

Intelligent Design of Plants & Bacteria

‘Scientists Debate Existence of Divine Agent.’ In a sold-out hall, students had the opportunity to watch four panelists use scientific theories and portions of the Bible in a debate over some of life's most significant questions.

Sponsored by Campus Crusade for Christ, the two-day program called “Evolution vs. Intelligent Design” included a discussion among experts from an array of scientific fields.

Arguing for the existence of a divine creator were astronomer and author Dr. Hugh Ross and award-winning biochemist and author Dr. Fazale Rana, president of Reasons to Believe, an organization created to prove that science and the Bible complement each other.

The opposition, consisted UC Davis professors Drs. Andreas Albrecht and Dan Potter. Immediately Albrecht commented that he didn't believe the creationist's work was science.

And Potter said that merging science and religion was just a bad idea. He said, “Religion and science are separate ways of defining the world. Merging them could be damaging to society and religion.”

But UC davis junior Jessica Tekawa said, “I agree with the opposite side that science is changing and the Bible is fixed. However, after hearing what the professors had to say about how science is always changing, I think it takes more faith to believe in science than God.”

Now folks, I don't know about you, but I sure find it interesting how Campus Crusade for Christ is using the arguments for **Intelligent Design** to share what? To share the Gospel of Christ, right? I mean gee whiz, maybe it **really is** a powerful way to share the Gospel, just like we've been seeing week after week, you know what I'm saying? But not only that, once again

what was the accusation of those scientists? That Intelligent Design is not science! I mean, can you believe that? Besides the Bible, what's the only thing we've been looking at? Scientific data! But not only that, as we've been seeing, those who are deliberately trying to suppress the truth, what are they actually doing? They're actually storing up the wrath of God! And how many of you would say that's probably not a good thing to do?

Therefore in order to help you and I to become the most effective witnesses we can for Jesus Christ, and help these folks out, that's right, we're going to continue in our series, "**The Witness of Creation.**" And what we're doing is taking a look at the **five different evidences** of creation that God has left behind for us showing us that He's not just real, but that we really can have a personal intimate relationship with Him, the Creator of the universe!

And so far we've seen the **first evidence** God left behind for us showing us this amazing truth and that was **The Evidence of An Intelligent Creation.** And the **first four evidences** of an Intelligent Creator designing our intelligent world was **The Evidence of the Universe, the Solar System, the Human Body, and the Animal Kingdom.** And so far we've seen how not only **mammals, and flying creatures, and slimy creatures** show evidence of God's intelligent design, but last time we saw how even **buggy**

creatures show evidence of God's intelligent design. And there we saw, gee whiz, anybody who didn't forget to pay their brain bill knows that the design in those bugs implies what? A designer, right? And how many of you'd say that's probably speaking about God?

But that's right, believe it or not, did you know that's not the only evidences of an Intelligent Creator designing our intelligent world? The **fifth evidence** of and **Intelligent Creator** designing our intelligent world is the **Evidence from the Plant Kingdom**. But hey, don't take my word for it.

Let's listen to God's!

Genesis 1:9-13 "And God said, Let the water under the sky be gathered to one place, and let dry ground appear. And it was so. God called the dry ground land, and the gathered waters he called seas. And God saw that it was good.

Then God said, Let the land produce vegetation: seed-bearing plants and trees on the land that bear fruit with seed in it, according to their various kinds. And it was so.

The land produced vegetation: plants bearing seed according to their kinds and trees bearing fruit with seed in it according to their kinds. And God saw that it was good. And there was evening, and there was morning-the third day."

Now folks, according to our text, I think it's pretty clear. The Bible says not only says that God created the ground but He also created the what? All the plants that grow in the ground, right? But the problem is, what does evolution teach? Do they say, "Oh yeah, look at all those plants and trees

that came from the Hand of God.” Are you kidding? They say look at all those plants and trees that evolved from a single-celled blob, right?

Therefore, I’d say we better take a look at these plants and see who’s telling the truth, how about you? People, we’re going to take a look at some interesting facts about some of the **plants out there** and you tell me if they accidentally sprouted on the scene!

The Ajuga Plant: Did you know when locusts move across North Africa, eating everything in their path, for some reason they never touch the Ajuga plant. Why? Well, it just so happens that there’s a hormone in the Ajuga plant that’s identical to an insect hormone in locusts.

But not just any hormone, but one that just so happens to induce molting or the shedding of the outer coat of skin as the insect grows. Therefore, it just so happens that if the locust eats the Ajuga, it causes him to molt and shed his skin. Now premature molting is kind of a pain for the locust but it just so happens the Ajuga plant hormone is also five times stronger than that found in the locusts.

Therefore, if the locusts eat the Ajuga plant they don’t just molt, they literally pop out of their skin so fast, they even lose the skin around their mouths, which causes them to starve to death. Therefore, most locusts leave it alone.

The Thorny Acacia: Did you know the thorny acacia tree of central Africa can actually tell when animals are feeding too heavily on it? Not only that, when it detects this danger it goes a step further and actually produces a chemical called Tannin K and combines it with other chemical in the leaves which just so happens make the leaves all of a sudden taste really bad.

In fact, scientists found that the tannin level is normally quite low, but within 15 minutes after the tree detects leaf damage, it raises its tannin levels to nearly double. But that’s not all. They also discovered that when this happens, the leaves not only start tasting bad but the tree also starts to give off an odor. Why?

Because the scientists discovered this odor was a warning alarm to other nearby acacia trees to be on guard in which they too began to produce more tannin in their leaves as well!

The Unusual Plants: Did you know that certain varieties of the Ophrys orchid have on their petals what appears to be a three-dimensional picture of a female wasp, complete with eyes, antennae and wings? In fact, the petal even gives off the odor of a female in mating condition so when the male arrives to mate, he gets tricked into pollinating the flower!

Did you know the dwarf mistletoe in America builds up the same amount of hydraulic pressure within it as in a truck tire? Why? Well, it does this in order to use that water pressure to catapult its seeds out to a distance of almost 50 feet at a speed of close to 60 miles per hour!

Did you know the wild oat has an overcoat on it called an awn, which looks like a partly bent leg of a grasshopper? Why? Well on warm, dry days, the leg suddenly straightens with such force that the seed is lifted over rough ground and partially burrows itself into the ground.

Did you know certain plants, including the tomato and potato, have special ways of defending themselves against insects? Well, it just so happens that if a leaf is damaged by an insect eating it, the plant actually produces a substance which just so happens to cause the insect's stomach digestive juices to stop flowing which causes the insect to no longer be able to digest its food!

Did you know the bamboo plants not only grow all over the world yet for some unknown reason every so often it suddenly dies? Not only that, when it dies, so do all the other bamboo plants throughout the world, even though they're separated by thousands of miles! Then later, the bamboo plant shoots up to life again, but once again, all over the world.

The Diatom: Did you know that many consider the tiny little diatom to be one of the most supposed simplest of all plants in existence? But the question is, "Is the diatom really a 'simple' plant?" You be the judge!

First of all, it's made mostly of fragile glass with many little openings, yet it is almost indestructible. It's fireproof, yet its used to make dynamite. It has

explosive properties, yet it's used in mines to reduce explosions. It tastes like fish oil, yet it's used in toothpaste. It has no apparent means of locomotion, yet it travels around by straining its own cytoplasm through one window and out the other.

It looks something like an exquisitely carved pillbox, yet this pillbox duplicates itself by growing a new lid on the box, and then the lid grows a new box. In fact, there are over 5,000 different types of diatoms yet no two varieties look exactly alike.

It's something like an algae, yet decidedly different. Each diatom can comfortably live in a thimble full of water with 14 million other diatoms. It produces the oil that gives fish a "fishy" smell, yet its skeleton is used to refine sugar!

And although the diatom is one of the smallest one-celled organisms in the world, it is responsible for recycling 90% of the oxygen we breathe, and provides most of the food for fish and whales. In fact, this so-called "simple plant" is so complex in construction that it's used to test the resolving power of microscope lenses.

Question, "How could these plants ever have evolved slowly over time? And at what stage of development could any of them ever have survived unless all of these features were fully functioning all at the same time?"

Now folks, I don't know about you, but I'd say those **plants** clearly show, they not only were **but they had to be** intelligently designed by an Intelligent Creator, how about you? In fact, I'd say anybody who's says they weren't, they're acting like about as smart as bait, you know what I'm saying? And gee whiz, I guess that's why **Arthur Schawlow** (Professor of Physics at Stanford University and winner of a Nobel Prize in physics) said this.

“It seems to me that when confronted with the marvels of life and the universe, one must ask why and not just how. The only possible answers are religious. I find a need for God in the universe and in my own life.”

Crone translation? “If you think all of life, including those **plants** were created by chance, “**You’re acting like your about as smart as bait!**”

Right? Isn’t that what he’s saying? Of course he is! **Why?** Because any intelligent person knows that design implies a what? A Designer, right? And how many of you’d say that’s probably speaking about God? Hey great answer, you’re so intelligent!

Oh, but that’s not all. The **sixth evidence** of an **Intelligent Creator** designing our intelligent world is the **Evidence from the Bacteria Kingdom**. People, we’re going to take a look at some interesting facts about some of the **bacteria** and **cells** out there and you tell me if they just accidentally spawned onto the scene!

The Lasso Mold: Did you know that some molds are not only pretty gross looking but some of them are actually predators? One such mold is the Lasso Mold which actually captures and feeds upon numerous nematode worms which are in the soil. And here’s what it does.

Some molds have sticky knobs in which they catch and hold onto the worms until they are eaten. But one, lasso mold has a very unusual method making it the cowboy of the microscopic world. Believe it or not, it actually lassos its prey!

The mold is in the shape of a thread, and the nematode is shaped like a worm and is much larger. So how does he catch his prey? Well, when the lasso mold senses the presence of a nematode, he immediately grows a small loop on the side of its body.

Then as the worm travels along, its head passes through the loop whereby instantly, within $1/10^{\text{th}}$ of a second, the loop cells swell and the loop clamps shut on the worm, lassoing it, whereby it's captured and eaten by the mold.

The Unusual Bacteria: Did you know some bacteria can think?

Experiments conducted in 1883 by Wilhelm Pfeffer revealed that bacteria will swim away from poisons like mop disinfectant, and toward good food such as chicken soup. When swimming through a partial disinfectant/soup mix, they swim faster. Upon arriving at the good food, they stop swimming and beginning feasting.

Did you know that within the chromosomes of a single bacterium there are about 3 million base pairs in an exact sequential order? In fact, it can double itself in forty minutes so that DNA synthesis is done at the rate of more than 1,000 base pairs per second! And if their divisions continued uninterrupted, the mass of descendents of one bacterium would weigh as much as 2,000 tons in only 24 hours.

Did you know some bacteria come with magnetic compasses? In fact, it wasn't until the 13th century that navigators began using compasses, which at first were magnetic needles floating in a bowl of water or oil. But from the beginning, bacteria have had within them strings of magnetite particles just the right size to make a compass in which they actually use to guide them back to preferred locations.

Keep in mind that, even though a bacterium is quite small, the distances it travels can seem long to it with many twists and turns. Did you know some bacteria can live in hot springs at a temperature of 175°F while spores of other bacteria have survived after being exposed to the temperature of liquid air that of minus 310°F ?

The Cell: Did you know there's no such thing as a simple cell? Why?

Because it has been observed that each cell is a literally factory that contains an elaborate network of interlocking assembly lines, each of which is composed of a set of large protein machines, bristling with high-tech machinery.

On the outside, their surfaces are studded with sensors, gates, pumps and identification markers and inside cells are jam-packed with power plants,

automated workshops and recycling units. In fact, they even have miniature monorails that whisk materials from one location to another.

In fact, the most advanced, automated modern factory, with its computers and robots all coordinated on a precisely timed schedule, is less complex than the inner workings of a single cell. And the so-called simplest of all cells, the paramecium is more complex than the space shuttle, which is the most complex machine man has ever built!

The DNA: Did you know the amount of information that could be contained within just the amount of DNA on a pinhead would, if written into paperback books, would make a pile of books 500 times higher than from here to the moon?

Did you know the amount of human genomes that could be contained on just pinhead would be more than 1/5th the population of the world? And did you know that if you were to stretch out the material of a pinhead into a wire with the same thin diameter as a DNA molecule, it would go around the equator over 30 times?

Did you know there are about 3 million nucleotides in just a single cell bacteria while there are over 3 billion nucleotides in the DNA of a single human cell? By the way, each one is aligned sequentially in a very specific order meaning that there are 3 billion complicated chemical links, each one of which has to be in a precisely correct sequence, in just one human cell.

And that's why the DNA molecule 45 trillion times more efficient than the silicon megachip, which by the way, was made by teams of designers.

The Bacteria Flagellum: Did you know the bacterial flagellum is what propels the E. coli bacteria through its microscopic world? It consists of about 40 individual protein parts including a stator, rotor, drive-shaft, U-joint, and a propeller making it a literal microscopic outboard motor!

In fact, the electrical power for driving the motor is supplied by the voltage difference it develops across the cell membrane and the motor itself run at an incredible 100,000 rpm and can stop on a microscopic dime. In fact, it only takes a quarter turn for them to stop, shift directions and start spinning 100,000 rpm in the opposite direction!

The flagellar motor has two gears (forward and reverse), is water-cooled, and speeds forward at about 1 micron per second, which is said to be equivalent to you and I swimming 60 miles per hour through peanut butter!

By the way, this amazingly complex bacteria was the one featured on the video documentary on Intelligent Design called, “Unlocking the Mystery of Life,” the PBS recently pulled from its website!

Question, “How could these bacteria and cells ever have evolved slowly over time? And at what stage of development could any of them ever have survived unless all of these features were fully functioning all at the same time?”

Now folks, I don't know about you, but I'd say those **bacteria** and **cells** clearly show they not only were **but they had to be** intelligently designed by an Intelligent Creator, how about you? In fact, I'd say anybody who says they weren't, they're acting like their chimney's clogged, you know what I'm saying? And gee whiz, apparently that's why **Robert Jastrow** (NASA scientist) said this.

“For the scientist who has lived by his faith in the power of reason, the story ends like a bad dream. He has scaled the mountains of ignorance; he is about to conquer the highest peak; as he pulls himself over the final rock, he is greeted by a band of theologians who have been sitting there for centuries.”

Crone translation? “If you think all of life including those **bacteria** were created by chance, then “**You're acting like your chimney's clogged!**” Right? Isn't that what he's saying? Of course he is! **Why?** Because any intelligent person knows that design implies a what? A

Designer, right? And how many of you'd say that's probably speaking about God? Hey great answer, you're so intelligent!

Oh, but that's not all! The **seventh evidence** of and **Intelligent Creator** designing our intelligent world is the **Evidence from Symbiotic Relationships**. People, we're going to take a look at some of the symbiotic or intertwining relationships that certain animals have for each other in order to survive and you tell me if there's anyway they could've evolved! But we'll take a look at that next time.

To find the way to God, to understand the *truth* of God's Word, and to received the gift of eternal *life*, begin by repentance and faith through a prayer like this:

“Dear God, I understand that I have broken Your Law and sinned against You. Please forgive my sins. Thank You that Jesus suffered on the cross in my place. I now place my trust in Him as My Savior and Lord. In Jesus' name I pray. Amen.”
