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VOLUME 44 NUMBER 6
JUNE 2015

Published by

INSTITUTE FOR CREATION RESEARCH

P. O. Box 59029 Dallas, TX 75229 214.615.8300 www.icr.org

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Fathers Who Change the World

once heard my pastor make a startling claim. After decades of counseling church members, he concluded that dads hold the key to their children's spiritual lives. He said the best way to raise an agnostic or atheist was for the father to pray before meals, practice daily quiet times with an open Bible, tithe at the first of every pay period, go to church every Sunday, and then be harsh at home. The pastor said growing up in a home with an unkind dad who claimed to be a follower of Christ motivated children to run from the church and, ultimately, reject God.



It makes sense. If we say we follow the Lord and then treat others with unloving behavior—a child might interpret those actions as an extension of God's character. The inconsistency could certainly be confusing enough to cause a child to question our heavenly Father's goodness.

But we can't forget the grace of God. We've all let an occasional unkind word slip out or done something that we regret. Our kids aren't automatically doomed because we can't live up to high and holy expectations. Fortunately, our kids see the big picture. How do we usually behave toward them? Do we communicate that we truly care about them? Do they hear us apologize for bad behavior and then witness us making appropriate changes in the way we act? Do they believe that we want to please our Lord? Do they see us struggle well?

Some of us had the privilege of growing up with a godly father, and we can be eternally grateful for the way he pointed us to the Lord through his caring words and actions. When we witnessed his Bible studies and heard his prayers, it was consistent with his loving behavior toward his family. His way of living validated his declaration of faith. We believed his faith was real because we witnessed it firsthand. He even showed us what God is like.

By living in obedience to the Word at home as well as in public forums, fathers can impact the world for generations to come. Children may be the most important disciples a father mentors. His children may change the world for good, all because he lived what he said he believed.

As we celebrate Father's Day this month, Dr. Henry Morris III's article "Rise up, O Men of God!" reminds godly men to live boldly. Men of God stand out-they're different from the crowd, and they stand up to the enemy. This task demands their whole being, their "heart and mind and soul and strength." They accept difficult challenges to oppose destructive teachings. Faithful men are willing to "actively engage the enemy and seek to stop the impact" (page 7).

True men of God demonstrate obedience to God's Word, boldly offering truth and grace to others, beginning with those in their own households. As you honor the men in your lives your fathers, grandfathers, fathers-in-law—remember to show gratitude to those who live the truth before you with boldness, integrity, and kindness. Daily lift them up in prayer and offer grace to them as they struggle well in their walk of faith.

Jayme Durant

Jayme Durant

EXECUTIVE EDITOR

RISEUP, CONTROLL OF GODE

Who will rise up for me against the evildoers?
Who will stand up for me against the workers of iniquity?

(Psalm 94:16)

HENRY M. MORRIS III, D. MIN.

ver a century ago, William P. Merrill wrote the words to the challenging hymn "Rise Up, O Men of God!" Back then, the modernist movement within churches and Christian colleges was capitulating to Darwinian evolutionary philosophy, rejecting the clear creation message of Genesis, and sweeping the doctrine of inerrancy into the garbage bag of "textual criticism." But even as the fundamentalist movement fought back with evangelistic fervor, much ground was lost in Western Christianity as the gap theory tried to solve

the scientific issues with an imaginary solution of a pre-Adamic age that supposedly occurred between Genesis 1:1 and 1:2. The scoffers Peter warned about in 2 Peter 3:3-4 largely had free reign until the middle of the 20th century, when ICR's founder and a handful of others rose up and led a resurging challenge to those who "worshiped and served the creature rather than the Creator" (Romans 1:25).

Over the past 20 years, however, a growing tolerance for compromise with the teachings of Scripture has spread among Christians—so much so that no less a

media personality than Bill O'Reilly challenged the Christian community to stand up for moral and ethical behavior! Where has the courage of godly men gone? What happened to holy boldness? Have we grown so accustomed to intellectual debate that we cannot confront those who scoff at the Word of God? Are we so enamored with the love of God that we have forgotten God hates sin and "will not at all acquit the wicked" (Nahum 1:3)? Have we forgotten that He placed clear warnings throughout Scripture? We are accountable to the whole Word of God—not just our favorite verses.

Yes, God does love the world, and we are the ambassadors who are to plead with the sinner "on Christ's behalf, [to] be reconciled to God" (2 Corinthians 5:20). The gospel is "the power of God to salvation" (Ro-

mans 1:16), and we are never to neglect the opportunity to preach, teach, speak, share, and otherwise declare the glorious news "that Christ died for our sins according to the Scriptures, and that He was buried, and that He rose again the third day according to the Scriptures" (1 Corinthians 15:3-4). But we must never forget that while those who trust in Christ receive His gift of eternal life, those who do "not believe the Son shall not see life, but the wrath of God abides on him" (John 3:36).

Surely we must remain aware that the broad way leads to destruction and many follow that road straight into the pit of hell (Matthew 7:13-14). Those who "suppress the truth in unrighteousness" (Romans 1:18) are becoming more and more articulate and defiant and are gaining open ac-

cess to our universities, politics, and media at an alarming rate. Suppressing the truth is evil no matter how eloquent the speaker. Edmund Burke has been quoted as noting: "The only thing necessary for the triumph of evil is for good men to do nothing."²

Rise up, O men of God! Have done with lesser things. Give heart and mind and soul and strength To serve the King of kings.

There is a time to confront evil men who place their human judgments above the Word of God. Fallen men do not have the right to judge the Word and tell others what it means to them; human opinions and expectations are not revelations from God.

Peter warned that there would be "false teachers among you, who will secretly bring in destructive heresies, even denying



the Lord who bought them" (2 Peter 2:1). Paul insisted that the last days would encourage a litany of godless behavior of those who would maintain "a form of godliness" but deny "its power. And from such people turn away!" (2 Timothy 3:5). Jesus insisted that we should not give "what is holy to the dogs" or throw the "pearls" of God's words to "swine." The reality is that those dogs and swine would only trample the precious revelation of God "under their feet" and then "turn and tear you in pieces" (Matthew 7:6).

Godless men hate God, and that hatred spews out in hatred for God's people. Some indeed are "enemies of the cross of Christ" (Philippians 3:18). There are those who deserve the "perfect hatred" of a holy heart that loves the words of God and loves the message of the Kingdom:

Do I not hate them, O LORD, who hate You? And do I not loathe those who rise up against You? I hate them with perfect hatred; I count them my enemies. (Psalm 139:21-22)

Those who love the Kingdom do not walk "in the counsel of the ungodly" or stand around "in the path of sinners" or sit down with "the scornful" (Psalm 1:1). But withdrawal from the lifestyle of the godless is not enough! We must actively engage the enemy and seek to stop the impact.

Rise up, O men of God! The kingdom tarries long. Bring in the day of brotherhood And end the night of wrong.

Engaging the enemies of God is not a simple task—nor is it a private war. One of Paul's great enemies was Alexander the coppersmith. He did "much harm" to Paul and "greatly resisted" the words of the apostle (2 Timothy 4:14-15). Nehemiah endured a constant and ever-increasing effort on the part of Sanballat and Tobiah to undermine, discourage, and even murder him (Nehemiah 2–6). There are many such examples in Scripture. Opposition to the cause of Christ is an absolute given! Please recall the warning of the Lord Jesus:

"If the world hates you, you know that

it hated Me before it hated you. If you were of the world, the world would love its own. Yet because you are not of the world, but I chose you out of the world, therefore the world hates you. Remember the world that I said to you, 'A servant is not greater than his master.' If they persecuted Me, they will also persecute you. If they kept My word, they will keep yours also. But all these things they will do to you for My name's sake, because they do not know Him who sent Me." (John 15:18-21)

But this should never be taken as a fearful thought! While the enemy may well seem to have the upper hand from time to time and through various seasons in history, his winning is only just that—a brief time and a season that ends when he ends! "I have seen the wicked in great power, and spreading himself like a native green tree. Yet he passed away, and behold, he was no more; indeed I sought him, but he could not be found" (Psalm 37:35-36). Our tasks and our responsibilities may be exercised during time and history, but the great Church of the Lord Jesus is an eternal entity, the "city of the living God, the heavenly Jerusalem, to an innumerable company of angels, to the general assembly and church of the firstborn who are registered in heaven" (Hebrews 12:22-23).

Rise up, O men of God! The church for you doth wait, Her strength unequal to her task; Rise up and make her great!

Goliath of Gath was that huge Philistine who terrified the armies of Israel and disdained little David. Goliath only saw the ruddy shepherd teenager and the cringing army of Israel. David said to him:

"You come to me with a sword, with a spear, and with a javelin. But I come to you in the name of the LORD of hosts, the God of the armies of Israel, whom you have defied. This day the LORD will deliver you into my hand, and I will strike you and take your head from you. And this day I will give the carcasses of the camp of the Philistines to the birds of the air and the wild beasts of the earth, that all the earth may know that

there is a God in Israel. Then all this assembly shall know that the LORD does not save with sword and spear; for the battle is the LORD's, and He will give you into our hands." (1 Samuel 17:45-47)

Lift high the cross of Christ! Tread where His feet have trod. As brothers of the Son of Man, Rise up, O men of God!

The boldness necessary to confront the many enemies of God and resist their widely varied efforts to undermine and defy the work of Christ does not lie in the human strength of any of us. "For though we walk in the flesh, we do not war according to the flesh" (2 Corinthians 10:3). The objective of this spiritual battle (Ephesians 6:12-18) is not to destroy the human instruments of the great Adversary but rather to bring their "thoughts" captive!

For the weapons of our warfare are not carnal but mighty in God for pulling down strongholds, casting down arguments and every high thing that exalts itself against the knowledge of God, bringing every thought into captivity to the obedience of Christ. (2 Corinthians 10:4-5)

The battle we fight is an intellectual one (2 Corinthians 11:3), just as the transformation we must make to our lifestyle starts in our minds (Romans 12:1-2). If we are to capture "every thought" as we fight against "principalities, against powers, against the rulers of the darkness of this age, against spiritual hosts of wickedness in the heavenly places" (Ephesians 6:12), then we must "rise up" in the confidence that "[we] are of God, little children, and have overcome them, because He who is in you is greater than he who is in the world" (1 John 4:4).

References

 William Pierson Merrill (1867–1954), author of numerous books and hymns, was a graduate of Rutgers College and Union Theological Seminary who pastored Presbyterian churches in Philadelphia, Chicago, and New York City. He wrote the verses to "Rise Up, O Men of God" while on a

steamship, when, as he later wrote, "suddenly this hymn came up, almost without conscious thought or effort"

2. Edmund Burke (1729–1797) was a British statesman and influential political thinker.

Dr. Morris is Chief Executive Officer of the Institute for Creation Research.



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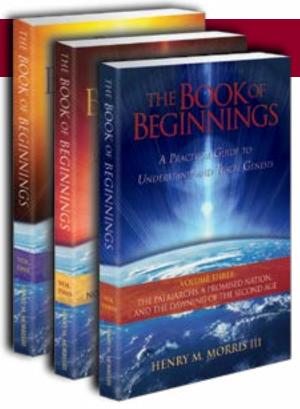
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BioOrigins Project Update

Purpose, Progress, and Promise Part 7

or the past several years, the Institute for Creation Research has been seeking answers to the major questions of creation biology. This series' previous installments chronicled the purpose and scope of ICR's life sciences research.¹ This month's article lays out the promise our current studies hold.

Despite steady and encouraging headway, the extent of the remaining research questions is still vast. *How, why, where*, and *when* species originated, as well as *why* they go extinct, persist as unresolved young-earth creation questions. Nevertheless, our recent results bode well for the prospect of discovering answers in the foreseeable future.

The question of *when* species originated is, perhaps, the most promising area of our current research. Past ICR research has already undermined the typical evolutionary answers to this question. In the RATE project, ICR scientists and their colleagues uncovered fatal flaws in the evolutionary methodology by which fossil layers are dated. Not only did these scientists remove this common objection to the young-earth timescale, they also found compelling evidence for an entirely new way of understanding radiometric data.²

Additional research in creationist paleontology and geology has revealed powerful evidence *for* the Flood and *against* Darwin's ideas. The majority of fossils are aquatic creatures, yet nearly all fossils are found on land—as if the land were once under water.³ In addition, the geologic layers in which these fossils reside span entire continents, indicating at least a continent-wide catastrophe as the cause.⁴ Finally, numerous examples of soft tissue in the fossils demonstrate that they could not have been buried millions of years ago.⁵ The Flood is the best explanation for much of the fossil record.

This fact makes the answer to the question of when species originated all the more challenging. Since the Flood spans only about a single year rather than the entire ~6,000 years of Earth's history, the fossil record is a poor timekeeper of species' origins post-creation and

post-Flood—it's a snapshot frozen in time.

This dearth of temporal evidence has spawned creative hypotheses on the timing of speciation. For example, some creationist researchers have suggested that species formed rapidly immediately after the Flood.⁶ Under this model, the burst of speciation quickly tapered off to the nearly invisible rate of speciation that appears to be the rule today. However, without a comprehensive dataset by which to test this model, other hypotheses are also worth considering. Speciation may have occurred in episodes—perhaps not in a single burst but in several bursts post-Flood. Alternatively, species may have formed at a constant rate in the ~4,350 years since the Flood.

The molecular clock that we highlighted in the last installment (part 6 in this series) may be a critical tool by which we can answer this question. If the rate at which certain DNA regions accumulated mistakes has been constant with time, then DNA differences act like a clock that ticks off the passage of time. By counting the number of DNA differences among species within a single kind, we might be able to chart when each of the modern species within a kind first originated. If this method works, it would open up all sorts of possibilities for future research. Stay tuned!

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Dr. Jeanson received his Ph.D. in cell and developmental biology from Harvard University.



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minutes).



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Heavy Metal Clocks, Pb-Pb Dating Model: Radioactive Dating

PART 8

...that we should no longer be children, tossed to and fro and carried about with every wind of doctrine, by the trickery of men, in the cunning craftiness of deceitful plotting. (Ephesians 4:14)

his final article of the series examines the common-lead method of radioactive dating, sometimes referred to as the *Pb-Pb method*. This method reaches the pinnacle of radioisotope dating methods in terms of complication and convolution. Since we do not want to be tossed to and fro by every teaching that cunning men put in front of us, let's carefully investigate this method's viability as a reliable clock for terrestrial and extraterrestrial rock formations.

Our investigation begins with the three "so called" isochron equations listed in a previous *Acts & Facts* article that are the foundation for the U-Pb and Th-Pb dating methods. Straightforward application of these equations generally yields discordant results; i.e., the dates obtained disagree by more than the stated measurement errors allow. In fact, Gunter Faure states that this must be taken as evidence that one or more of the dating method assumptions are not satisfied—essentially nullifying the method.

In an attempt to solve this problem, the isochron equation for 235 U is divided by the isochron equation for 238 U to yield an isochron equation that only involves Pb isotope concentrations on one side of the equation: 207 Ph 207 Ph 207 Ph

$$\frac{\frac{235PD}{204Pb} - \binom{236Pb}{204Pb}_{i}}{\frac{206Pb}{204Pb} - \binom{206Pb}{204Pb}_{i}} = \frac{235U}{238U} - \binom{e^{\lambda_{2}t} - 1}{e^{\lambda_{1}t} - 1}$$
Equation 1

The result is a transcendental equation that cannot be solved for t (time). Now we must make some adjustments to the equation in order for it to be practically useful—adjustments that involve dubious assumptions.

First, we assume, as a corollary to the closed system assumption, that ^{206}Pb and ^{207}Pb concentrations *only* change via decay of ^{238}U and ^{235}U respectively.

Second, we assume that the present-day isotope ratio of ²³⁵U/²³⁸U is constant in time even though they have different decay constants.

Third, we assume that a clever application of l'Hôpital's rule from elementary calculus will provide us with a reasonable primordial value for the radiogenic Pb ratio, i.e., (²⁰⁷Pb/²⁰⁶Pb),* that is good for all terrestrial and extraterrestrial rocks. We are then left with the following equation for dating rocks based solely on their radiogenic ²⁰⁷Pb and ²⁰⁶Pb concentrations:

$$\left(\frac{207Pb}{206Pb}\right)^* = \frac{1}{137.88} \left(\frac{e^{\lambda_2 l} - 1}{e^{\lambda_1 l} - 1}\right)$$
 Equation 2

Numerical solution of this equation, by projecting it forward in time from the present measurements of ²⁰⁷Pb, ²⁰⁶Pb, and ²³⁵U/²³⁸U= 1/137.88, yields a fourth estimate of a rock's age. However, a critical question arises: How do we know the initial concentrations of the radiogenic ²⁰⁷Pb and ²⁰⁶Pb concentrations in the rock we are dating?

At t=0, the equation for radiogenic Pb isotopes is indeterminate since it results in division by 0. Secular scientists get around this problem by a clever application of l'Hôpital's rule to estimate that the original ratio is $(^{207}\text{Pb}/^{206}\text{Pb})^* = 0.04604$. They then measure the present radiogenic lead ratio in a rock sample and interpolate the age of the sample from a table of age versus the radiogenic lead ratio constructed from Equation 2. This estimate is generally discordant with the first three isochron estimates. However, Faure believes that this last estimate is most likely also discordant due to loss of radiogenic Pb by thermal metamorphism or various other transport mechanisms. He further concludes that if this is the case, then the $(^{207}\text{Pb}/^{206}\text{Pb})^*$ date is the most reliable. If the loss of radiogenic Pb is possible, then shouldn't the gain of radiogenic Pb also be possible? It would not take much Pb gain to significantly skew the age to a much younger value.

Secular scientists attempt to understand these discordances by constructing U-Pb Concordia diagrams, such as in Figure 1. They reason that if one plots the ratio of radiogenically generated Pb to its corresponding U isotope on a two-dimensional plot, then one obtains the ideal curve describing the evolution of radiogenic Pb in closed-rock formations. They further reason that the loss of radiogenic Pb out of the rock formation causes discordant lines that intersect the ideal curve at the time of original crystallization and the time elapsed since complete closure to migration of any form, assuming all assumptions are rigorously satisfied. In this way, the Pb-Pb method

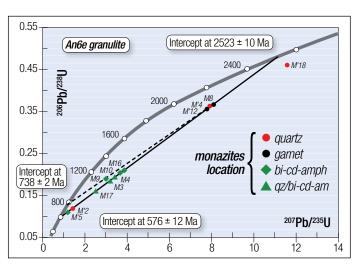


Figure 1. A Concordia plot of 12 monazite grains taken from an ultrahigh temperature (UHT) granulite at Andriamena, North-Central Madagascar.

attempts to deal with any loss of radiogenic Pb during the life of the rock formation.

The time points on the graph indicate values for the t (time) inserted into the equations for $(^{207}\text{Pb}/^{235}\text{U})^*$ and $(^{206}\text{Pb}/^{238}\text{U})^*$, i.e.:

$$\left(\frac{^{207}Pb}{^{235}U}\right)^* = \left(e^{\lambda t_2} - 1\right)$$

$$\left(\frac{^{206}Pb}{^{238}U}\right)^* = \left(e^{\lambda t_I} - 1\right)$$
 Equations 3 and 4

Note that one obtains two different closure times for the rock sample depending on which minerals are selected to define the concentration line underneath the Concordia arc. This is the basic Pb-Pb dating method for rock samples.

The ratios of U/Pb and Th/Pb must be quite large to maximize the sensitivity of these dating methods to radiogenically generated Pb. Thus, they can only be applied to certain minerals such as zircon and monazite crystals.⁵ In order for any of these methods to provide reasonable estimates of the age of a rock, all four basic assumptions made for radioisotope dating methods must be rigorously satisfied:

- (1) The rock/mineral must have remained closed to U, Th, Pb, and all intermediate daughters throughout its history.
- (2) The decay constants of U, Th, Pb, and all intermediate daughters must be accurately known and constant over the entire history of the rock.
- (3) The primordial concentrations of all U, Th, and Pb isotopes used in estimating the age are accurately known.
- (4) Enough time has elapsed for the formation of measurable amounts of radiogenic Pb.

For the Pb-Pb method, a further assumption is employed—that the isotopic composition of U has not been modified over the age of the rock. This is a demonstrably bad assumption, because we know from observation that ²³⁵U is significantly depleted with respect

to ²³⁸U in the Precambrian deposits at Oklo, Gabon, Africa, due to naturally induced neutron fission within the deposits. ⁶ Logic would also suggest that the isotopic composition of U would change over billions of years since ²³⁵U decays approximately seven times faster than ²³⁸U.

An even more mathematically complex model called the *Holmes-Houtermans Model* (hypothesis), using only Pb isotope concentrations, has been developed to date the age of the earth and extraterrestrial rocks.⁷ It makes five more assumptions, which are essentially corollaries to the closed system assumption, plus a sixth assumption unique to the Pb-Pb dating system. The sixth assumption assumes that at the time a mineral was formed in a rock, the Pb it contains was separated from the U and Th parents, and thus its isotope ratio has remained constant. How does one use radioisotope decay as a clock when it has been removed from the rock sample being dated? Secular scientists assume that the galena (lead sulfide) being dated is a certain age based on the traditional stratigraphic dating of the earth rock layers. The gold standard for dating has turned to lead (Pb)!

Examples abound of discordant and just plain wrong dates obtained with these gold-standard dating methods. Rock samples from New Zealand's Mt. Ngauruhoe yielded a Pb-Pb isochron age of $3.908 \pm 0.390 \times 10^9$ yrs. for samples known to be ≤ 60 yrs. old. Somerset Dam layered mafic intrusion rocks gave a Pb-Pb isochron age of $1.425 \pm 1.000 \times 10^9$ years for samples having a conventional age of $0.216 \pm 0.004 \times 10^9$ years.⁸ Why would anyone accept them as scientific fact when they aren't based on reasonable assumptions and don't faithfully reproduce empirical data?

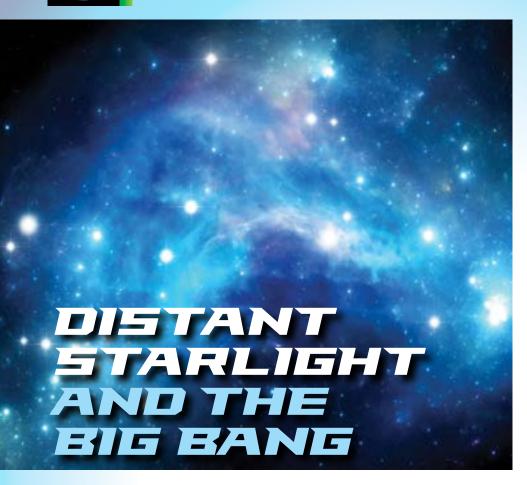
I hope you enjoyed this series. I presented these issues in detail because scientists and lay people alike deserve a thorough and comprehensive answer. I believe you can now see that *all* radioisotope dating methods are fraught with questionable assumptions and do not reproduce observable data as the scientific method requires. In conclusion, radioisotope dating presents no rational basis for believing that science has contradicted the Bible and its clear account of creation—on the contrary, the data point to a young earth and universe!

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ince light travels at a known rate, how could incredibly far-away starlight have reached Earth in just one day—specifically, Day 4 of the creation week? Genesis scoffers, including many Christians, stand ready to assert that Big Bang beliefs explain starlight better than Genesis does because they allow the supposedly necessary time for light to travel from the most distant stars and galaxies all the way to Earth. But a closer look at other information reveals a fatal flaw in that scenario.

Since the most distant galaxies are so far away, secular astronomers, who assume that light travels at the same speed in all directions (see below), argue that the cosmos must be billions of years old in order for the most distant light to reach us.² However, a stunning characteristic of something called cosmic microwave background radiation (CMB) throws a wrench into that idea by introducing the *horizon problem*. To understand why it's a problem, we first need to know a little about the CMB.

CMB radiation is a faint glow found throughout black space, even where no stars shine. It is invisible to human eyes, but specialized radio telescopes can detect the radiation. Amazingly, the CMB looks the same throughout space—exactly what a Big Bang explosion would *not* have produced.

In Big Bang scenarios, space and energy mysteriously came into existence and began expanding like an inflating balloon. Some regions of the early universe were allegedly much hotter than others. The hot spots would emit light, thus carrying some of their heat to the cold spots. How long would it take the hot spots and cold spots to reach the same temperature, forming the same-looking CMB we see today? Hot and cold spots that lie on opposite sides of the visible universe are simply too far apart to have reached this same temperature even after 13.8 billion years. This is the horizon problem.

Thus, Big Bang supporters need light to travel from the hot spots to the cold spots

in *much less time than their own model allows*. This is a light-travel time problem—in essence, the same problem as the distant starlight problem allegedly plaguing biblical models. So, light-travel time cannot be used to argue against one view of origins if the alternative view faces the same type of issue.

Creation scientists continue to investigate the intriguing question of how distant starlight can travel to Earth within the biblical timescale. Before scoffers accuse creation researchers of forcing data into a biblical history, they should understand that Big Bang scientists do just that—they look for ways to accommodate the CMB and a host of other observations into their billion-year history.³

Some Genesis-respecting solutions invoke stretching the fabric of space or even time-stretching by high gravity.⁴ Another solution involves Einstein's principle that the speed of light in one direction is a human convention, like inches versus centimeters. If we use a convention that defines outbound light as traveling at half the measured two-way speed, then light could conceivably travel from distant stars to Earth in an instant.⁵

We know that light-travel time challenges Big Bang models that stumble over the horizon problem, but it's far less an issue for biblical creation. So while we wait for more observations and better answers, why not trust that God did just what He said about stars: They were created on Day 4 to be "lights in the firmament of the heavens to give light on the earth."

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- Genesis 1:15 ("and it was so") suggests that starlight was already accomplishing its intended purpose by the end of the day.
- Specifically, they hold to the commonly used Einstein synchrony convention in which light's one-way speed is defined to match its two-way speed. See reference 5.
- They work on the horizon problem described here, as well as the entropy, lumpiness, ignition, lithium, smallness, coincidence, flatness, mature distant galaxy, dark matter, missing antimatter, young spiral galaxy, asymmetry, and star formation problems. Learn about Big Bang's flaws at icr.org.
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THICK ICE SHEETS:

HOW OLD ARE THEY REALLY?

ecular scientists claim that ice in deep cores extracted from the thick Greenland and Antarctic ice sheets is hundreds of thousands of years old. Do these ice cores prove an old earth?

Although these scientists believe the ice sheets to be millions of years old, vast amounts of time are not necessarily required for their formation. "Back of the envelope" calculations show that if current average snowfall rates have always been the norm, then the Greenland ice sheet could form in about 5,000 years and the Antarctic ice sheets in a little more than 10,000 years, ignoring factors such as melting.1 Of course, melting would increase the ice sheet formation time, but higher snowfall rates would decrease the time. Therefore, the 4,500 years since the Flood provide ample time for the growth of the thick ice sheets we see today, considering the much greater snowfall during the post-Flood Ice Age.1

Theoretical ice-flow models are the most common means of dating ice cores—especially the deep Antarctic cores. These models implicitly assume the ice sheets have existed for millions of years, so the vast ages the models assign to these cores are hardly surprising.¹

However, some skeptics, while acknowledging the possible influence of oldearth assumptions on Antarctic core dating, claim that the deep cores from central Greenland provide irrefutable evidence for an old earth. For instance, the 3,000-

meter GISP2 core was dated by counting presumed annual layers, a process supposedly independent of any old-earth assumptions.

However, the difficulty of correctly identifying annual layers negates this argument. The top half of the GISP2 ice core was dated by counting layering patterns called depth hoar complexes. Dozens of distinct layers can be deposited within just a few years, with the number of layers varying from year to year.² Since the number of layers changes from year to year, glaciologists must guess how many layers were actually deposited in a given year—a task that is increasingly difficult at greater core depths. In spite of these uncertainties, secular scientists assigned the remarkably low age of just 9,300 years to the ice at a depth of 1,500 meters in the GISP2 core.3

The bottom half of the GISP2 ice core was dated by counting presumed seasonal dust "peaks" within the ice. (Atmospheric dust content is generally higher in the spring and summer.) However, dust levels are *always* changing due to evervarying meteorological conditions, and secular glaciologists have acknowledged that storms, particularly violent ones, could result in higher dust levels within the ice cores.⁴ Therefore, the many winter storms in Greenland during the post-Flood Ice Age could have resulted in thousands of non-annual dust peaks. In fact, dust concentrations in the bottom sections of the Greenland

ice cores are highly variable, ranging from three to one hundred times (!) the concentrations found in the upper core sections.^{3,5}

Scientists need at least four or five measurements to identify a dust peak, but how far apart should those measurements be made? Because secular ice-flow models predict very thin annual layers deep within the ice cores, secular scientists believe these measurements should be spaced very closely together. This makes it much more likely that they will mistake a short-term "jump" in dust content for a seasonal change. Therefore, the 100,000 dust peaks counted by secular scientists in the bottom half of the core likely resulted from a "perfect storm" of highly variable dust content and old-earth assumptions.

When one understands the details behind the secular dating of these ice cores, this apparent challenge to the Bible's short timescale simply melts away.

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A Worldwide Phenomenon

or many years, paleontologists have known of marine fossils within various dinosaur-bearing rock units in the American West. These occurrences are largely ignored by mainstream scientists who deny that dinosaurs were buried in the global and recent Flood, as described in Genesis.

The Hell Creek Formation in eastern Montana has yielded many *T. rex* specimens, including well-documented dinosaur soft-tissue fossils. Surprisingly, in two volumes of papers published specifically on the Hell Creek discoveries, little is mentioned of the five species of shark and 14 species of fish fossils that are indicative of marine influence.^{1,2} Secular scientists either ignore these findings or dismiss them as all freshwater sharks and freshwater fish, in spite of the more likely conclusion that they represent marine organisms.

Other authors have studied the fauna of the Hell Creek Formation since the 1950s and found ample evidence of a mixture of marine and non-marine fossils.^{3,4} As Joseph Hartman and James Kirkland stated, "Although previously reported, knowledge of the continuation of marine conditions above the Fox Hills Formation [in the Hell

Creek Formation] is not well or widely known."¹

It is now becoming obvious that the mixing of terrestrial and marine environments is not a rare occurrence in the rock record. Recent discoveries in Morocco and Europe have shown that most dinosaurs are found with marine fossils or buried in marine sediments.

Nizar Ibrahim et al. reported that sharks, sawfish, ray-finned fishes, and coelocanths were found in the same rock layers as a *Spinosaurus* dinosaur in Morocco.⁵ How can this be? Today's coelocanths live about 500 feet below the ocean surface and not in freshwater rivers as many paleontologists have proposed. They dismiss the blatant physiological evidence from living specimens and insist that ancient coelocanths must have lived in fresh water simply because they are found in strata with dinosaurs. Where is the logic in this conclusion?

Zoltan Csiki-Sava and his colleagues surveyed all the recent research on dinosaur occurrences in Europe within the six accepted stages of the Late Cretaceous system. The team reported that "although isolated occurrences of continental [terrestrial] vertebrate fossils were occasionally reported from the Cenomanian to lower Santonian [lower four Upper Cretaceous stages] of Europe, these were mainly from marginal marine deposits." And the vast majority of these dinosaur occurrences were even found in open marine chalk and limestone deposits mixed with marine invertebrates.

Their survey of the upper two stages of the Cretaceous also showed nearly all dinosaur fossils were located in marine rocks. Here, too, the paleontologists reported numerous discoveries of dinosaur remains in open marine chalk beds that are difficult to explain in a uniformitarian context. "Although these are isolated skeletal elements [individual bones] that washed out to sea, they are remarkably common and have been reported in surprisingly large numbers since the early discoveries."

Dinosaur fossils found in rock strata with marine fossils are commonplace, not the exception. The mounting empirical evidence cannot be ignored or simply explained away as a rare occurrence. The fossil evidence supports a catastrophic and global flood that mixed the marine realm with the terrestrial realm as tsunami-like waves spread ocean fauna and sediments across the continents. Genesis 7 and 8 describe this process better than any secular scientist could imagine.

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BRIAN THOMAS, M.S.



I'm often asked if there really is a "gay gene"—one that predetermines certain people to be ho-

mosexuals. From the beginning of creation, God designed men and women to be equal but not interchangeable. He designed marriage to be exclusively heterosexual. Science even supports the Bible's answer to this important question.

The idea of a gay gene became popular from a misunderstood 1993 study in the journal *Science*. It reported that some male homosexuals who were related through a maternal line—such as gay sons with gay uncles on their mother's side—shared some similarities within a large DNA region on the X chromosome.¹

Though some researchers were unable to duplicate those results, a 2014 analysis of a larger group of test subjects found a similar link.2 But the similar sequences did not include a gene, nor did the research support the conclusion that any DNA directly or indirectly determines sexuality. If this DNA determines sexuality, then why does it often look the same in homosexual and heterosexual males? Also, the data show no link between gay and straight women. According to these results, DNA does not cause homosexual behavior. In general, studies confirm that human behaviors are too complicated for just one gene or region of the genome to explain.

The supposed warrior gene illustrates

this. Some individuals with a certain version of the MAO-A gene, when combined with an abusive upbringing, have a much higher likelihood of eventually committing a violent crime. However, plenty of people with the same combination never commit such crimes, showing that genes and backgrounds do not directly determine behav-

opu-

iors.³ Nobody has yet found a gay gene or a criminal gene. They may never find one.

Even those who report subtle genetic links between some homosexuals agree that homosexuality, like other human behaviors, comes from a complicated mix of genetic and other factors. For example, Michael Bailey, senior author of the 2014 study, told *International Business Times*, "It is not completely determinative; there are certainly

other environmental factors involved."4

If genes do not determine homosexuality, then how does it arise? The Bible describes how turning away from God can lead to homosexuality.

Their foolish hearts were darkened.... [They] exchanged the truth of God for the lie....[T]he men, leaving the natural use of the woman, burned in their lust for one another, men with men committing what is shameful.⁵

When we refuse to acknowledge our Creator and His clear design for our lives, the consequences are devastating. God's Word says that individual decisions at key points in a person's life influence behavior, and science does not refute this. Personal choices seem to be a key precursor to homosexual behavior, and the answer for that-as for all selfserving conduct—is the redemption available to all through Jesus Christ.

Those who argue that God somehow made them homosexual by placing a gay gene inside them have no

science or Scripture to stand on.

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MADE IN HIS IMAGE: TINY PARTS ARE BIG PLAYERS IN HUMAN VISION

RANDY J. GULIUZZA, P.E., M.D.

hen we think about human vision, the first thing that comes to mind is the eye. But just as a star football player performs with other essential players on his team, our eyes are supported by key, well-designed structures that are absolutely essential to making sight possible. We will consider some of the outer structures whose importance may get overlooked even though they are in plain sight.

For instance, eyelids are small and delicate but packed with incredible miniaturized components. Eyelids are not just floppy curtains that hang over our eyes. A small piece of dense connective tissue called the *tarsal plate* gives the eyelid its curved shape while also providing rigidity to its function as a movable covering (see Figure 1).

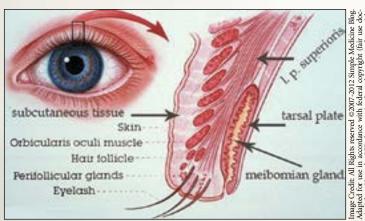


Figure 1. A cross-section of a human eyelid demonstrating tiny intrinsic muscles, the tarsal plate, and the meibomian gland housed within the plate.

The plate is positioned near the outer edge of the eyelid, near the lashes. This is an ideal location to allow the lid to slide tightly over the globe of the eyeball. Unwanted debris is removed with every blink, much like a windshield's wiper blades are held tightly to the glass with every swipe. And just the right amount of flexible rigidity is applied by the tarsal plates so that, upon blinking, lubricating tears are evenly spread over the eyeball.

Tarsal plates are also multifunctional. They house vital glands that produce oil-based tears for lubrication. These *meibomian glands* manufacture a special oil called *meibum* and release it through tiny

ducts right at the lid margins. Tiny meibum oil droplets are captured when the lid closes. The action of the blink rolls the droplets under the lid and uniformly spreads them over the eye by the precise shape of the lid margin. Meibum is not a simple homogenous oil but actually a complicated compound of multiple oils, waxes, sterols, and esters that possess many useful properties. Meibum not only functions like man-made lubricating oils that reduce friction when two surfaces slide past each other, but also provides an oily covering over water-based tears to slow their evaporation. Human designers usually specify a rubber or wax gasket at the interface of two surfaces to make their connection waterproof. Meibum's soft, waxy properties make the watertight seal of eyelids over our eyes possible with only mild lid pressure.

By far the largest-volume ingredient in tears is the watery liquid produced by the *lacrimal gland*. This liquid is vital since tears hydrate our eyes with copious irrigation. From a design standpoint, any good irrigation system would have a high-elevation water input and a lower-elevation outlet located on opposite sides of the irrigated area; that way, water would naturally flow across the area, pulled by gravity.

This is just what we find for the tears that irrigate the eye. The well-protected, indispensable lacrimal gland is shielded in the bony part of the upper orbital ring that circles above the eye and extends toward the outer part of the eye away from the nose (see Figure 2).

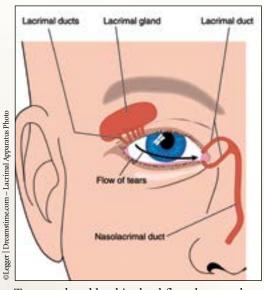


Figure 2. A cutaway view of the lacrimal system dedicated to producing and removing tears. The lacrimal gland, and lacrimal ducts at the rear of the nasal passage are identified.

Tears produced by this gland flow down and across the eye toward drainage ducts placed on the nasal side of the upper and lower eyelids. Generally, tear production and removal are balanced at just the right rate to not allow the eye to dry out or tears to overflow and flood down the face.

Just like meibum, tears also contain a variety of essential compounds. Our body usually does a great job regulating the microbes that colonize the area on and around our eyes—including some microbes that could potentially harm our eye-related structures. Tears contain mixtures of antibodies and enzymes that manage the controlled destruction of microbes. Eye infections occur when exposure

THE FUNCTIONING HUMAN VISUAL SYSTEM IS A PRIME EXAMPLE OF ALL-OR-NOTHING UNITY AND PRECISE DESIGN.

to pathogenic microbes overwhelms the eye's regulatory design parameters in terms of the numbers or types of microbes.

Another fascinating feature of tears is that only humans shed emotional tears. In times of severe emotional stress, molecules called *enkephalins* that are like natural opioids are released in tears. Eye tissue absorbs these molecules, and when they bind to certain receptors in the brain, the crying person may feel a sense of relief or euphoria afterward. An evolutionary story for the origin of these tears can be concocted, but a better explanation is that they are a sweet provision from a loving heavenly Father.

The outlets draining tears are rather tiny, but you can see them with the naked eye. If you look closely in the mirror, you will see a very small circular hole in each of your upper and lower lids in the angular area where the lids come together next to your nose. The openings are *puncta*. Amazingly, the round elevation represents an extremely small circular muscle overlaid with eyelid tissue. This structure is a remarkably efficient suctioning tear remover. Every time a person blinks, that tiny muscle contracts and closes the opening. When the lids lift, the muscle quickly relaxes, which causes a rapid re-opening. The quick opening action creates a small suction that pulls in the tears. The lower opening removes more tears than the upper one since gravity naturally draws tears toward the lower lid, where they pool.

But where do the captured tears go? Each puncta has a miniature drainpipe attached to it that conveys tears away from the eye. Just like any plumbing system, these drainage pipes, called *lacrimal canals*, feed into a larger pipe. In this case, it is a lacrimal duct located at the back of the nasal passage. The expended tears flow down by gravity, where they eventually drain into the back of your throat. After you swallow them, most of the watery portion is reabsorbed by your body, which means that a tiny fraction will be recycled and make its way back as fresh new tears.

The reality is that without any one of these structures, ingredients, and processes, a person would go blind. This is another wonderful illustration of how none of the primary function of vision is attained until *all* of the key parts are in the right place, at the right time, at the right scale, and in the right amounts. The functioning human

visual system is a prime example of all-or-nothing unity and precise design. We should be thankful that we benefit so greatly from the engineering genius of our Lord Jesus Christ!



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Crayfish, Caribou, and Scientific Evidence in the Wild

n unusual law has helped some creation science evidence to "go wild."

Unsurprisingly (for Bible believers), mounting evidence increasingly shows that only the Genesis explanation of our world's origin—and Earth's present ecological equilibrium—makes sense. Animal ecology is purposefully balanced; it's not a simple hodgepodge of evolutionary "accidents."

We can thank Congress for much of what we now know about American wild-life, specifically, the Federal Aid in Wildlife Restoration [Pittman-Robertson] Act (P-R Act) in 1937. The P-R Act focuses financing of scientific research projects involving field studies of animals in their natural habitats. This approach improves upon stereotypical research done on experimental animals in laboratories because the facts learned in the field are usually more relevant for understanding how animals actually function.

But if biologists can conveniently research in climate-controlled laboratories, why spend money on ecologists' in-the-wild field studies?

Crayfish in the Laboratory

Consider, for example, an experimental laboratory study of crayfish feeding habits that uses an aquarium in a temperature-controlled lab illuminated by artificial lighting. When biologists observe crayfish eating food supplied to them in such a laboratory setting, what are the biologists actually learning? Since crayfish prefer to forage in the dark or semi-dark, the experimental data largely constitute "artifacts" (outcomes



much that is both reliable and relevant about

how crayfish behave naturally.

To learn how crayfish really live, we need to observe them *in the wild*, without them noticing that we are watching. Imagine how crayfish react to giant humans gawking at them as they eat! Hidden cameras in natural habitats can record candid behaviors, representative of real-world activities.

So, for learning ecology, there is no substitute for field study observations. And field studies, more than lab experiments, demonstrate the interactive complexity of the real world, with the resilient balancing dynamics that God programmed for it.²

Caribou in the Wild

Using P-R Act field study funding, what have we learned about caribou (Rangifer tarandus) and how they behave in the wild? Surveys using aerial photography inform us about a herd's migration and calving patterns. Captured caribou are fitted with radio-transmitting collars and tracked by the latest space-satellite technology.3 Biologists previously thought that wolves were the only serious predator of Alaskan caribou. Not so. Brown bears often consume cervids, including many caribou. Likewise, in the wild, ectoparasitic mosquitos and endoparasitic brain worms plague them. Even golden eagles, which congregate hungrily near calving sites, prey on newborn caribou calves-a fact now beyond dispute due to modern monitoring technology.3

Caribou interact with other animals

(wolves, bears, deerflies, mosquitos), plant life (willow, birch, aspen, tundra lichens), and their expansive geophysical environment, which varies according to seasonal migrations. How caribou populations survive, and thrive, is an ongoing, complex, and *non-random* balancing act.

God created caribou. God conserves their herds today. They interact with habitat neighbors and changing seasons. That caribou flourish in seasonal ranges exhibits God's providential care for His creation—animals, plants, environment, and humans—even in this fallen world (Romans 8:21-22; John 1:3). If we are thoughtful observers, surely we are reverentially amazed.

This biogeographical drama of *Rangi- fer tarandus* herds—acted out in arctic tundra and boreal habitats—powerfully provides us with "clearly seen" proofs of God's caring conservation of His own handiwork. Alaskan caribou are marvels in motion, created and conserved by the Lord Jesus Christ (Colossians 1:16-17; Romans 1:19-20).

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Dr. Johnson is Associate Professor of Apologetics and Chief Academic Officer at the Institute for Creation Research.



he breadth and depth of ICR's ministry are remarkable. From countless articles and numerous books, to online education programs, long-running radio broadcasts, entertaining online videos, captivating DVD resources, robust scientific research, and hundreds of speaking engagements each year, it's clear God uses ICR to contribute an incredible amount to the body of Kingdom work that glorifies our Creator, the Lord Jesus. I can only marvel at God's hand on our ministry and humbly thank our supporters for partnering with us in the Lord's work.

God's financial provision for ICR through His people is not an insignificant thing. ICR has experienced times of plenty and seasons of leanness and need. But through it all, ICR has remained sensitive to the Lord's leading by pursuing new opportunities when appropriate while continuing to distribute free publications like *Acts & Facts* and *Days of Praise*. Those who labor with us by sharing their financial resources will share in the eternal rewards of our work (1 Corinthians 3:7-8), and we look forward to a time of great rejoicing when the Lord reveals the eternal impact of our efforts for the cause of Christ.

ICR has a strong commitment to use those resources wisely. We do not go into

debt or spend what we do not have. Moreover, we have resisted the urge to do too much, like pushing larger programs that require bigger budgets to support. Please don't misunderstand me—large gifts are tremendously welcome additions to our ministry! Yet, we know such gifts are not possible for most. Consider the words of the Lord Jesus in Mark 12:41-44:

Now Jesus sat opposite the treasury and saw how the people put money into the treasury. And many who were rich put in much. Then one poor widow came and threw in two mites, which make a quadrans. So He called His disciples to Himself and said to them, "Assuredly, I say to you that this poor widow has put in more than all those who have given to the treasury; for they all put in out of their abundance, but she out of her poverty put in all that she had, her whole livelihood."

Jesus was not impressed by the large sums of the rich because they gave "out of their abundance" and still had plenty left over; these gifts were not a sacrifice for them. Rather, Christ was so impressed by the widow's *quadrans*—about one-fourth of a penny, worth a small fraction of an average daily wage—that He called His disciples over to point out this truth: God measures a gift not by its size but by the motive with which it is given and the amount left un-

given. In God's eyes, the widow's two mites were far more valuable than all other gifts combined because she gave "all that she had, her whole livelihood." This widow would likely go hungry until she earned more. Therefore, this example portrays one of the greatest examples of sacrificial giving in all of Scripture.

Perhaps some have been reluctant to give "too small" a gift, believing that small amounts cannot do much good for the Lord's work. Nothing could be further from the truth! God is not interested in size but rather in motive and proportion. So for those who are currently receiving our material but have not partnered with us, please consider this: If only 10 percent of our subscribers gave \$10 per month, the Lord would use them to increase ICR's ministry budget by over one million dollars per year. And if 100 percent were able to give just \$5 per month (we understand many cannot), our resources would more than double. The power of many "mites" does add up and can be a formidable force for the Lord's work!

Considering the example of the poor widow, won't you prayerfully consider

joining us? Your help will make a difference for the cause of Christ. ●

Mr. Morris is Director of Donor Relations at the Institute for Creation Research.



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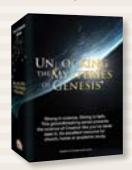
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ETTERS TO THE EDITOR

When I returned to Canada after serving the Lord almost forty years in India, I began receiving *Acts and Facts* as well as *Days of Praise*.



Words fail to express my appreciation for your ministry. I have ordered and read most of your books by Dr. Henry M. Morris and other authors. I have learned so much through books, CDs, and now the DVDs. *Unlocking the Mysteries of Genesis* has been a tremendous blessing. I received the booklet about [Dr. John Morris'] adventure on Mt. Ararat. Thank

you that I can keep learning in my senior years.

— O.B.

In the March 2015 Acts & Facts, you included excerpts from an interview with astronaut Jeff Williams. It was a very interesting article and comforting to know, as Jeff said, that even if organizations such as NASA are commonly believed to be pro-atheist, there are Christians who permeate the entire organization. I also agree with Jeff's



observation that there is no clash between science and God; on the contrary, science proves God, but it is the predetermined biases that some scientists look through at the world that create issues. I appreciate that you put yourselves up to the task of creating a creationist science journal, because so many of the other academic options take atheism and evolution as scientific law and not as unproven theories. The universe we live in is so wonderful and awe-inspiring, how could I have been created by chance, let alone from nothing?

— Е.Н.

I appreciate your article "Destructive Heresies" in the [April] is-



sue of *Acts & Facts*. Much of the religious world, as you say, "have long abandoned any pretense of supporting the inerrancy of Scripture" but are "instead substituting dogma, theology, philosophy, and the traditions of men." Satan is being successful in steering people away from the Scriptures.

— R.B.

["Destructive Heresies" is an] excellent article. I think the efforts of evolutionists reflect the fragility of their arguments in the face of so

much data that now support creation by design. May God bless you all at ICR. I love reading your articles and often discuss their subject matter with my 13-year-old daughter. Please don't be daunted.

— D.E.



As a long-time recipient of your publications, I wish to comment on two articles in the April issue of *Acts & Facts*. The article on blood treated a highly complex topic in a manner that made it understandable to the layman...The other article comparing man and apes was delightful and honored our Creator in a special way. I referenced it

to my Facebook friends. Thank you for your ministry.

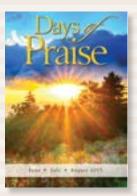
-D.B.

I re-discovered ICR only recently, having read *The Genesis Flood* long ago (late 1960s). That book and early issues of *Acts & Facts* strengthened my instinctive distrust of evolutionary theory. I am a retired mechanical engineer with numerous design patents. From 45 years of experience, I assert: *The more complex a design becomes, the less*



likely any random change will be beneficial! This observation alone scuttles any possibility that man evolved from single-cell creatures.

— B.S.



Eighteen years ago, on June 20, 1997, you had, as the verse in *Days of Praise*, Psalm 108:1. My husband and I had only been married 12 days when his heart stopped while he was working. When he fell and hit the floor, it restarted. They rushed him to the hospital, and [spent time] trying to figure out what was wrong as his heart stopped over and over again. They finally put in a pacemaker and called it

Sudden Cardiac Death Syndrome. Apparently, the electrical system of his heart had stopped working. The next morning, in the hospital, I opened *Days of Praise* and read Psalm 108:1, "My heart is fixed, O God!" I do not think we got any farther than that. We cried and praised God all day long. The verse had a different meaning for us that day. We will celebrate our 18th anniversary on the 7th of June. Praise God! He fixed my husband's heart!

--BP

Have a comment? Email us at editor@icr.org or write to Editor, P. O. Box 59029, Dallas, Texas 75229.

Note: Unfortunately, ICR is not able to respond to all correspondence.

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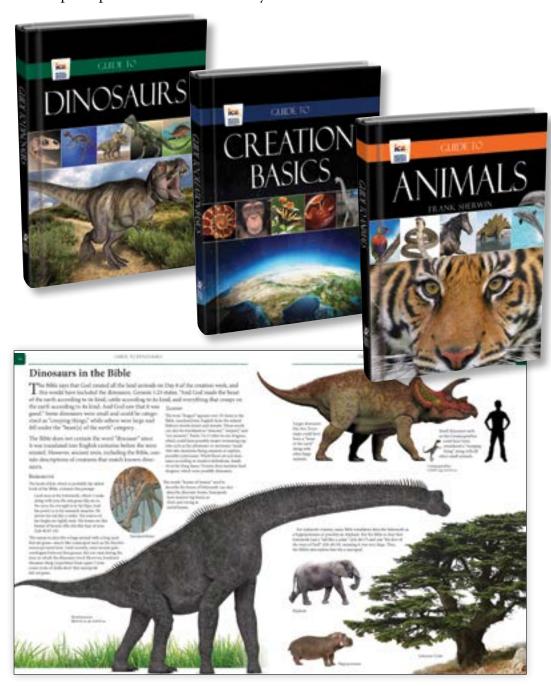
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