

“Cloning Could Help So Many People”

I am intrigued by the possibilities of cloning. Is human cloning possible? Could we use it on nearly extinct animals? What would be the risks of cloning, and if it were a success what might be the outcome?

I am interested in this because I think that cloning should be allowed to go ahead because it could one day help a lot of people. I would like to know as much information as you have on genetic cloning, so that I can gain an understanding of it and how it works. We would also have the ability to feed the starving children in Africa and other third world countries.

I am intrigued by the possibilities of cloning. Is human cloning possible? Could we use it on nearly extinct animals?

Human cloning is not possible at this time. Cloning to preserve endangered species is counter-productive since cloning produces genetically identical organisms. Endangered species usually suffer from a lack of genetic diversity. Cloning only makes the problem worse.

What would be the risks of cloning, and if it were a success what might be the outcome?

Cloning produces a nearly identical genetic copy of the original by taking the nucleus of a cell from an organism and placing inside an egg cell of the same species. The egg needs to “reprogram” the original cell’s DNA to perform embryonic functions. The risks currently are that this process is not always complete and the organism dies at various stages of development, or it is born deficient in some way. Some scientists believe that all clones are genetically handicapped

in some way but some are able to survive, but marginally.

I am interested in this because I think that cloning should be allowed to go ahead because it could one day help a lot of people.

We don't really know yet what cloning could do for anybody. At the moment there are only hopes and wild dreams.

I would like to know as much information as you have on genetic cloning, so that I can gain an understanding of it and how it works.

I have several articles on our website. Check there first:
<http://www.probe.org/faith-and-science/bioethics/>

If we were to be able to clone cows it would mean that we would not have a loss of meat production.

Cloning cows is more expensive than normal reproduction. Currently only bulls are cloned to make more copies of good genetic stock for normal animal husbandry purposes.

We would also have the ability to feed the starving children in Africa and other third world countries.

Unfortunately, cloning will not answer this problem.

I hope you find this helpful.

Respectfully,

Ray Bohlin, Ph.D.

© 2008 Probe Ministries

“Where is the Scientific Evidence of Joshua’s Long Day?”

I was talking with a guy at work about Jesus and the word of God. He is very skeptical of the whole thing and doesn’t really believe God exists. I told him I was watching The Discovery Channel a while back, they were saying how there must be some truth to the bible because they found that time was stopped for a certain amount of time and they traced it back to biblical times and found God did stop time. I was wondering if you could point me in the direction of scientifically proven scripture. Maybe a website or a book. This person wants proof of God [as most people do]. I know there is scientific proof, I just don’t know where to look or know if I’ll be able to [or he will] understand it!!

I’m sorry, _____, but the idea that scientists have proven that God stopped time is a Christian urban legend. What you are referring to is Joshua’s long day. Here’s the webpage that debunks that theory:

<http://www.ship-of-fools.com/Myths/index.html>

Actually, there is no PROOF of God’s existence; if there were proof, there would be no place for faith! However, there is a lot of evidence. For starters, may I suggest an article I wrote on that very topic: [Evidence for God’s Existence](#).

I hope this helps!

Sue Bohlin
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

=

“What Is Carbon-14 Dating?”

What exactly is carbon 14 testing and what are its limitations? I will be explaining this to 7th graders.

Carbon 14 dating essentially tests how long something has been dead. In the atmosphere solar radiation transforms a predictable number of nitrogen atoms into radioactive carbon (carbon 14). Carbon 14 then becomes incorporated into carbon dioxide which is taken up by plants and used to produce sugars by photosynthesis. The carbon then moves up the food chain from herbivores to carnivores. Normal carbon is carbon 12. Therefore there is a constant ratio of carbon 12 to carbon 14 in the atmosphere and consequently in living things. There is a far greater abundance of carbon 12 than carbon 14 and the radiation is a very low level and is not hazardous in and of itself. When a creature or plant dies, the inflow of carbon 14 stops and decay begins. After 5,568 years half of the carbon 14 has reverted back to nitrogen. This is referred to as the half-life. Therefore, after every 5,000+ years, there is half-again the amount of carbon 14. Usually after 10 half-lives there is not sufficient carbon 14 left to measure. The limit of carbon 14 then is about 50,000 – 60,000 years.

This dating method is based on some crucial assumptions that are difficult to verify. First, it assumes that the rate of transformation of nitrogen to carbon 14 in the atmosphere is constant through time. It turns out that this has not been the case and scientists have found greater/lesser abundances of carbon 14 in times past yielding dates that are too young or too old respectively. Second, it assumes that there is no other source of carbon 14 in living things which has not been investigated very thoroughly.

Another complication has been recent reports that indicate that supposedly ancient sediments are producing trace amounts carbon 14 where there should be none at all. By ancient I mean

sediments that are traditionally dated as being millions of years old. (see www.icr.org/research and click on the article "Measurable C14 in Fossilized Organic Materials." Either the c14 dating method is worthless or these sediments are nowhere near as old as suspected.

Hope this helps.

Ray Bohlin
Probe Ministries

"Stop Wasting My Time About Life on Other Planets"

I have a comment on one of your recent broadcasts, [Are We Alone in the Universe?](#).

I listen to your broadcast because it is sandwiched between two of my favorite shows on Moody Radio. I just happen to hear it because I'm too involved in my work at the time to change the channel. I find the current discussion obnoxious and a waste of radio space. I also think you're setting yourselves up for more "see, Christians are just insecure, intellectually dishonest bigots who won't look at 'scientific' evidence that their beliefs are all wrong." In the event that evidence of life on Mars or in an asteroid, or any other source be discovered, or fabricated, you will look like idiots. If it isn't discovered anytime soon, people will argue that we simply haven't had enough time. What's the point? It all depends on what people WANT to believe.

Quite frankly, the discovery of life on other planets, or the converse for that matter, won't prove anything about God.

"Possibility" is a function of probability times occurrences. The Universe is a big place. So any good evolutionist worth his salt will argue "maybe the chances are infinitesimal that life could have arisen by chance, but look how big the Universe is." And, "See? The fact that life is so rare and hard to find only disproves the need for a designer, since we can't find it anywhere else."

No one is going to get saved by the "facts." The point is whether or not the Holy Spirit has access to someone's life and whether they chose to accept Christ or arrogantly say "Well, I have to have proof, and I have to know it ALL ahead of time."

Please stop wasting my time with this convoluted hogwash. It's not edifying. I'm sure the person who put the show together worked very hard on it, but it just doesn't add anything to my day or give me witnessing tools. This discussion is Medieval. IF there is life on other planets, God put it there, He knows it's there, He has some plan for it, and if their Genesis doesn't have a happier start, He probably went there, died, and rose again for their salvation. IF NOT, the fact that we are alone is part of God's plan too. My Christianity is not threatened by the prospect either way.

I am sorry you do not find our programming useful or meaningful. Our program is meant to help Christians to make sense out of the many-faceted assault on our faith in the midst of this post-Christian society. I assure you that many of our listeners find our programming stimulating and informative.

The purpose of the particular program you commented on was to help Christians see the underlying philosophical reasons behind our society's fascination with extraterrestrials. They really are afraid of being alone because they have excluded God from the equation and if we are all there is, to them this is terrifying! I use this to engender a sense of compassion

for the lost rather than condemning their beliefs. We need to see the fear behind their assertions to give us understanding and to truly be all things to all people so some may be saved. It is difficult to witness to a culture we don't understand.

I am sorry if this intent was not clear to you, or even if it is, you still think it a waste of time. Hopefully some of our other programs can be of more redeeming value to you.

Additional comments follow.

Not sure I'm writing to the correct address, but I have a comment on one of your recent broadcasts. The series concerns whether or not there is/may be intelligent life in other parts of the universe or whether we are "all alone." I listen to your broadcast because it is sandwiched between two of my favorite shows on Moody Radio. I just happen to hear it because I'm too involved in my work at the time to change the channel. I find the current discussion obnoxious and a waste of radio space. I also think your setting yourselves up for more "see, Christians are just insecure, intellectually dishonest bigots who won't look at 'scientific' evidence that their beliefs are all wrong." In the event that evidence of life on Mars or in an asteroid, or any other source be discovered, or fabricated, you will look like idiots. If it isn't discovered anytime soon, people will argue that we simply haven't had enough time. What's the point? It all depends on what people WANT to believe.

But why do they want to believe it is the important question. I was trying to explore this very question to help Christians understand the culture around us to be more effective witnesses.

Quite frankly, the discovery of life on other planets, or the converse for that matter, won't prove anything about God.

Agreed. But many scientists today look for life elsewhere to bolster their confidence in evolution and therefore push God even farther away.

"Possibility" is a function of probability times occurrences. The Universe is a big place. So any good evolutionist worth his salt will argue "maybe the chances are infinitesimal that life could have arisen by chance, but look how big the Universe is." And "See? The fact that life is so rare and hard to find only disproves the need for a designer, since we can't find it anywhere else."

Hardly. Evolutionists currently believe that life is inevitable and must find evidence of extraterrestrials life to confirm this belief. So evidence of its rarity IS evidence for design and evidence against chance.

No one is going to get saved by the "facts."

Agreed, but we can remove the barriers people erect so they can get a clearer look at the cross. Paul felt the "facts" of the resurrection quite important in 1 Cor. 15:1-19. He felt the facts of Creation quite important in Rom. 1:18-20. Facts don't save anyone but they do point the way to our need of a Savior. Many are looking for that Savior in the form of an ET. We can only help them by pointing out that this hope is an illusion.

The point is whether or not the Holy Spirit has access to someone's life and whether they chose to accept Christ or arrogantly say "Well, I have to have proof, and I have to know it ALL ahead of time."

No one knows it all ahead of time, but to a few people, indeed, I would say most, a few facts are needed to help draw them to faith. Faith is not blind. Everybody has some kind of faith. The issue is whether our faith is placed in something

we can rely on. Is the object of our faith true and reliable?

Please stop wasting my time with this convoluted hogwash. It's not edifying. I'm sure the person who put the show together worked very hard on it, but it just doesn't add anything to my day or give me witnessing tools. This discussion is Medieval.

All I can and will say is that I'm sorry you feel that way, but that we at Probe and most of our other listeners disagree.

IF there is life on other planets, God put it there, He knows it's there, He has some plan for it, and if their Genesis doesn't have a happier start, He probably went there, died, and rose again for their salvation. IF NOT, the fact that we are alone is part of God's plan too. My Christianity is not threatened by the prospect either way.

Agreed. But it's not your Christianity I am worried about, but the millions of misinformed fearful souls who are putting their hope and trust in extraterrestrials.

Respectfully,

Ray Bohlin, PhD

“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

**“I’m Interested in Grad
School in Intelligent Design”**

Dear Dr. Bohlin,

Thank you for your reply to my earlier letter, and yes I am interested in graduate school. I am under a little pressure though, as I am an older student with a wife and two sons. At this time it seems I will have to pursue some type of professional or graduate school in order to use my degree to any extent. I am still trying to decide what I want to be when I "grow up." I am tired of school simply because of the continual attacks on my beliefs. I would very much like to pursue further schooling if I could find a school and professors that are a little more user friendly. I would like to hear more of what you have to say along the lines of Intelligent Design professors. As a matter of fact, I can't wait. I was ready to drop out this week, but between your letter and my counselor's advice I have managed to hit my last two exams in full stride and I feel renewed about school. Thank you again and I hope that you have more good input for me.

I'm glad to hear that a few things came together to encourage you. If nothing else the list of professors below could better help direct you and fashion your goals. They may also have other suggestions for you.

Here are a few names to research for possible graduate school.

- *Mike Behe is professor of Biological Sciences at Lehigh University.*
- *Scott Minnich is associate professor of microbiology at the University of Idaho.*
- *Dean Kenyon is professor of biology at San Francisco State University.*
- *Paul Chien is professor and Chairman of the Biology department at the University of San Francisco.*

Behe, Minnich, Kenyon, and Chien are fellows of the Discovery Institute's Center for the Renewal of Science and Culture. You can find a short bio for each at

www.discovery.org/crsc/fellows/index.html.

I don't know anything about these guys need or desire for graduate students but I do know that Minnich has an active research program utilizing graduate students. Behe has cut back some of his research to focus on promoting intelligent design, so I'm not sure where he is at in being able to support graduate students. If you haven't read Behe's *Darwin's Black Box* you should do so ASAP.

I also understand your plight as an older graduate student with a wife and two kids. I started my Ph.D. program in 1983 when my boys were 1 and 3. It is difficult and you can't devote the lab time that other single students can but because I knew this was where God wanted me and my wife was fully supportive, God supplied our needs. I also made sure my boys received scheduled time with Dad that I protected almost at all costs. For years I took them out individually for breakfast on Saturday mornings which they loved. We rarely had "important" conversations but time alone with Dad at least every other week helped let them know that they were important to me. In retrospect I could have scheduled a little more time. I also scheduled my nights in the lab. Everybody knew Dad wasn't home on Tuesday and Thursday evenings. This helped keep me from disappointing them with random evenings away from home. I could schedule long experiments on those days and keep disappointments to a minimum. I also stayed away from the lab on Sundays except for occasional quick trips for maintenance of ongoing experiments. It's tough but can be done. But total support from your wife is essential. The long term demands on your time put a big strain on her and she needs to believe this is what God wants for you and your family.

Respectfully,

Ray Bohlin
Probe Ministries

“How Do I Approach a Carl Sagan Fan?”

Dear Dr. Bohlin,

I'm a pastor that is meeting with a young man who is planning to marry a young lady that is a member of our church. This young man, who is in his twenties, said that he believed in God—much like Carl Sagan. He seems to have a postmodern view of truth, but my question is, how can I read up on the spiritual views of Sagan? Do you know any websites or critiques on Sagan? I read your article “[Contact: A Eulogy to Carl Sagan](#)”—what would be the best approach to this young man?

It sounds like you have a rather sticky situation on your hands. Believing in God “like Carl Sagan” means little more than a deistic belief in some kind of super intelligence that helped order our universe but has no personal involvement with it or you and me. Sagan had a profound dislike for any theistic belief, particularly Christianity. His novel *Contact* brings this out much more strongly than the movie adaptation.

My concern would be that the young man is saying some things to help smooth things out with his bride-to-be, but is potentially hostile to her beliefs. Sagan basically believed Jesus was a good man but not God (page 167-173 of the Pocket edition of the novel *Contact*. The character of Ellie Arroway is basically Sagan personified, so these seven pages will give some insight into his thinking. It's about twelve pages into Chapter 10 if you find a different edition). My fear is that he would eventually ridicule or otherwise try to undermine her faith with science and skepticism.

I would ask him if Sagan was a hero of his and do his ideas

about God and religion coincide with Sagan's. If yes, does he hold the same disdain for Christianity and clergy (yourself) as Sagan did? This will perhaps force him to come a little cleaner and bring a little more understanding to the situation. He should be concerned with devaluing the belief system of the person he says he loves. If your intuition is correct about his taking a rather post-modern view, he should be sensitive to this. After all, truth is impossible to know so if it's true for her great, what's it to him?

Would he ever come to church with her?

What about children, how should they be raised? As skeptics or in the church?

I agree with your suspicion I sensed from your message. These kids need some hard questions asked of them. What are her thoughts? Does she think she can convert him? This rarely works out, but if this is her intent, is she ready to follow the prescription in 1 Pet. 3:1-2? Most women find this difficult even with a saved husband who has wandered away.

There is a potentially fatal divergence of basic world views which will affect nearly all aspects of their future lives. Maybe they just need to wait a little longer and give each other some time to explore these differences before committing to marriage.

Well, I have said a lot for someone who has little knowledge of the individuals involved.

Hope this helps.

Let me know if I can be of further assistance.

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

“What About the Water Vapor Canopy Hypothesis?”

You say that the literal translation makes the most sense, yet you say that there are things about it that make no sense. Well here is my suggestion. I am a literalist... I believe what the Bible says about creation – literal. 6 days. But read your Bible about the creation of the “sky.” God separated the waters from the waters. It doesn’t say that he created mists, or clouds from the waters to make up the sky... it says he separated the water from the water. In fact, wind, rain, and rainbows are not mentioned anywhere in the Bible until the flood... so what if the atmosphere was different in the original times? What if there was literally a solid water “layer” above the sky... this would create an atmosphere like a green-house effect on earth... therefore totally changing the oxygen and most importantly CARBON levels in the air... which would totally ruin all “carbon-dating” tests prior to the flood... which would then in effect also explain why people lived longer prior to the flood. Not only were we closer to perfection then... but there was probably better levels of oxygen in the air... and oxygen is known to have healing properties (especially O₃). Just a thought to consider...

Thank you for reading and writing.

I am very familiar with the Canopy Hypothesis you describe. I even accepted and taught it for several years. While definitely still around, it has fallen into disfavor in many creationist circles for two primary reasons.

The first is biblical. The description of Day Two in Genesis describes the separation of the waters and that God placed an expanse in the midst of the waters. This has usually been interpreted as the atmosphere. However, on Day Four, God places the sun, moon, and stars in this same expanse.

The second involves the inherent instability of any water vapor canopy above the earth's atmosphere. So far calculations show that it would require a miracle of constant intervention to keep it in place until the flood. There is also a difficult problem with the condensation of the canopy into water droplets to fall as rain for forty days and nights. This would release a tremendous amount of heat that would cause additional problems.

Hope this helps.

Respectfully,

Ray Bohlin