

“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.

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Only Science Addresses Reality?

Dr. Ray Bohlin comments on the hubris of Drs. Coyne and Cobb in their op-ed in Nature, in which they claim that only science addresses reality. Religion, they say, must be silenced. This alarming sentiment has already met reality in California.

Would it surprise you to hear that churches may eventually be prohibited from teaching any ideas contrary to Darwinian evolution? “No way!” you say. “The Constitution guarantees freedom of speech! The first amendment guarantees that Congress can pass no law restricting or promoting any religious exercise!”

Well, yes the Constitution does that, but be patient with me and I’ll show why the answer to the opening question could be “yes.”

In the current issue of *Nature*, probably the most prestigious science journal in the world, a letter to the editor appeared in the August 28, 2008 issue on page 1049. Two well-known evolutionary biologists, University of Chicago’s Jerry Coyne and University of Manchester’s Matthew Cobb wrote the letter to complain about a previous editorial expressing hope that the Templeton Foundation, which funds research into the relationship between science and religion, might bring about some helpful resolutions.

Coyne and Cobb couldn’t disagree more:

We were perplexed by your Editorial on the work of the Templeton Foundation.... Surely science is about material

explanations of the world—explanations that can inspire those spooky feelings of awe, wonder and reverence in the hyper-evolved human brain.

Religion, on the other hand, is about humans thinking that awe, wonder and reverence are the clue to understanding a God-built Universe.... ***There is a fundamental conflict here, one that can never be reconciled until all religions cease making claims about the nature of reality*** (emphasis added).

The scientific study of religion is indeed full of big questions that need to be addressed, such as why belief in religion is negatively correlated with an acceptance of evolution. One could consider psychological studies of why humans are superstitious and believe impossible things....

...You suggest that science may bring about “advances in theological thinking.” In reality, the only contribution that science can make to the ideas of religion is atheism (emphasis added).

Coyne and Cobb clearly state that religion has no authority to make claims about reality. If science is allowed to persist in this audacious distortion of religion and science, then any kind of teaching that is critical of any aspect of naturalistic evolution would be considered a negative influence on society as a whole. Religion is seen as crossing its constitutionally protected borders.

Biology teachers constantly complain now that what they teach about evolution is contradicted by the churches their students attend. This is obviously quite frustrating. If science is the only branch of knowledge that is allowed to make claims about reality, then religious teachings should not be allowed to interfere.

You may still be thinking that I’m taking this too far. Consider though that the California state university system already refuses to give credit for high school science courses

that include anything beyond naturalistic evolution. Many Christian private school graduates in California are finding that their science courses are not accepted at state universities. Essentially that means you don't get in unless you can make those credits up by taking junior college science courses that meet the evolution-only standard.

State governments may easily decide that they need to help these religious school graduates out by requiring that these religious schools not be allowed to teach religious material that contradicts state-mandated standards. It's a violation of the separation of church and state, after all!

If you ever questioned the importance of the evolution/Intelligent Design controversy, I hope you see the point now. Unless we can convince a sufficient minority in the science community that science is limited and the subject of origins is one of those limitations, we may not be able to legally teach students anything about creation or Intelligent Design.

While Coyne and Cobb certainly don't represent all scientists, they are not alone! Trust me. I watched a video recently of Jerry Coyne making a presentation at a scientific meeting where he basically made the very same claim. NO one objected. He was applauded enthusiastically. Watch it for yourself [here](#). While the whole lecture is worth watching, the last eight minutes when he presents a slide with just the word "Religion" is the key segment.

Coyne and others are trying to establish what Nancy Pearcey called the fact/value split in her book *Total Truth*. To Coyne science is based on fact. Only material explanations are allowed in science since religion is based on personal values and have nothing to do with facts. Therefore if you try to inject your personal values (Creation, Intelligent Design) into the world of facts (science) this is a violation of the rules of science. It's not allowed.

According to Jerry Coyne speaking in the video, the only way to increase the acceptance of evolution is to reduce or eliminate the influence of religion. The two are incompatible! Coyne is unable to see that he also has a worldview, materialism, which influences how he interprets the data of science. He erroneously believes he is being objective about his interpretation.

This is a cultural battle as well as a scientific battle. For more information and resources from Probe to help you educate yourself and others about evolution and Intelligent Design see browse our articles at www.probe.org. If we don't "tear down strongholds" like this, we may find ourselves behind impenetrable, silent walls.

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"Can I Get HIV From Washing Machines?"

Hello Mr. Ray,

I would like to get some advice from you regarding HIV transmission.

Because of the nature of my job, I have to always travel from one place to another. During this I have to stay in the hotel for many days. For washing my clothes, I often use the washing machines which are kept in the hotel for washing clothes. These machines are used by many people for washing clothes. Do I need to take any special care when using these machines for washing my clothes, as these machines are used by several people; some of them might be infected with the disease or the

clothes which are brought for washing might be contaminated with body fluids of the infected person.

Please advise.

There is no danger to you in using these washing machines. Infection with HIV requires direct contact with body fluids contaminated with the virus. HIV is actually a very fragile virus outside the body so even if someone were to have washed clothes containing blood or semen from an infected individual in the machine you are about to use, the virus will have been disabled long before by exposure to air, drying and the chemicals in the detergent. Infection also requires exposure to a large number of virus particles. So even if, by the remotest of chance, some virus particles survived all this (and the heat of the dryer), there simply would not be enough of them to cause infection by the time you put your clothes on or even handled them in the laundry facility.

I am confident that you have nothing to be afraid of.

Respectfully,

Ray Bohlin, Ph.D.
Probe Ministries

“What Does the Bible Say About Masturbation?”

Dr. Bohlin:

I have just read [your article on “Sexual Purity”](#) & found it to be an excellent resource. You have really hit this subject on the head.

Can you please address the following question?

I am a Christian male, age 36. My girlfriend, maybe soon to be fiancée is also a Christian. We do not cohabit, nor do we have sexual relations, albeit we are not virgins.

The secular world would have us believe that masturbation is a healthy practice. Research has shown that men think about sex more often than women. Obviously men and women are wired differently.

I catch myself entertaining sexual thoughts and I feel a tremendous amount of guilt. What does the Bible say about masturbation & entertaining sexual thoughts? I know that we can commit fornication in our hearts by our lustful thoughts & desires.

You raise a difficult and even controversial topic. Christians have disagreed on the issue of masturbation. Some allow it and some do not. Here is my take. The Bible is clear that any sexual activity outside of marriage is sin. The biblical term "fornication" (sexual immorality) simply refers to any sexual activity outside of marriage. Jesus also clearly indicated, as you mentioned, that we can commit adultery in our hearts without any physical activity involved. Part of our sanctification process is to be transformed from being self-centered to being other-centered. With this background, consider these realities. Masturbation is sexual activity outside of marriage. Most if not all masturbation is accompanied by sexual thoughts to accentuate the experience. Masturbation is essentially self-centered, seeking to fulfill one's own needs by oneself. There is no specific Biblical admonition to refrain from masturbation. However, based on the review above, it is difficult to find any justification for it either.

This is not to say, of course, that avoidance of masturbation in young men is easy. We praise God for His finished work on

the cross that allows for forgiveness of past, present, and future sin, even besetting sins.

Respectfully,

Dr. Ray Bohlin
Probe Ministries

“Is Masturbation OK When My Wife and I Are Apart?”

This is an embarrassing question but here goes.....

I am a soldier in the US Army and a born again Christian. Many times the army sends us away from home for long periods and we are separated from our families. I have read your responses to others concerning masturbation but my dilemma is this. I have done this but I do not use porn and I am thinking of my wife when I do it. My wife and I have a very healthy sexual relationship and when together we enjoy each other just as the Bible allows!!! Do you stand firm on your direction for those of us who are married and do this?? I have prayed and have not felt the same conviction as I have on other issues I have taken to the Lord. I know this doesn't mean that okays it but that is usually the way he answers my issues.

Thanks for writing and your encouragement. You bring up a very important issue, masturbation within marriage.

Since you have read my other responses let me remind you of something I said within one of those responses.

“Masturbation is essentially self-centered, seeking to fulfill one's own needs by oneself. ”

I'm afraid this still holds in your case. I fully recognize that the long separations are difficult. But by relieving your sexual tension on your own (even though you use your wife in your mental image) you are robbing your wife of her proper role and responsibility in your sexual relationship. For example, it is well recognized that the longer the time interval between sexual experiences, the greater the enjoyment and the more powerful the experience when finally consummated. By masturbating during separation you ultimately dampen the reunion for both you and your wife. Ask yourself, biblically, who should be the sole recipient of your sexual energies? I think you would answer that it should be your wife alone.

Masturbation also creates conflicting signals for your mind and body. A high frequency of masturbation creates a pattern in your mind and body on how it is best satisfied. And this will be apart from your wife. You may also fantasize situations with your wife that she may be unable to fulfill in person. This can also create a situation where your actual experiences together may not be able to measure up to what you have created in your mind. This can easily erect a barrier in your mind for when you are together.

Also this is still a sexual experience outside of marriage as God intended, which is fornication.

I challenge you to refrain from masturbation during your next separation with a willing attitude of submission and purity and see if it doesn't make a significant and "very positive" difference in the intensity of your reunion.

Respectfully,

Ray Bohlin
Probe Ministries

“Is Masturbation A Sin?”

This has plagued me for a long time. Is masturbation a sin, and if so how serious is it? I have been doing good for a while but I am starting to slip again. I need help. If you could get back to me I would be thankful and I am ashamed of this.

You raise an issue that affects more young men (and a growing number of women) than you probably realize. When young men are unmarried their sexual drive seeks satisfaction, so you are certainly not alone in this struggle. Most Christians will agree that masturbation is sin for two very important reasons.

First, God has defined sex for within marriage only. The numerous Old Testament prohibitions on fornication or sexual immorality refer to any sexual experience outside of marriage. This would included self-inflicted sexual pleasure.

Second, most masturbation takes place with pornography to look at either actually or in your mind through fantasy. Since Jesus condemned not only the act of adultery but lusting in our mind, this is clearly included.

You must also keep in mind the addictive nature of nearly all sexual sin including pornography. It eventually becomes a form of idolatry. We worship our sensual pleasure over Jesus.

Jesus' response to Peter's question as to how many times he must forgive (70 x 7) is meant to assure us of God's infinite capacity to forgive even habitual sin. Masturbation can only be conquered in the power of the Holy Spirit. If you follow Philippians 4:8 when tempted, you will find that the thoughts vanish or they remain only at your desire. It must become a question of Lordship: Jesus or you. The masturbation becomes

only a symptom of a deeper need for intimacy with Christ. Habitual sin does not lead to questions of salvation but of Lordship.

I encourage you to seek first His kingdom and His righteousness and everything else will follow. This is not to say it will be easy or quick. True discipleship is costly and our personal secret kingdoms must be rooted out one by one. But Jesus said I will never leave you nor forsake you. He meant it.

Also, may I suggest two websites for help with sexual addiction and pornography addiction? The first is Setting Captives Free at www.settingcaptivesfree.com, and the second is Blazing Grace at www.blazinggrace.org.

Dr. Ray Bohlin
Probe Ministries

“You Are Degrading Teenagers in Your ‘Safe Sex’ Article”

I just quickly glanced over your article about STDs and pregnancy ([Safe Sex and the Facts](#)). I was extremely set back by the hypocritical phrasing, “immature teenagers.” You may want to take a long, deep thought about how people could judge you at this time in your life. Just because teenagers may lack experience, “immaturity” would not be the word to use especially used in your degrading sense.

I think if you had read the article more carefully, you would have seen that I give teenagers a lot of credit where I know credit is due, as in this paragraph:

“Current condom-based sex-education programs basically teach teenagers that they cannot control their sexual desires, and that they must use condoms to protect themselves. It is not a big leap from teenagers being unable to control their sexual desires to being unable to control their hate, greed, anger, and prejudice. This is not the right message for our teenagers! Teenagers are willing to discipline themselves for things they want and desire and are convinced are beneficial. Girls get up early for drill team practice. Boys train in the off-season with weights to get stronger for athletic competition. Our teens can also be disciplined in their sexual lives if they have the right information to make logical choices. Saving sex for marriage is the common sense solution. In fact, it is the only solution. We don’t hesitate to tell our kids not to use drugs, and most don’t. We tell our kids it’s unhealthy to smoke, and most do not. We tell our kids not to use marijuana, and most do not.”

This paragraph puts my comment in context:

“Condoms are inherently untrustworthy. The FDA allows one in 250 to be defective. Condoms are often stored and shipped at unsafe temperatures which weakens the integrity of the latex rubber causing breaks and ruptures. Condoms will break 8% of the time and slip off 7% of the time. There are just so many pitfalls in condom use that you just can’t expect immature teenagers to use them properly. And even if they do, they are still at risk.”

The comment you found disgusting is not meant in a derogatory way, it is simply a realistic observation. My wife and I have raised two sons, now ages 22 and 24. They are certainly more mature then when they were 13 and 15. Even they would acknowledge that. Teenagers are immature in many ways and that is natural. They haven’t had many life experiences, especially sexually, to allow them to act as mature adults and make wise

decisions. That was my point. From the statistics cited about teen sexual behavior, the immaturity shows. I also certainly understand that some teenagers are more mature than others. Not everyone fits a generalization. That is understood.

I'm sorry you interpreted the phrase as being degrading. That was not my intention and I see no reason to change it.

Respectfully,

Ray 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

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“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