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## Hummingbirds by Design

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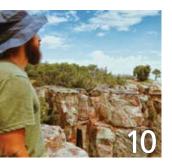
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Front cover: Male rufous hummingbird Image credit: iStock, BirdImages





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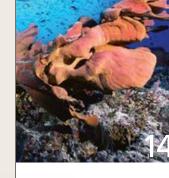
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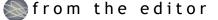
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ake a quick look at the hummingbird pictured below. This tiny bird's wings beat from 50 to 80 times per second a testimony to God's incredible design, caught in a split-second of time. In real time, we only see a blur as this remarkable creature darts about too fast for us to fully catch its exquisitely engineered performance.

When you look at the world around you, do you ever wonder about the things that are happening just beyond the boundaries of what you can see, hear, and touch? How much of God's workmanship do we miss? What do we take for granted?

This month, ICR zoologist Frank Sherwin pulls back the curtain to reveal just some of the hummingbird's elegantly intricate capabilities. Mr. Sherwin points out in "Hummingbirds by Design" (pages 17-19) that when a hummingbird draws nectar from a flower, we can marvel at how both bird and plant were crafted for each other. The Creator carefully constructed the flower in just the right way to feed the tiny creature: "These flowers seem uniquely designed to accommodate a hummingbird's beak and tongue....God designed the hummingbird's bill and tongue to drink nectar from flowers many insects wouldn't be able to access." Mr. Sherwin also points out the sophisticated design of the hummingbird's metabolism, vision, and vocalization. Every part of this tiny bird points to the genius of Christ.

In this issue, ICR President Dr. Randy Guliuzza spells out his vision for a new biological model that explores and explains remarkable creature features like the hummingbird's within an engineering frame-



work. In "The Power of the Next Idea" (pages 5-7), Dr. Guliuzza says, "The creation science movement was initially launched by a powerful idea: that the biblical narrative could be fully trusted to guide the development of scientific theory." The Flood model in Drs. Henry Morris and John Whitcomb's The Genesis Flood changed the way many Christians understood geology. Dr. Guliuzza explains how the Institute for Creation Research will build on that foundation by developing a similarly compelling model for biology: "Our task is to fundamentally change the way people understand biology by constructing a completely new theory of biological design that incorporates recent discoveries and respects the biblical narrative." ICR is committed to highlighting God's work within a framework that's both biblically based and scientifically sound... "a perspective that gives glory to the Creator-not to nature."

When we look around us, we see evidence of God's engineering everywhere from gleaming stars in galaxies far away to Earth's life-friendly ecosystems in which tiny hummingbirds can hover and dart from flower to flower. Every detail of every part of the universe is specially designed by our Creator. Consider His handiwork this Thanksgiving as you ponder His blessings—our world shouts His design and sings His glory!

Jayme Durant

Jayme Durant Executive Editor

# The Power of the of the lexit laces

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

#### article highlights

- The modern creation science movement began with a powerful idea—namely, that the biblical narrative can be fully trusted to guide the development of scientific theory.
- Drs. Henry Morris and John Whitcomb's Flood model changed the way many Christians understood geology.
- ICR is now poised to construct a similarly compelling model that will fundamentally change the way Christians see biology.
- Engineering principles consistently prove to be the most accurate framework to explain the operation of biological systems, and ongoing discoveries are bringing biology and engineering into closer alliance.
- ICR's goal is to develop a new theory of biological design that unites scientific explanations, matches the Bible, and educates future generations.

ur task is to fundamentally change the way people understand biology by constructing a completely new theory of biological design that incorporates recent discoveries and respects the biblical narrative—all with the goal of igniting a second creationist revival." That's the short elevator pitch I give when asked what I want to accomplish as the president of the Institute for Creation Research.

With the unanimous backing of our Board of Trustees, ICR is undertaking the biggest science initiative since we launched the Radioisotopes and the Age of the Earth (RATE) project in 1997. We often say that creationists and evolutionists have the same data, but our interpretations differ completely. ICR scientists believe our past endeavors to identify the abundant flaws in evolution were vital but are not nearly enough. Now is the time to state how and why the interpretation of biological phenomena must be profoundly different. Other skilled scientists and theorists agree and are ready to join us.

#### ICR's History and the Power of an Idea

Just as the Flood model presented in Drs. Henry Morris and John Whitcomb's The Genesis Flood changed the way many Christians understood geology, ICR's highest priority today is to construct a similarly compelling model that will fundamentally change the way Christians-and, Lord willing, many others-see biology. The creation science movement was initially launched by a powerful idea: that the biblical narrative could be fully trusted to guide the development of scientific theory. This led to bolstering a theory of geology known as catastrophism through the exceptional explanatory power brought by the Flood model. Clearly, the Lord used the Christ-like nature of Henry Morris to advance creation science. That powerful idea, coupled with Dr. Morris' gracious spirit, helped pastors have confidence in the Bible when theistic evolution was gaining influence in the church by leaps and bounds.

Our goal today is to build a clear,

#### feature

concise, and easily communicable biological framework that will spark a second creationist revival and again stir up a sense of certainty in Christian truth. We aim high for a goal that's commensurate with the Lord Jesus' power and proven enablement.

ICR has a team of scientists bold enough to study these observations in a radically new way and do the hard work necessary to connect these findings into a coherent theory. The resulting models wouldn't be esoteric, mathematical constructs. They would compile hundreds of fascinating examples of creatures' abilities and explain those biological functions from an organism-centered, engineering-based perspective that gives glory to the Creator-not to nature. A new theory of biological design would become the fundamental, designbased principle uniting biological explanations in Christian textbooks and museums to educate future generations of young believers.

#### **Biology Comes Full Circle**

As a pioneering research institute, ICR will be a leader in building a theory of biological design that's fully informed by the biblical narrative right down to its basic assumptions. The timing couldn't be better. Every day, the scientific literature reports on the operations of many new biological discoveries that are readily explained by principles of design. Across the field of biology, current research is demonstrating that the future of biology is heading back to two primary concepts.

First, there is an increasingly restored approach to the holistic view of creatures. In addition to the recognition that many creatures clearly seem to exercise independent agency, taking a holistic view means that we can't fully understand how organisms function simply by looking at their parts. Rather, when taken as a whole, they have behaviors and actions that result from the purposeful arrangement of parts that is fundamentally distinct from the operation of the individual parts themselves. There are indications that essentially everything (e.g., molecules, parts, systems, etc.) about a creature seems to function not for a single purpose but for multiple purposes. These are innate capabilities derived solely from a creature's internal systems.

Second is the mounting recognition in scientific papers that models based on mathematics and engineering principles consistently prove to be the most precise framework to explain the operation of biological systems. Pioneering biologists, though not speaking in today's sophisticated engineering language, previously wrote extensively about the correspondence between the operation of human contrivances and

features found in creatures. More recently, ICR invested nearly two years elaborating on these realities in a series of articles titled Engineered Adaptability in *Acts & Facts.*<sup>1</sup> These articles introduced several of the concepts that are key to a theory of biological design but have yet to be fully developed.

The series demonstrated an innovative approach to biological explanations using engineering-based, organism-focused models. A model called *continuous environmental tracking* (CET) was created to explain the biological function of adaptation. CET is not simply a critique of the insufficiencies of adaptationism, random mutations, or selectionism. It's a new model that flows from the latest findings in molecular biology identifying innate sensing systems and logic mechanisms that direct targeted responses to environmental challenges.

Most importantly, this model gives clear and compelling reasons to fundamentally change the way we perceive organisms. An engineering-based, organism-focused framework shows why we should abandon Darwinism's worldview of selectionism that sees organisms as modeling clay being passively shaped over time by nature.<sup>2</sup> And that same design-based approach to biology shows why we should view creatures as active, problem-solving entities that continuously track changing environmental conditions and through innate systems *purposefully adapt themselves* over time to better fit existing niches or fill new ones.

#### A Rare Opportunity

Remarkably, the basic holistic and engineering premises that are increasing in biology today actually guided how pioneering scientists interpreted biological phenomena prior to biology being corrupted by Darwinism's selectionist worldview. Over the last decade, many scientists have recognized that evolutionary theory is contradicted by the huge surge of biological discoveries that are suitably explained by engineering science principles. Evolutionists are currently in bitter disarray over whether they can reconcile these discoveries with Darwin's theory.<sup>3</sup>

Recent trends in academia are adding to the upheaval. Technological developments and necessity are bringing biology and engineering into a very close association. Why? Because biologists methodically disassemble biological systems piece by piece to discover their operation; i.e., they have always been "reverse engineers." The infusion of more engineering into biology is inevitable as both the number and importance of bioengineering departments swell at universities. In those buildings it's difficult to draw a sharp distinction between a pure biologist and an engineer. Evolutionary biologists, who interpret biological observation through design-exclusive assumptions,

will face the inevitable rising tide of scientific literature from other disciplines that are using engineering principles to better explain biological functions. Thus, we note increasing calls to reform or replace the current evolutionary framework, though the "reformers" themselves have not integrated a replacement.

Creation scientists have an extremely rare, transient opportunity to get out in front and frame all of these new findings before the evolutionists do. A theory of biological design would enable us to set both the interpretive and research agendas.

#### "Let the Dead Bury Their Dead"

For decades, creation scientists have focused primarily on exposing where evolutionary theory is insufficient, inconsistent, inaccurate, and incomplete. Both atheistic and theistic selectionists affirm that Darwin's proposed mechanism is correct, but theistic selectionists add that it's insufficient to explain the diversity of life. By merely tweaking or modifying evolutionary theory, they have essentially reinforced Darwin's view...not replaced it.

A recent essay by Dr. Paul Nelson, an articulate advocate for research by the Intelligent Design (ID) community, perfectly summed up the need to move on from only attacking or tweaking evolutionary theory toward replacing it altogether. He did this in the context of a lecture he delivered about 20 years ago:

Following the talk, as I was packing up my computer, a young biochemist on the Wayne State faculty, who identified himself as a Christian (thus, he acknowledged, he was philosophically pre-disposed to find ID worthwhile, maybe), approached me at the podium. "You spent a lot of time in your talk criticizing evolutionary theory," he began, "and I can agree with much of what you said. *But what can you offer me using design* (he asked) *that I can take back to my lab and apply?*" I have never forgotten his question, or my fumbling reply. It struck me that, indeed, nearly all of my talk had addressed shortcomings in evolutionary theory. By implication, the ID alternative was more promising—only I had said almost nothing about it.<sup>4</sup>

But today Nelson has come to realize "the abject futility of trying to construct a theory of biological design within a philosophical framework, naturalism, fundamentally committed to another goal. *Reform it altogether*, said Hamlet to the players."<sup>4</sup>

There's another crucial reason why we should "let the dead bury their own dead" (Luke 9:60) and move on entirely from Darwinian selectionism. It's a mistake to think Darwin's primary goal was to explain the cause for life's diversity. Science historians clearly document that his goal was to explain why the purposeful parts and operations of creatures could look so incredibly designed without appealing to God as the designing agent.

Darwin is heralded for his great feat of explaining creatures' "apparent design" by a totally materialist mechanism. Yet all he did was slip in a pseudo-agent—nature itself. He did this by personifying nature through his projection of "selective" abilities to the environment. Personifying nature as a selective entity bestows on it the capabilities of volition and intelligence, which it doesn't have, so that it can function as an idolatrous substitute designer.<sup>5,6</sup> ICR takes the task of exposing and opposing the "anti-Designer" goal of Darwinian selectionism very seriously since we must be "pulling down strongholds, casting down arguments and every high thing that exalts itself against the knowledge of God" (2 Corinthians 10:4-5).

#### **Taking Action**

I hope you're feeling as energized for action as we are at being at the cutting edge of developing a new approach to biology that's totally current, fully pro-life, and truly Christ-honoring. With the scientific insight and enablement of the Lord Jesus, ICR will move forward to seize this extraordinary opportunity. We would like to produce books, videos, and a textbook. To that end, we need an additional researcher and science writer. We ask you to partner with us on this important task.

I want to express a special "thank you" to everyone who attended the one-year anniversary celebration of the opening of ICR's Discovery Center for Science & Earth History. Your presence was a joy to the entire ICR family!

Unfortunately, in our August issue we were harsh in our criticism of several fellow creation scientists and called them some names. I regret that we did that and am truly sorry for the hurt it inflicted. We will endeavor to not engage in those behaviors in the future. Please forgive us.

We are celebrating the 50 years that the Lord Jesus Christ has used the Institute for Creation Research to spearhead the biblical and scientific restraint against unchecked evolutionism and, more importantly, to proclaim the gospel! Like many of you, I marvel at how ICR's influence in both the church and academia greatly exceeds our rather small size. We fully realize this is due to Christ's enablement. Jesus reminds us in John 15 that He is the vine and we are the branches. We must abide in Him, for without Him we can do nothing. We appreciate that you also believe this. Thank you for abiding in Him as you have walked alongside us for all these years. 🛸

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Dr. Guliuzza is President of the Institute for Creation Research. He earned his M.D. from the University of Minnesota, his Master of Public Health from Har-

Ins Master of Public Health from Harvard University, and served in the U.S. Air Force as 28th Bomb Wing Flight Surgeon and Chief of Aerospace Medicine. He is also a registered Professional Engineer and holds a B.A. in theology from Moody Bible Institute.







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For the serious science reader

research

## **Soft Tissue Fossils Reveal Incriminating Trends**

n December 2019, the journal *Expert Review of Proteomics* published a paper I authored with Stephen Taylor titled "Proteomes of the past: the pursuit of proteins in paleontology."<sup>1</sup> The article features a table that lists 85 technical reports of still-existing biomaterial—mostly proteins—discovered inside fossils.

Can proteins last millions of years? Not according to decay rate measurements. Five incriminating trends emerged from these 85 secular reports. Our review sharpens the tension between how short a time biochemicals last and the supposed age of the fossils that contain them. We wrote:

Collagen decay rate experimental results build a temporal expectation that restricts bone collagen to archeological time frames, yet many reports of collagen and other proteins in older-than-archeological samples have sprinkled the paleontological literature for decades. Tension between the expectation of lability [susceptibility to chemical breakdown] and observations of longevity has fueled steady debate over the veracity of original biochemistry remnants in fossils.<sup>1</sup>

The 85 reports included descriptions of original skin, connective tissues, flexible and branching blood vessels, bone cells, and probable blood cells. Original biochemistry includes tattered but still-detectable osteocalcin, hemoglobin, elastin, laminin, ovalbumin, PHEX, histone, keratin, chitin, possible DNA, collagen, and collagen sequence—all inside fossil bones.

The first trend we found noted biomaterials from all kinds of different fossilized animals, not just dinosaurs.<sup>2</sup> Thus, researchers need not restrict their searches for fossil biomaterials to any specific plant or animal type.

The second trend from all of these reports, which span over a half century of exploration, found no better preservation in one ancient environment over another. Whether living in air, oceans, lakes, swamps, or forests before they were fossilized, fossils could still contain biomaterials.<sup>3</sup> article highlights

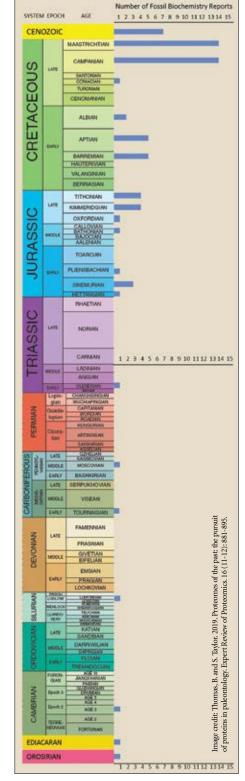
- Soft tissues in fossils are original body remnants.
- Eighty-five secular science reports detailed many biochemicals in fossils supposedly millions of years old.
- Biochemicals occur all over the world in most of Earth's representative sedimentary rock systems.
- Since lab-tested protein decay rates demonstrate short shelf-lives, these fossils appear to be far younger than the millions of years claimed.

Third, a bar graph of the number of relevant publications per year showed an increased interest in this field within the last two decades. Additionally, Figure 5 from our paper plots discoveries onto a world map to show that biomaterials in fossils occur virtually worldwide. We predict that future investigations could discover original biomaterials wherever fossils are found.

The fifth and final trend presents the biggest obstacle for those who insist that rock layers represent vast eons. We found reports of original biomaterials from seven of the 10 standard geologic systems plus one report each from the Precambrian and Ediacaran layers the bottommost sediments on Earth. As one of our anonymous peer reviewers protested in response to these findings, having biomaterials last over 70 million years—let alone 500 million—is simply fantasy.

Proteins decay relentlessly and relatively fast. Yet protein discoveries keep piling up. Thus, "it is likely that contention will persist."<sup>1</sup> Our secular colleagues now have a sharper look at the vast depth and wide spread of younglooking biomaterials from fossils. Security *References* 

 Tissues or biochemistry were reported in dinosaur, eggshell, turtle, bird, marine worm casings, sponge, clam, mosasaur,



tree, insect, arachnid, frog, salamander, and crinoid fossils.

 "Fossilized" does not necessarily mean "mineralized," as this list clearly shows. Fossils include remains of once-living things that were totally replaced by minerals, partly replaced by minerals, mineralized only in tiny pore spaces, or not mineralized at all—like natural

mummies.

Dr. Thomas is Research Associate at the Institute for Creation Research and earned his Ph.D. in paleobiochemistry from the University of Liverpool.



<sup>.</sup> Thomas, B. and S. Taylor. 2019. Proteomes of the past: the pursuit of proteins in paleontology. *Expert Review of Proteomics*. 16 (11-12): 881-895.



For the serious science reader

# Paleontology Confirms a Late Cenozoic N-Q Flood Boundary

EFFREY P. TOMKINS, PH.D., AND TIM CLAREY, PH.D.

#### article highlights

- A large diversity of mammals that lived at higher elevations before the Flood were fossilized in vast amounts of Cenozoic strata.
- Vast coal layers are also found in Cenozoic Flood strata.
- This evidence refutes evolution and also shows that the Flood record extends all the way to the top of the Neogene—near the top of the Cenozoic layers.
- The evidence that Earth's rock layers were laid down in the Flood by ecological zonation clearly confirms the N-Q boundary model.

xtensive rock record research performed by ICR geologist Dr. Tim Clarey across four continents has revealed that the sedimentary strata laid down in the global Flood extend nearly all the way to the top of the Cenozoic unit in the geologic column.<sup>1-3</sup> This post-Flood boundary is at the division of the Neogene-Quaternary systems and is known as the N-Q boundary. The Neogene system represents the final receding Flood layers, while the Quaternary system marks the beginning of the post-Flood Ice Age.

ICR scientists Dr. Jeffrey Tomkins and Dr. Clarey have also documented fossil discoveries in the upper Cenozoic rock layers—such as Cenozoic coal seams and several types of Cenozoic mammal fossils—that further confirm the N-Q boundary.<sup>3</sup> These Late Cenozoic fossils were buried during the receding phase of the Flood and typically represent plants and animals that lived at higher elevations in the pre-Flood world.<sup>4</sup>



#### **Cenozoic Coal Seams**

One of the most powerful paleontological evidences of the high-Flood/post-Flood boundary (N-Q) is the presence of huge Paleogene (Early Cenozoic) coal beds formed from mostly angio-sperm (flowering) plants.<sup>4</sup> For coal beds to form, enormous amounts of plant material must be transported and buried rapidly before it decays. Compared to Carboniferous coal beds formed earlier in the Flood that contain tropical coastal vegetation, the more massive Cenozoic coal seams were formed from plants and trees that grew at higher elevations in the pre-Flood world.<sup>3</sup> These higher-elevation plants would have been ripped up late in the Flood and buried during the receding phase in large sedimentary basins where they would have been easily trapped.



An excellent example of massive Cenozoic coal deposits in North America can be seen in a large region known as the Powder River Basin that extends from the center of eastern Wyoming up into the lower third of Montana.<sup>5,6</sup> This coal layer contains some of the largest known reserves of low-sulfur subbituminous (black lignite) coal in the world. Approximately 42% of the present coal production in the United States comes from the Powder River Basin. At least six coal beds in this basin exceed 100 feet in thickness, with some more than 200 feet thick in places, such as the Big George coal layer. Other extensive but thinner Cenozoic coal deposits can be found across the midwestern and southern states.<sup>6</sup>

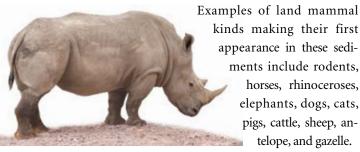
Huge Cenozoic coal deposits aren't exclusive to North America but have also been mapped out across South America. These late-Flood Cenozoic coal seams are the thickest and most extensive across that continent as well.<sup>67</sup> It is estimated that these beds alone make up about one half of all coal in South America, and the total tonnage has been estimated to be greater than any other geologic system or combination of systems in that continent.

But Cenozoic coals aren't just found on land. Oil-well drilling data in the South China Sea about 175 miles off the coast of Borneo have revealed a large region of bedded coals buried in Oligocene (Middle Cenozoic) strata that "is both thick and rapidly deposited."<sup>8</sup> The intense energy of the receding phase of the Flood could easily have transported and buried these land plants out in the deep sea in late-Flood continental runoff similar to that which occurred in North America with the Whopper Sand deposit in the Gulf of Mexico.<sup>9</sup>

#### Land Mammal Fossils

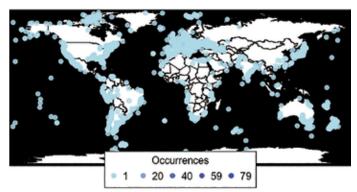
The Cenozoic Era is often referred to as the Age of Mammals primarily because most kinds of mammals make their first fossil appearances in these strata. As with other types of fossilized creatures throughout the rock record, these land-based mammals appear suddenly without any evolutionary precursors, and the ones that are not now extinct look similar to their living counterparts. Most of these fossilized mammals would have been living at higher, more temperate elevations than the dinosaurs and thus would have been buried in the uppermost Flood layers of the Cenozoic—which is exactly where we find them.

The fact that the majority of mammal fossils make their first appearances in Cenozoic sediments confirms that the depositional processes of the global Flood were still occurring throughout these late-Flood rock layers. The land mammals in these layers that are now extinct would likely have been represented aboard Noah's Ark but have since died off due to loss of habitat or human hunting.



#### **Marine Mammal Fossils**

In addition, many kinds of whales and other marine mammals show up in these upper Flood layers, which isn't surprising because many Cenozoic sediments are of marine origin, especially across Europe and the Middle East.<sup>10</sup> It's likely that the large, bloated, buoyant carcasses of dead marine mammals would have been some of the last to be buried during continental runoff in the receding phase of the Flood. In fact, whale fossils are located along the coastal margins of nearly every major continental landmass and are also found across the entire continent of Europe (Figure 1).<sup>11</sup> This aligns with findings from ICR's Column Project, which has shown that Cenozoic marine sediments cover most of Europe.<sup>10</sup>



*Figure 1.* Global occurrences of Cetacea (whale) fossils using data from the Paleobiology Database posted on paleobiodb.org

ICR scientists disagree with creation scientists who place the post-Flood boundary at the end of the earlier Cretaceous system (K-Pg or Cretaceous-Paleogene). One good reason is that it's hard to plausibly explain the sudden appearance of whale fossils above this boundary. Some advocates for a lower boundary claim these large marine mammals rapidly and radically changed from their ancestors that walked on legs out of the Ark.<sup>12</sup> But did whales really descend by modifications from land-dwelling ancestors coming off the Ark? Creationists who believe that supposed whale ancestors were on the Ark should offer a biological mechanism to account for the numerous and exceptionally large changes in anatomy and physiology in an extremely short time frame of only about 200 years.<sup>12</sup>

Some creationists suggest these whales were fossilized in localized post-Flood catastrophes, but the pervasive global distribution of whale fossils refutes this claim. Even secular research has shown that a massive global extinction event that involved many marine mammals occurred near the top of the Pliocene.<sup>13</sup>

#### **Monkey Fossils**

Another interesting group of mammals that further confirms a higher N-Q Flood/post-Flood boundary are monkeys whose fossils have been found across multiple continents. Both monkey and ape fossils appear suddenly in the geologic record. Monkey fossils of the same type have been found in the same Cenozoic rock layers of completely separate continents.<sup>14</sup> To account for these inconvenient data, evolutionists have actually claimed that monkeys rafted back and forth between Africa and South America on the open ocean.

While the monkey fossil data lend no support to ideas of monkey evolution, they do support that the Flood sediments extend through the Cenozoic. The reason we find monkeys and apes in Cenozoic strata is that they were buried late in the Flood with animals living at higher elevations. The monkeys lived in these more temperate ecosystems with other large mammals, birds, insects, and many angiosperm plant species. This explanation also supports the idea of these fossils being formed during the receding phase of the Flood as massive continental runoff occurred following the separation of continents from the original Pangaea supercontinent.

#### **Exotic Mammal Fossils**

Paleontologists recently discovered a fossil of a new type of extinct ferocious-looking mammal bigger than any lion or tiger living today.<sup>15</sup> This bizarre creature highlights the wide diversity of nowextinct large, exotic mammal species that were preserved as fossils in the sedimentary rocks of the Cenozoic deposited during the late stages of Noah's Flood. The newly found creature is classified as *Hyainailourine hyaenodont*, a group of creatures that are among the largest carnivorous land mammals known, although they aren't placed in the order Carnivora. This creature was even larger than a polar bear, with a skull as big as a rhinoceros and huge, piercing canine teeth. Despite the sharp teeth, these creatures lacked bonecrushing molars and were thought to do more tearing and shredding than grinding. Their paws lacked the rotational ability of cats' paws and were more wolf-like, as were their overall skeletons.

This hyaenodont fossil was recently discovered in the drawer of a museum. It had actually been dug up in Kenya over three de-



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cades earlier while researchers were studying fossil apes. The creature was found in early Miocene strata and is allegedly 22 million years old, according to evolutionary dating. As the secular story goes, "Hyaenodonts arose in Asia in the late Paleocene and quickly spread across the northern continents in the early Eocene."<sup>16</sup> The terms "arose" and "quickly spread" are evolution-speak, meaning that this unique group of creatures appeared suddenly all over the world with no evolutionary precursors. Like the other mammals, hyaenodonts were buried late in the Flood along with other creatures living at higher elevations in more temperate environments.

So, how do we put this new hyaenodont fossil discovery in the context of a creation model? And why aren't these large, ferocious animals roaming across Earth today? The Bible tells us that breeding pairs of various animal kinds were brought onto Noah's Ark then released after the Flood. Hyaenodonts (in some form) were likely among these creatures, but because in time their vicious and predatory nature represented a threat to humans—and especially livestock—they were likely hunted to extinction.

#### Early Flood Boundary Advocates Promote Implausible Physical Changes

Some fellow creationists promote a Cretaceous-Paleogene (K-Pg) post-Flood boundary lower in the sedimentary rock record. In doing so, they have extreme difficulty explaining the fossils and sediments of the Cenozoic and resort to untenable ideas of rapid saltational (abrupt, substantial mutational change) physical changes.<sup>17</sup>

As mentioned above, one of the major problems with this idea is that whale fossils have been found across the entirety of Europe and the coastal margins of nearly every major continental landmass and at the same stratigraphic levels, negating their supposed burial in localized post-Flood catastrophes. In addition, many first appearances of numerous plants and animals occur in Cenozoic sediments. Besides the obvious paleontological data, the data from extensive global megasequences clearly show that the Flood's depositional processes occurred on a global scale through most of the Cenozoic, also known as the Tejas Megasequence. Thus, evidence from both geology and paleontology debunks the notion of an early Flood boundary and hence the supposed necessity of both rapid saltation and numerous global post-Flood catastrophes.

#### Conclusion

In 1996, ICR founder Dr. Henry Morris stated, "The vertical order of the strata is thus primarily a function of vertical elevation of environmental habitat, and not evolutionary progress."<sup>18</sup> The paleontological evidence clearly shows that the diverse plants and mammals inhabiting higher elevations and more temperate ecological zones aren't just buried in Cenozoic Flood strata but also make their first appearances in these rocks with no previous evolutionary history.

Thus, when we combine the paleontology of the Cenozoic rocks with the vast amounts of sedimentary strata deposited therein, we not only have a sound case for refuting evolution but also show that the Flood record extends all the way to the top of the Neogene, close to the top of the Cenozoic layers. This model clearly confirms Dr. Morris' original prediction of the correlation of rock layers laid down during the Flood by ecological zonation rather than evolution—and more importantly reveals a Flood timeline that supports biblical creation and not the evolutionary model.

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# Claims of 100-Million-Year-Old Bacteria Unfounded

volutionary scientists recently claimed to have discovered bacteria that are 101.5 million years old. In 2010 researchers collected deep-sea sediment cores in the South Pacific as part of the Integrated Ocean Drilling Program, with the goal of examining seafloor life and habitability in one of the lowest-productive ocean areas. Sediment samples used in the analysis were taken from depths of up to 75 meters below the seafloor at several sites in water between 3,700 and 5,700 meters (12,100 to 18,700 feet) deep.<sup>1</sup>

Publishing in Nature Communications, Yuki Morono of the Kochi Institute for Core Sample Research, Japan Agency for Marine-Earth Science and Technology, and his colleagues added a special blend of nutrients to nearly 7,000 individual bacteria collected from the sediments. This food source contained a unique mix of carbon and nitrogen isotopes that allowed scientists to see if the bacteria were actively feeding.1 Coauthor Steven D'Hondt, a University of Rhode Island oceanographer, said of the bacteria, "We didn't know whether we had fully functioning cells or zombies capable of doing very few things."2

Within 68 days, the distinctive tracer isotopes began showing up in the bacteria cultures, indicating the bacteria were feeding on the nutrients. The bacteria also reproduced, "increasing total numbers by four orders of magnitude" during the study.<sup>1</sup>

The scientists found this truly amazing since the bacteria had been taken from mud trapped between layers of impermeable porcellanite, a microcrystalline variety of quartz that no microbe could penetrate.<sup>1,2</sup> This led the study's authors to suggest the microbes could be as old as the sediments they were found in, essentially having been trapped in a time capsule. Co-

#### article highlights

- Scientists found living bacteria encapsulated by sediment taken from deep-sea sediment cores.
- This led them to speculate that the bacteria were as old as the sediments themselves—100 million years, by their reckoning.
- The researchers' claim that the living bacteria were 100 million years old is based on their assumption of deep time, not on empirical science.
- In reality, the sediments and the bacteria they hold appear to be only thousands of years old.

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#### lin Barras of NewScientist observed:

Many biologists are unsettled by the idea that individual bacterial cells could survive for 100 million years. There have been a handful of claims for even older microbes on Earth. One team claimed in 2000 to have resurrected microbes trapped inside 250-million-year-old salt crystals, but some researchers suspect that the microbes were seen as a result of sample contamination, which is unlikely to be the case in the new study.<sup>2</sup>

Claiming that bacteria can survive trapped in sediment for over 100 million years seems like science fiction. And yet, scientists have found cells, proteins, and flexible blood vessels in dinosaurs and other animals dated by secular scientists at 66 to over 500 million years.<sup>3</sup> These discoveries question the great ages assigned to these creatures and instead suggest these fossils are just thousands of years old.

In light of these other fossil discoveries, there appear to be two possible solutions for these deep-sea bacteria: 1) the bacteria were not trapped for 101.5 million years, suggesting that there were fractures or conduits in the porcellanite that allowed bacteria to migrate in at a more recent date; or 2) these sediments and the bacteria found in them are not really millions of years old.

> Either one of these scenarios better explains the presence of living bacteria in deep-ocean sediments compared to the tale spun by secular scientists. However, the earlier discoveries of so many original proteins and cells found in so-called ancient rocks makes solution number two the most likely one.

These bacteria, if indeed trapped in sediment at the time of deposition, are only thousands of years old. The ocean sediments, and possibly the bacteria too, were deposited during the global Flood described in Genesis. Claiming these bacteria are over 100 million years old is not based on empirical science but on a secular, deep-time worldview.

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# Science vs. Falsely Called Knowledge

Guard what was committed to your trust, avoiding the profane and idle babblings and contradictions of what is falsely called knowledge—by professing it some have strayed concerning the faith. (1 Timothy 6:20-21)

he National Academy of Sciences (NAS) defines science as "the use of evidence to construct testable explanations and predictions of natural phenomena, as well as the knowledge generated through this process."<sup>1</sup> This definition suggests that evidence should be the foundation for science.

But exactly what is evidence? Depending on how it is used, evidence can be an equivocal concept. For example, one person can observe evidence like the geologic rock column and conclude it represents millions of years. But another person can observe the same rock column and conclude that sometime in Earth's past a catastrophic worldwide flood occurred, moving and depositing extremely large amounts of material into an extensive rock column.

Evidence, as legally defined, can and many times does depend upon how the observer interprets what is seen or measured. By leaving out the subjectivity wrapped up in evidence, the NAS definition makes science seem more objective than it often is especially when used to reconstruct past events.

As originally conceived by the founders of the scientific method in the 17th century, the scientific method established a process for evaluating the relative merits of explanations of observations and repeatable experimental data. This process consists of using observations and previously established scientific laws to construct hypotheses and/or models in order to explain and predict natural phenomena. If the hypotheses use reasonable assumptions and stand the test of time and repeatable experiments with no contradictory data appearing, then they can advance to the category of a theory of science, but they must be testable.

Like a hypothesis, if a theory stands

the test of time and rigorous repeatable experiments with no contradictory data, then it can eventually advance to the category of a scientific law. This is the hierarchy of ideas that the founders of the scientific method

#### article highlights

- Science can seem more objective than it often is since evidence can depend on how the observer interprets what is seen or measured.
- The scientific method established that scientific evidence must be observably testable, and every hypothesis must be both verifiable and falsifiable in order to achieve the status of a scientific theory.
- Secular humanists have largely hijacked science by equating science with naturalism and then pretending science can arbitrate truth.
- Despite being claimed as proven scientific models, Darwinian evolution and the Big Bang cannot be verified or falsified and thus constitute "falsely called knowledge."

established to explain natural phenomena. It was meant to institute order in the way we approach science and to avoid the deleterious effects of popular but indefensible models being accepted into science.

Science was never intended to be a great club wielded by any group with an agenda. Yet this is exactly what we observe in today's world. Secular humanists have largely hijacked science by equating science with a philosophy called *naturalism*;<sup>2</sup> then they pretend science can somehow arbitrate all truth.

It is easy to see the logic here. If science equals truth and naturalism equals science, then naturalism equals truth. However, science can only speak to natural phenomena, so the premises are flawed. Science has almost nothing definitive to say about history, morality, ethics, belief, religion, philosophy, or societal issues. In spite of this, naturalism, masquerading as modern science, has surreptitiously replaced ancient history by championing popular hypotheses such as Darwinian evolution and the Big Bang as proven models. These two ideas are not only in direct contradiction to the eyewitness account of Genesis, but each contradicts at least one known law of science.3

How should we as believers respond to this intrusion of "falsely called knowledge"? The scientific method as originally developed would maintain that any hypothesis/ model that clearly contradicts established scientific laws—or that lacks overwhelming observational and reproducible experimental data to support it—must be rejected.

We can be thankful for the blessings of technology that the scientific method has brought us, but we must reject Darwinian evolution and the Big Bang models. These hypotheses should be set aside not only because they contradict the clear testimony of Genesis, but also because they are falsely called knowledge. Some

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# HUMMINGBIRDS BY DESIGN

FRANK SHERWIN, M.A.

oologists have wonder and appreciation for the animals they investigate, whether the creatures fly through air, swim in water, or walk on land. Stanford University biologist Vadim Pavlov stated it best: "Animals are exciting sources of elegant engineering solutions in aero and hydrodynamics."<sup>1</sup>

This is certainly true regarding the hummingbird, an amazing feathered acrobat, tiny and fearless. Many scientists attempt to explain hummingbirds' profound innate engineering in Darwinian terms, but the evolutionists' own explanations reveal the flaws in their logic.

Of all the birds of God's creation, the hummingbird ("hummer") might be the most remarkable. Everything about these creatures shouts design.<sup>2</sup> Their little hearts can beat more than 1,000 times a minute, while their wings beat from 50 to 80 times a second. But evolutionists see hummingbirds as "diversifying and evolving over millions of years" and marvel that "evolution can take an animal to such extremes."<sup>3</sup>

Evolutionary theory maintains these tiny birds evolved from a non-hummingbird ancestor. According to a study led by UC Berkeley herpetologist Jimmy McGuire:

The branch leading to modern hummingbirds arose about 42 million years ago when they split from their sister group, the swifts and treeswifts. This probably happened in Europe or Asia, where hummingbird-like fossils have been found dating from 28-34 million years ago.<sup>3</sup>

#### article highlights

- Evolutionists' own words expose the inherent weakness of their arguments regarding hummingbird evolution.
- Hummingbird fossils look like hummingbirds living today, with no evidence of evolutionary ancestors.
- Hummingbirds were clearly designed from the beginning thoughtfully engineered with unique flight, sight, feeding, and metabolic capabilities.

But when we look at the fossil record, we find that hummingbirds have always been hummingbirds. An article in the *Journal of Ornithology* validates this:

A near-complete, partially articulated skeleton of a hummingbird was recently found in the menilite shales of the Polish Flysh Carpathians. The specimen is dated to the Early Oligocene [about 33 million years ago]. It shares derived characters [traits absent in the last common ancestor] with extant [living] hummingbirds and plesiomorphic characters with swifts.<sup>4</sup>

The same article also identified the Oligocene fossil "as a new species of the same genus [*Eurotrochilus*]."<sup>4</sup> In other words, the fossil was still very much a hummingbird. The journal *Science* also described "tiny skeletons of stem-group hummingbirds from the early Oligocene of Germany that are of essentially modern appearance and exhibit morphological specializations toward nectarivory and hovering flight." The paper referred to these as "the oldest fossils of modern-type hummingbirds, which had not previously been reported from the Old World."<sup>5</sup>

Evolutionists believe the hummer somehow evolved from Archosauria (class Reptilia), the group that includes crocodiles and alligators. However, the fossil record doesn't document this at all. The alleged common ancestor of hummingbirds remains unknown.

#### Hummingbirds and Flowers

Many are familiar with the relationship between the hummer and flowers they feed on and pollinate. These flowers seem uniquely designed to accommodate a hummingbird's beak and tongue, but did such a relationship evolve? A study published in *Integrative Organismal Biology* stated: "The fit between flowers and hummingbird bills has long been used as an example of impressive co-evolution."6

Yet co-evolution is hardly an impressive explanation because it isn't scientific. Two evolutionists describe co-evolution as being "caused by selection pressures" that each species somehow enacts on the other.<sup>7</sup> Selection pressure is supposedly exerted by the environment. But the environment can't apply pressure. Nature can't think and select—it just exists. For example, when it comes to bird vision switching between violet and ultraviolet wavelengths "in the course of avian evolution," it isn't surprising that evolutionary scientists admit "the selection pressures driving this switch are not well understood."<sup>8</sup>

God designed the hummingbird's bill and tongue to drink nectar from flowers many insects wouldn't be able to access. Just as hummingbirds have always been hummingbirds, we find that flowers (angiosperms) have always been flowers as God created them. They didn't evolve. Two separate published studies powerfully summarized the "mystery" of the origin of flowers. One stated: "The question of the structure and biology of the ancestral angiosperms, and especially their flowers, is an enduring riddle."9 The other study's lead author observed that "the discrepancy between estimates of flowering plant evolution from molecular data and fossil records has caused much debate."10

Most of us don't appreciate the complexity of what happens when a hungry hummer feeds from a flower or man-made feeder. High-speed filming and detailed anatomical studies revealed the birds are designed with a long, forked tongue that aids in *drinking biomechanics*. The tongue opens up when inserted into the flower, and the nectar is pumped up the tongue via two grooves. The hummer can do this up to 20 times per second.

Because of this speed, scientists realized the traditional explanation of nectar being drawn up by *capillary action* (the movement of a liquid in a narrow space caused by the surface tension of the liquid—adhesion and cohesion) was incorrect. It was wrongly assumed for almost two centuries that hummingbirds took in nectar by capillary rise loads. Although the hummingbird's amazing feeding mechanism has now been shown, evolutionists maintain that its tongue's abilities—no matter how complex—evolved. "Nectarivores [nectareating organisms], however, have evolved specialized tongues that function as their primary food-capturing device."<sup>11</sup> But "have evolved" isn't a scientific explanation. (The same article stated, "The tetrapod tongue

evolved.") Creationists assert that hummers, like woodpeckers, were designed with specialized tongues from the beginning.

Hummingbird feeding appears to be *irreducibly complex*—a phrase non-evolutionists use to explain the way in which a number of crucial parts must all work together for a structure or process to function. In this case, it starts with the tongue fitting the flower. According to a *New York Times* report on hummingbird tongue research:

The findings could affect thinking about how flowers and hummingbirds have evolved together, since the shape of the flower, the composition of the nectar and the shape and workings of the tongue *must all fit together for the system to work*<sup>12</sup>

Nectar taken into the hummingbird's body is immediately metabolized (burned)

for energy to power rapid wing strokes. Sugars are compounds rich in energy. Evolutionists say, "Whereas humans evolved over time on a complex diet, hummingbirds evolved on a diet rich in sugar."<sup>13</sup> But hummingbirds and people haven't evolved from ancient bird and human ancestors. It's far more accurate to say humans are *designed* to metabolize a complex diet, whereas hummingbirds are *designed* to metabolize a diet rich in sugar.

Because of their immediate energy needs, God designed hummingbirds to process the *monosaccharides* fructose and glucose with ease. When chemically hooked together, these make up the *disaccharide* sucrose, or table sugar. University of Toronto biologist Kenneth Welch stated:

What's very surprising is that unlike mammals such as humans, who can't rely on fructose to power much of their exercise metabolism, hummingbirds use it very well. In fact, they are very happy using it and can use it just as well as glucose.<sup>13</sup>

#### **Hummingbird Vision**

Hummingbird vision is also a marvel. The Creator designed hummingbirds with a color vision range that exceeds that of humans. This unique vision helps birds see nectar-producing plants, potential mates, predators, and objects within their range.

Recent research verifies this amazing fact. In addition to the three types of color cones humans have in their eyes, birds have one more. Not only are they sensitive to red, green, and blue light, they also can pick up on ultraviolet rays.<sup>14</sup> In a Princeton University news release, evolutionary biologist Mary Caswell Stoddard said:

Not only does having a fourth color cone type extend the range of birdvisible colors into the UV [ultraviolet], it potentially allows birds to perceive combination colors like ultraviolet+green and ultraviolet+red—but this has been hard to test.<sup>14</sup>

The release went on to state, "Stod-

dard and her colleagues designed a series of experiments to test whether hummingbirds can see these nonspectral colors," the results of which were published in the Proceedings of the National Academy of Sciences.14 And indeed, the hummingbird's fourth color cone type allows it to see colors we cannot even imagine! In their study, Stoddard's team reported:

Nonspectral colors are perceived when nonadjacent cone types (sensitive to widely separated parts of the light spectrum) are predominantly stimulated. For humans, purple (stimulation of blue- and red-sensitive cones) is a nonspectral color; birds' fourth color cone type creates many more possibilities.15

An earlier study conducted by the Washington University School of Medicine in St. Louis reported:

The researchers characterized the carotenoid pigments from birds with violet vision and from those with UV vision and used computational models to see how the pigments affect the number of colors they can see....The study also revealed that sensitivity of the violet/UV cone and the blue cone in birds must move in sync to allow for optimum vision. Among bird species, there is a strong relationship between the light sensitivity of opsins [a protein contained in vertebrates' visual pigment that determines the pigment's spectral sensitivity] within the violet/ UV cone and mechanisms within the blue cone, which coordinate to ensure even UV vision.16

Was such intricate design of these cones caused by chance and time or plan and purpose?

#### Hummingbird Communication

Hummingbirds vocalize using highpitched chirping. "Hummingbirds are a fascinating group of birds, but some aspects of their biology are poorly understood, such as their highly diverse vocal behaviors."17 Like their vision, these birds' vocalization is incredibly complex.

The predominant vocalization of black jacobins (Florisuga fusca) [a type of hummingbird]...consists of a triplet of syllables with high fundamental frequency (mean F0 ~11.8 kHz), rapid frequency oscillations and strong ultrasonic harmonics and no detectable elements below ~10 kHz. These are the most common vocalizations of these birds, and their frequency range is above the known hearing range of any bird species recorded to date, including hearing specialists such as owls. These observations suggest that black jacobins either have an atypically high frequency hearing range, or alternatively their primary vocalization has a yet unknown function unrelated to vocal communication. Black jacobin vocalizations challenge current notions about vocal communication in birds.17

#### Hummingbird Physiology

Animals can make physiological adjustments to slow down their metabolism, and this can affect body temperature. For example, hummingbirds do this on cold nights to save energy. A recent investigation added another layer to the astounding feats of these tiny marvels:

Researchers sought to learn more about several of the species of hummingbirds that live in the Andes in South America-a region that can get very cold at night in the summer. In this case, the researchers looked at species that survive at altitudes up to 3,800 meters above sea level....The researchers also found that one of the birds, a black metal tail, lowered its body temperature to just a few degrees above freezing-to 3.3 degrees C. This finding marked a record low body temperature for any nonhibernating mammal.18

The wonderful, created hummingbird is a miracle. Its specialized interaction with plants, visual color range, complex vocalization, and unique flight and physiological capabilities are a testament to God's living creation design. 🛸

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Quick and easy answers for the general science reader

creation q & a

# How Can You Refute

Darwinian evolution promotes a mantra that "all creatures great and small—natural processes made them all." Just one creature somehow became all others. Textbooks reassure students that some early fish turned into today's fish, as well as birds, turtles, and humans.

Does this match the real world? It's one thing to simply draw a line on a paper between two animals' pictures to express a belief that they're related, but how can we know for sure? One test offers a hard stop to evolution between basic kinds: all-or-nothing body systems.

Body parts integrate into body systems. Each part, and each piece that makes up that part, needs the right shape, size, and strength

of material to do its job. That's why brains aren't made of enamel but of interconnected nerves.

Some body parts can change a little and still allow the system to work. For example, human legs come short and thick or long and thin and every variety in between. But the imaginary process of transforming fish fins into human legs would leave the in-between creature either unable to swim or unable to walk. It would die, as would its evolution. Take enough of a fish's fins away on its supposed journey to land life, and it loses its ability to track down dinner before it *becomes* dinner.

I have a friend who cut off his pinky

article highlights

Osteichth

Sarcoplery

Actinopteryg

- Evolution teaches that all creatures on Earth somehow came from one initial creature.
- But fundamental differences between the body parts and systems of various creatures present far too great a gap for natural processes to bridge.
- A living creature's all-or-nothing systems cannot be significantly changed without killing the creature and ending its imaginary evolution.

ward their mammal-like destinations. The list of all-or-nothing body systems gets longer the more you look for them.<sup>1</sup>

H (DO

If the shift from one basic body form into another requires the loss of any vital body part even for a minute, then that shift would require a wholesale rebuild from the ground up. In other words, it would require creation. You can't change a fish into a person—or into a clam or squid—any more than you can install 29-inch wheels on a young child's bicycle.

finger by accident. He survives just fine with such a small change. He can no longer catch minnows out of his bait bucket with that hand, so he uses his other hand or gets help from a friend when fishing. But the changes needed to trace the supposed evolution of one of those minnows into my friend, one body part at a time, would kill the unfortunate fish. Just like man-made machines, body systems can only take so much change before they simply stop working. And body systems are vital.

At some point, nature would have to replace gills with lungs, leaving the creature unable to breathe. And that's just one necessary body-part change. That dead fish would still have a long way to go in becoming human, including replacing its two-chambered fish heart with a four-chambered heart. Once nature added two more chambers (and how would such mutants survive?), the animal would stop pumping blood while its arteries and veins migrated out of place toJust because someone draws lines that connect pictures of paramecia, piranhas, and people doesn't mean they evolved. Whoever makes such connections ought first to think through the insurmountable steps, like rewiring nerves, reprogramming cells, and replacing hundreds of genes. Each change that would kill the original creature—as mutations do today—represents an evolutionary impasse. How can you refute evolution? Just ask its defenders for examples of how nature rewires all-or-nothing body systems.

Neoplerygii

#### Reference

For example, researchers took decades to delete 6,000 genes in yeast cells, one pair of genes at a time. Of the 23 million strains they produced, 550,000 of them (representing as many pairs of genes) made the cells sick or dead. Charles Boone, senior author of this study published in *Science*, told *Quanta Magazine*, "The complete picture...clearly shows a beautiful hierarchical structure." See Greenwood, V. Giant Genetic Map Shows Life's Hidden Links. *Quanta Magazine*. Posted on quantamagazine.org October 25, 2016, accessed September 23, 2020. See also Costanzo, M. et al. 2016. A global genetic interaction network maps a wiring diagram of cellular function. *Science*. 353 (6306): aafl 420.

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# *Mayflower* Pilgrims, Simian DNA, and Straw Men

oth the Mayflower Pilgrims and biblical creationists are unjustly targeted for straw man vilifications using misleading, false accusations. A straw man fallacy occurs when a critic disagrees with someone based on an alleged fault or flaw-yet the opponent is not guilty of that alleged fault or flaw.1 Consider the difference: fighting and defeating a healthy human opponent versus beating up a lifeless scarecrow-like effigy of one's opponent (a straw man). Anyone can defeat a lifeless scarecrow.

However, defeating a living foe requires a true contest. Yet, critics often claim "fake fight" victories when they dishonestly defeat historical heroes they dislike. Fakefight victories are also claimed—on false pretenses—over Scripture by evolutionists who crow about disproving a scientific "claim" that biblical creationists never made in the first place.

We'll first look at how straw man mischaracterizations are dishonestly cast via sloppy history. Then we'll see how similar misreporting is used to mischaracterize real facts via sloppy science.

#### **Sloppy History**

Some accuse the *Mayflower* Pilgrims, who arrived at Plymouth exactly 400 years ago, of stealing the land of Native Americans. But this misrepresentation of the Pilgrims' history is inexcusably misreported. Actually, the Pilgrims settled on land that was intentionally abandoned by the nearby native tribes because that land was deemed cursed and haunted. Previous tribes who had lived there died of an unusual plague about three years before the Pilgrims arrived.<sup>2</sup>



Plymouth Plantation was thus settled on land rejected by local Indian tribes. To accuse the Pilgrims of "stealing" Native American land is an irresponsible failure to inspect actual historical truth. Accordingly, whoever denigrates the Pilgrims' settlement as somehow unethical is really condemning the faults of a straw man who never lived at Plymouth.

#### **Sloppy Science**

Some evolutionists assert that there is almost no difference between human DNA and simian (monkey/ape-like) DNA, insinuating that the Genesis creation account cannot be scientifically trusted. Suppose an evolutionist argues that genetics evidence clashes with the Genesis record, saying, "When compared to the chimpanzee, the two species [human and chimp] differ by as little as 1 to 2%"—that would be a straw man fallacy. Why? Because the actual difference between the human and chimpanzee genomes is at least 15%, so trying to "match" a 1 to 2% genomic difference with the biblical account will never line up.<sup>3</sup>

Instead, Genesis-affirming scientists expect less—though still some—genomic overlap between chimpanzees and humans because God designed humans and sim-

#### article highlights

- A straw man argument purposely distorts an opponent's argument in order to make it easier to attack.
- Such an argument is fallacious because it doesn't reflect the opponent's true position.
- Some falsely accuse the Mayflower Pilgrims of wrongdoing, but this ignores the real historical facts.
- Some claim creationists lack genetic evidence to corroborate Genesis, but this ignores recent empirical evidence that reveals genetic differences that align with the Bible.
- Beware of the logical fallacies commonly used in sloppy history and sloppy science.

ians to inhabit the same world, breathe the same air, eat many of the same foods, drink the same water, etc. But to imply that Genesis must "force fit" a genomic difference range of only 1 to 2% is to flippantly advocate a straw man argument when the real genomic difference is beyond 15%.<sup>3</sup>

Don't be fooled by the straw man logical fallacy of those who disparage the Pilgrims as you thank God for blessing America through their bravery 400 years ago. Likewise, don't be fooled by evolutionists who imply that human genotypes almost identically resemble chimpanzee genotypes—because Darwinists who promote such sloppy science are just unjustly monkeying with the facts.<sup>4</sup>

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e all have so much to be thankful for. Even after such a trying year, we must admit that God has been so very good to us. The Lord has not only shown us infinite mercy and grace by forgiving our sins, saving our souls, and promising us eternal life, He also "daily loads us with benefits" (Psalm 68:19). Truly, although wickedness and evil might rage around us, "the righteous shall be glad in the LORD, and trust in Him" (Psalm 64:10).

Such wonderful benefits also extend to our work at ICR. God has supplied for us in ways only He could and has greatly used our ministry to help countless others. I am reminded of this every time I review the notes and letters I receive. These are a great blessing to me personally, and like the apostle Paul, "I thank my God upon every remembrance of you" (Philippians 1:3). So, in thankful remembrance of those who have encouraged me, it's my joy to share a few of God's many benefits to ICR.

Consider these comments from a medical doctor in Alaska: "I was introduced to ICR through *Days of Praise*, the most excellent devotional I've ever encountered. The postage to AK is expensive, I know, so thank you for making them available. I place them out in the waiting room, and they often create opportunities to witness. Imagine my surprise to learn of ICR's focus on science—a real bonus!"

A radio listener and supporter in Ohio writes: "I've got no story...just a great respect for the courageous people of ICR. You stepped out with inspiration from God to create a museum debunking the bogus museums we were forced to go to as kids

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GALATIANS 6:9-10

22



#### highlights

- God provides for us even in difficult times, and we have much to be thankful for.
- He has protected ICR and allowed our ministry to thrive.
- Please come alongside us in prayer and support as we close out this year.

and [where we were] fed the lies about evilution. God bless you all!"

Speaking of the ICR Discovery Center, one of our talented filmmakers sent me this message on Facebook: "Congrats, Henry, on your first anniversary! I know how much effort and care you put into each and every aspect, and this was one of the best projects I've ever worked on. I hope I can get back down there before too long. Please relay my cheers to Dr. Morris III as well."

This encouragement came from an engineer and longtime supporter in New York: "I love ICR's ministry, one of the few I support. I grew up [in a mainline denomination] and struggled for years to find a solid church—they are filled with nice people but are weak and mostly 'dead.' ICR fed me during many lean years, for which I will ever be grateful."

Closer to home, a new friend from East Texas sent me this email: "I just wanted to add my thanks to you for making available the facilities of the Institute for Creation Research for [our] team to use. Not only was it a great place to meet, [but] the added benefit to tour your museum and see the dramatic productions was outstanding. You have done an excellent job presenting the pages of God's Word."

And finally, a retired educator and current trustor in Hawaii shared: "Just wanted to say that your September *Acts & Facts* article, 'One Generation Away,' was excellent. Great work. Such an important reminder for us all. Your financial management is also a great blessing to ICR. God's continued blessings on your work for Him!"

God is using ICR's ministry to reach and help people, often in ways we are unaware of. It is my prayer that these marvelous testimonies bless you as much as they did me and will encourage you to keep praying and supporting our work. As for me, when I

remember my blessings this Thanksgiving, I'll be thanking the Lord for you.

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

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My eternal life is owed to ICR. I was lost! [In] 2016, the science shared through ICR gave me truths I had been searching for most of my life. Thanks to you all in Jesus' name!

— D. W.

I just want to say I love ICR! I never liked science until you came to my hometown, presenting the historical and scientific reliability of Genesis and the Bible as a whole. I have been following your articles for about five years now. Because of your research and unwavering conviction in a literal Genesis, I am able to have a stronger confidence in my faith and a better understanding of ancient world history during college. While my "Christian" professors at a "Christian" university are teaching evolution and a symbolic Genesis, I'm steadfast in my young earth beliefs and praising God for creation. I haven't made it to the [ICR Discovery] Center yet, but I hope to someday soon.

— B. F.



You asked for feedback as to how we became acquainted with ICR. I was living in Salinas, California, and attending a Bible-believing church. In the early

1960s, my wife and I were invited to attend a pastors conference on creation in Clear Lake, California, by a professor from the San Francisco Theological Seminary who knew I had an extreme interest in creation. **The speakers at the confer**ence were Drs. Henry M. Morris and John Whitcomb. It was an outstanding and blessed week of education in expanding my knowledge of God's creation. I still have the green third edition of *The Genesis Flood* book I bought there. I have followed ICR over the years and have been blessed many times over in reading *Acts & Facts* and a number of books I have purchased, the last being *Carved in Stone.* 

— E. B.



It is an honor for me to support your work. I have always been interested in science, and I remember as a child I asked my mom: "How come the Bible says God created the world in seven days, but (science programs on TV) say it took millions of years?" My mother answered simply: "You know, the Bible says that for God, one day is like a thousand years, and a thousand years is just like one day for Him." I settled with that answer for years. At age 17, when I, after some time away from God, rediscovered Him and became a personal Christian, it meant a lot to me finding literature that could give a Bible-based foundation for my own belief in both God and in science, and I was lucky to find some books, written by Bible-believing scientists, that could explain some of the pitfalls in modern science regarding dating methods (C14) and Darwin's theory of evolution, etc., and that was eye-opening. So many "facts" are presented by modern science that are not facts but theories....I think it is great work that you do by presenting alternative explanations for many of the things that people today believe is the proven "truth." Science will not go forward unless it is challenged.

- K. S. (Norway)

Thank you for the valuable and crucial work that ICR produces. My family and I have been financial supporters over many years and count it all joy to do so. ICR is truly a bright light in a deluded and dark world. I routinely share with friends and family the excellent research and publications provided by ICR. So many people are pleasantly surprised (and thereby emboldened) to discover that an organization that systematically and scientifically defends the Genesis creation model exists.

— D. W.



In the September 2020 Acts & Facts on page eight, Dr. [Randy] Guliuzza said: "My view of science has probably come down, realizing that it can be abused, and my view of the Bible has gone up, recognizing that it really, really is accurate, and it is so full of wisdom that I just hold it in awe and respect." As a graduate chemist who came to know the Lord in his 30s, that has been exactly my own personal experience.

I can't express how pleased I am to see and read the article titled "Plants Model Continuous Environmental Tracking" in

your [September

— R. L.



2020 Acts & Facts] magazine. Botany is a passion, more like an obsession, of mine. I do believe it is one of the less explored scientific fields when it comes to creation science. That's to our shame since plants are such amazing organisms and God created them in the most perfect way. I hope to be able to read more in the future.

— Mrs. R.

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. We cannot review manuscripts, books, or other materials.

# **Gifts for Young Creationists**

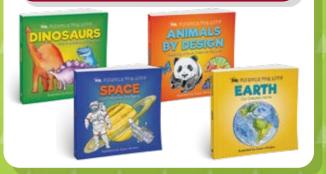
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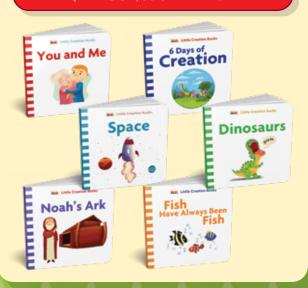


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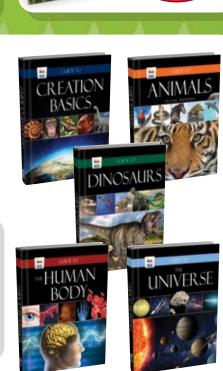
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