bloody crime scene, a picture is starting to emerge and these elements are obviously connected. All of these elements are related to each other and are evidence of an irreducible sequence of events that led to the death of the victim. It appears that entry to the house was forced through the kitchen window, a knife was removed from the kitchen drawer, the knife was then used to murder the victim, a message was left behind in his blood, the murderer then left through the front door leaving blood on the doorknob. Science can tell us more about these elements within the crime scene. DNA can tell us if the same person touched the broken window, the drawer and the knives (including the one still in the victim). Scientific comparisons can also tell us if the source of this DNA is the victim or an unknown assailant. But even without this scientific confirmation, there is an obvious irreducible connected complexity here that makes it unreasonable to conclude that it was simply an unfortunate series of accidental or natural events that caused the victim's death. Is it 'possible' that the victim died accidentally, naturally or from a self inflicted injury? Is it possible that all these crime scene elements happen to exist independently from one another? Yes, in the strictest sense, we must admit that anything is 'possible'. But is it 'reasonable'? No. The best and most reasonable inference from the evidence is that an outside intelligent agent is responsible for this death.*

### **2** *The Existence of Specific Information*

*In addition to the connected complexity of the scene, specific information has been left by the person who caused this death. The message, "USTED LO MERECIÓ", has been written in the victim's own blood. There is good reason to believe that the victim himself could not have been the source of this information. For one thing, the position from the body (approximately 4 feet away) is too far to have been reached by the victim with either hand. In addition, the victim appears to have suffered a single fatal wound to his heart and this alone would have prevented him from completing the note left on the floor (especially in the neat and calm way it appears to have been written). The message is also written in Spanish. All other notes or letters in the house that can be attributed to the victim (including the shopping list on the refrigerator) are written in English. The Spanish words translate "YOU DESERVED IT". Interestingly, the message does not say, "LO MERECÍ" ("I DESERVED IT"). It is not written with a first person pronoun. But there is something more about the message that is important. It is a MESSAGE! It says something. It contains information that indicates that the source is someone outside the scene. The letters are not*

random and they are written in a language that can be deciphered and translated. Once again, expert witnesses can help us here, if needed. We could consult with linguists to tell us something about the language that was used in the message. We could check with DNA to see if the writer is also the person who touched the broken window or the kitchen drawers. But even without the science, our reason alone tells us enough. Is it 'possible' that the victim died accidentally, naturally or from a self inflicted injury? Is it possible that this message on the floor really has nothing to do with an outside agent, but instead occurred either accidentally or was written by the victim? Yes, anything is possible. But is it 'reasonable'? No. The best and most reasonable inference from the evidence is that an outside intelligent agent is responsible for this death.

### **3 The Resemblance to Past Patterns**

The two detectives had an intuitive sense that they were looking at a homicide scene from the very beginning, even before they were asked to identify the connected complexity and specificity of the scene. Why? These two guys have been working homicides for twenty years. They've seen literally hundreds of crime scenes. They recognize the similarities between this and other scenes in which a suspect has come from outside the scene and committed a murder. As a result they recognize outside intelligent intervention by comparing this scene to others. That's why an experienced investigator is so valuable in situations like this. Sometimes you just can't place a price on the value of experience. These detectives have seen stabbing scenes before. They recognize the signs of forced entry and looting. They understand what the suspect's flight path should look like. In their minds, the moment that they entered the room, they observed the patterns and appearances of this scene and compared them to the hundreds of scenes they had investigated in the past. This scene matched up with their prior experience of murder scenes immediately. Now you might wonder if you could trust this kind of comparative expertise, but when combined with the previously described observations related to complexity and specificity, comparative recognition can be an important and reasonable tool. Once again, is it 'possible' that the victim died accidentally, naturally or from a self inflicted injury? Is it possible that this scene compares well to other similar murder scenes, yet there was no murder? Yes, anything is possible. But is it 'reasonable'? No. The best and most reasonable inference from the evidence is that an outside intelligent agent is responsible for this death.

### **4 The Inadequacy of Alternative Explanations**

Finally, all good detectives find themselves running all the possibilities through their mind just to make sure they haven't limited their investigative options. They start with as broad a set of possibilities as possible, and then limit the direction of their investigation based on the reasonable (or unreasonable) nature of these possibilities. If an outside intelligent agent did not commit this crime as a murder, then there are only a few alternatives: the victim died naturally, the victim died accidentally, or the victim killed himself. It should be clear that the victim did not die of natural causes. While his heart DID stop beating, it stopped because of the knife and not because of a heart attack or some other natural cause. It should also be clear that this is not an accidental death. If there was no other physical evidence at the scene, it would still be hard to envision a way in which the victim could have accidentally fallen on the knife in this way. And finally, it should also be obvious that this is not a suicide. It would be physically impossible for the victim to stab himself in the location where he was ultimately stabbed. So, is it 'possible' that the victim died accidentally, naturally or from

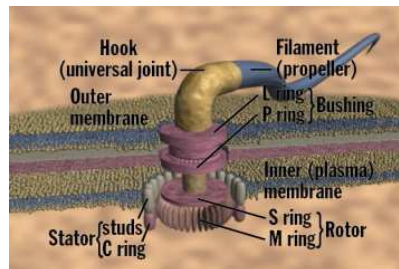
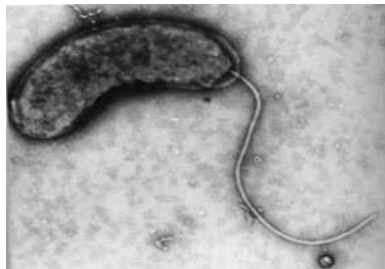
*a self inflicted injury? Once again, we have to remember that ‘possible’ is a very broad word. Yes, I suppose that anything is possible. But is it ‘reasonable’? No. The best and most reasonable inference from the evidence is that an outside intelligent agent is responsible for this death.*

Now let me ask you a question. Have the detectives been unreasonable in their forensic approach to examining the evidence? Given the same crime scene, would you or anyone else reasonably conclude that this was a natural, accidental or self inflicted injury? The detectives here are going to advance an “Intelligent Intervention Theory”; they are going to conclude that this is a murder and start looking for the suspect. Using these four principles, they have investigated and examined the evidence and have concluded that there is a murderer involved in this crime scene. They have not been irrational. They have not ignored the scientific evidence. They don’t believe something that is without evidence, and they don’t believe something that is untrue.



### The Reasonable Nature of ID Theory

In a similar way, those who propose the Intelligent Design Theory examine these four factors when they examine the nature of biological organisms. They come to much the same conclusion as the detectives in our story. Let me give you an example from the most famous organism cited by ID Theorists, the Bacterium Flagellum:



Some bacteria have the ability to move rapidly and change direction by utilizing a small motor like device called a “flagellum”. The flagellum ‘tail’ spins and whips in order to propel the organism forward. The flagellum spins and whips around at the rate of 200 to 1000 revolutions per minute, just like a motor propeller! These flagellum tails can change direction and tilt to speed up or decelerate the bacteria and change their direction. When we look at the flagellum under magnification, we see a specific assembly of specialized parts that have been assembled in a specific way to form a motor that is then used to propel the bacterium! Now this flagellum is constructed from 40 individual parts. These parts are assembled in a meaningful way and the flagellum CANNOT function unless all the parts are present at the same time.

The question of course is, how did these flagellum mechanisms come into being? In other words, we have to ask ourselves:

1. *“Did the flagellum develop accidentally?”*
2. *“Did the flagellum come about as a result of ‘natural’ causes?”*
3. *“Did the flagellum create itself?”*
4. *“Was an outside intelligent agent involved in the creation of the flagellum?”*

Do these questions sound familiar? You see, we are once again asking the very same questions that the detectives asked when they first encountered their crime scene. So, let's examine the possibilities using the same four filters with which we examined the crime scene.

### **1** *The Connected Complexity of the Flagellum*

*The 40 piece flagellum has been compared to a mousetrap. All the pieces of the mouse trap must exist in the assembled form in order for the mousetrap to function. Any one of the pieces on its own (the board or the pin or the spring or the wire hammer) are useless unless they work in harmony with the other pieces. There is a functional MINIMUM requirement here. You cannot reduce the mousetrap beyond a certain point. There are a minimum number of pieces that must be assembled to make the trap work. It must be at least this complex to function at all. This level of reduction is called "irreducible complexity". It is the minimum point beyond which the machine cannot function. The flagellum also has a minimum 'level' of functionality. It has an irreducible complexity. It requires all 40 parts to appear at the same time, assembled in a specific way in order to work! Does this connected, irreducible complexity tell us something about its origin? All machines that demonstrate an irreducible complexity are the result of intelligent agents that have the ability to assemble these parts in a thoughtful, connected and complex manner. Is it 'possible' that the connected complexity of the flagellum occurred accidentally, naturally or from its own effort? Yes, anything is possible. But is it 'reasonable'? No. The best and most reasonable inference from the evidence is that an outside intelligent agent is responsible for the flagellum.*

### **2** *The Existence of Specific Information within the Flagellum*

*In addition to the connected complexity of the flagellum, specific information appears at the most fundamental levels of the organism. Remember that the flagellum is built from a number of proteins shaped into the variety of components necessary for the flagellum. These proteins are in turn built from amino acids. These acids have to come together in a specific way so they can fold up onto themselves to form the specific shapes and clusters that we call proteins. But ask yourself the question: how do these amino acids know how to join to each other? Is it accidental? Is there a natural attraction between the acids that acts like magnets coming together? No, the activity of the amino acids and proteins is controlled by DNA. The pre-existing DNA provides the organism with information and direction; guiding the process of protein formation. DNA is the most densely packed molecule in the known universe. It is a highly complex, highly ordered and extremely large assembly of information containing more data than the largest human library. DNA poses a dilemma. Proteins cannot form without the DNA information and direction. But DNA is highly complex, ordered and informational. Where does it come from? As it turns out, the DNA molecule is filled with specific information that directs the assembly of the overall organism. And it is required for the protein to exist. The 'irreducible complexity' of the protein is not just a number of simple amino acid chemicals. The 'irreducible complexity' of the protein also includes the most complex known molecule in the universe: the DNA molecule. Is it 'possible' that the specific information required to assemble the flagellum occurred accidentally, naturally or from its own effort? Yes, anything is possible. But is it 'reasonable'? No. The best and most reasonable inference from the evidence is that 'information' comes from intelligence and an outside intelligent agent is responsible for the DNA that guides the formation of the flagellum.*

### **3 The Resemblance to Past Patterns Compared to the Flagellum**

As we look at the flagellum (even before we recognize its irreducible complexity and specific information), we have an intuitive sense that this little motor simply cannot be the product of accidental or unintelligent, unguided forces. We are not much different than the two detectives who had an intuitive sense that they were looking at a homicide scene. Why do we feel this way? Well, let's look at the mechanism again. Do we recognize patterns that exist in other designed objects? The Flagellum bears a striking resemblance to other designed motors! If we came upon an outboard boat motor sitting in the wilderness, we would know with certainty that it is the product of intelligent design, and the flagellum is no different. It displays all the same design factors that are present in the outboard motor. It too is the obvious result of intelligent design. And as we look at the entire cell, with all of its ordered and specific machinery, and observe the way in which these cellular machines operate with each other, we recognize that it is unreasonable to believe that these elements came together without intelligent influence. Is it 'possible' that the resemblance to other known designed objects is the result of accidental, natural or self directed processes? Yes, anything is possible. But is it 'reasonable'? No. The best and most reasonable inference from the evidence is that an outside intelligent agent is responsible for the resemblance between the flagellum and other known designed objects.

### **4 The Inadequacy of Alternative Explanations for the Flagellum**

Finally, we must examine the alternative possibilities to see if there just might be a better explanation that can explain the existence of the flagellum. If we, for example, believe that the flagellum came into being as a result of natural processes (natural selection), then we are going to have to explain a few things. Natural selection argues that small changes occur over time. The first part of the motor appears in the bacterium, then thousands of years later, another part appears, then when all the parts appear, they come together to form the flagellum. But the laws of natural selection would actually work AGAINST this possibility, because Darwin argued that organisms only KEEP elements that BENEFIT the organism. Useless pieces are discarded and are NOT passed down to the next generation of the organism. So, as these parts of the flagellum motor slowly appeared in the bacterium, they would have no function on their own and would have been selected OUT and eliminated if natural selection is to be believed. 30 of these parts are unique to the flagellum and don't exist in any other capacity in the bacterium. They only exist to assemble the motor, and they have to come together in a specific way and a specific order! If natural forces are at work here, then we have to explain how the 39 piece 'pre-flagellum' structure contributed to the organism. But more importantly, we would also have to explain the nature and functionality of the 38 piece organism, the 37 piece organism, the 36 piece organism, and so on... In other words, naturalism must provide a 'functional pathway' from a single protein contributing to the organism, to the complete 40 protein machine (including a reasonable function for every mechanism in between). Is it 'possible' that alternative accidental, natural or self directed processes provide an explanation for the existence and nature of the flagellum? Yes, but once again, this is not really the question that should matter to us. The real question is this: are these alternative explanations 'reasonable'? No. The best and most reasonable inference from the evidence is that an outside intelligent agent is responsible for the existence of the flagellum.

Once again, let's ask an important question: "Have the investigators of the flagellum been unreasonable in their forensic approach to examining the evidence?" Given the nature of the flagellum, is it really all that unreasonable for us to conclude that it is NOT the result of natural, accidental or self directed forces? Using these four principles, theists have investigated and examined the evidence and have concluded that there is an intelligent agent involved in the flagellum. They have not been irrational. They have not ignored the scientific evidence. They don't believe something that is without evidence, and they don't believe something that is evidentially untrue.



### **So, It's Not Science (So What?)**

So, is the Intelligent Design Theory 'science'? No. Does that really matter? No. The "Intelligent Intervention Theory" proposed by the detectives is not 'science' either, but it is clearly the best and most reasonable conclusion from the evidence. In our fictional account of the homicide crime scene, no one would challenge the conclusion that the victim was murdered. In fact, juries have sentenced people to the death penalty given just such a forensic approach to the evidence. Why is it reasonable for the detectives to use the four evidential principles we have described to determine intelligent intervention in the crime scene, yet unreasonable to use the very same approach to determine if intelligent agency was involved in the creation of life? The claim that ID Theory is not 'science' has no bearing on the reasonable conclusion that God has been involved in the design process.