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JUNE 2009

VOL. 38 NO. 6



*Traveling down the
road to compromise*

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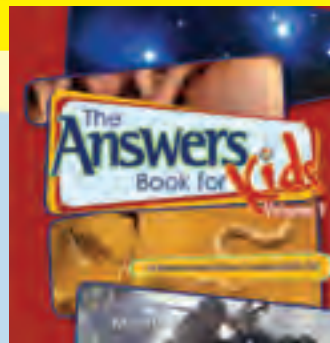
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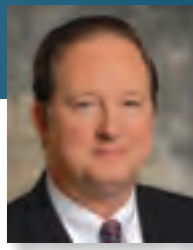
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Letting God Settle Matters

Philippians 4:7 promises that God will give us a peace that surpasses all comprehension. One of my professors in seminary described this as “a settled conviction.” It is certainty in the midst of chaos—a conviction that *He* has already settled the matter, and therefore I don’t need to be anxious.

Certainty is not simply a nice byproduct of prayer; it is a vital pillar of purposeful and productive living. Without certainty in something, life has no meaning; it becomes just a series of seemingly aimless reactions to supposedly random circumstances.

Those who name Christ as Creator, and His Word as accurate and authoritative, have obtained a measure of certainty at the most basic level of living. But those who doubt what the Creator did in the beginning, or that He really meant what He said in the Bible—which some evangelical leaders are now doing—have exchanged these most essential divine assurances for what amounts to human accolades, desiring the favor of men over the favor of God. As ICR founder Dr. Henry Morris describes in “Dangerous Turn Ahead,” traveling down the road to compromise only leads to a dead end.

ICR’s work in science and education for the past four decades has involved understanding, describing, and at times even defending these fundamental certainties, as we are now doing in the state of Texas.

Most *Acts & Facts* readers are aware that ICR recently filed suit in both federal and state courts regarding the unconstitutional actions of the Texas Higher Education Coordinating Board (THECB). Like Paul appealing to Caesar in Acts, ICR is seeking a fair hearing in order to obtain a nondiscriminatory review of our educational program. The outcome is firmly in the Lord’s hands.

Interestingly, there’s a lot of bizarre information circulating around the Internet regarding

these lawsuits. The most hilarious urban myths are from the blog site of a supposedly “practicing attorney” who boasts of a law degree from Harvard. Quite carelessly, this admitted atheist names the THECB attorneys as actually representing ICR; he fails to notice that ICR filed both federal and state lawsuits on the same day; and he failed to locate the official Texas bar information on ICR attorney Johnson, who has practiced federal litigation for most of his career. The atheist lawyer committed so many simple errors in his “analysis” of ICR’s legal battle that one feels sorry for the clients he represents in his own practice!

So, if you want accurate information about our actions, get updates at the ICR Press Room (www.icr.org/press), where we routinely post our official statements on this important matter.

But instead of drowning in Internet invectives and threats against ICR for its stand on science and the Bible, spend a few minutes each day interceding on our behalf, asking the Lord to thwart the schemes of the Enemy, as well as to allow ICR public opportunities to honor the Creator in the midst of our battle.

And looking forward, don’t forget to reserve your spot on our 2009 Yosemite Creation Tour, September 12-20. It’s a great time of year to visit this spectacular destination full of the wonders of God’s creation. Call our Tour Coordinator at 800.337.0375, or email tours@icr.org. Visit www.icr.org/yosemite for online details.

June marks the end of ICR’s fiscal year and the beginning of the lean summer months that many ministries experience financially. Your gift to the strategic ministries of ICR before June 30 will be of great encouragement as we look forward to implementing new projects designed to defend the accuracy and authority of the Bible, something that we’ve maintained since our founding nearly 40 years ago.

Lawrence E. Ford
EXECUTIVE EDITOR

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Traveling down the road to compromise

H E N R Y M . M O R R I S , P H . D .

Genesis 1:1 states, “In the beginning God created the heavens and the earth.” This is the first and foremost apologetic. If a person stumbles on this one profound truth, a lifetime of doubt and confusion lies ahead for him, full of uncertainty about the ultimate purpose for being alive. But when a Christian attempts to alter this ultimate statement of reality to fit the compromising philosophies of men—even scientifically-trained professionals—then woe to him for his unbelief and, even graver still, for teaching others that unbelief. The following article by the late Dr. Henry Morris, published some years back, contains a timeless warning about the failure of Christian scientists who compromise the truth. Today, the names of Christian leaders who advocate compromise in the Genesis record are different, but the precipice on which they stand is just as dangerous.

—LAWRENCE FORD, EXECUTIVE EDITOR

The basic conflict of the ages is between the two worldviews of evolutionism versus creationism. In its most explicit form, this conflict comes down to biblical revelatory creationism versus evolutionary humanism. The only book even *claiming* to deal authoritatively with this supernatural creation of the space/time cosmos is the Bible, and there the Creator personally inscribed His explicit summary of creation, as follows: “For in six days the LORD made heaven and earth, the sea, and all that in them is, and rested the seventh day” (Exodus 20:11; see also Exodus 31:15-18).

Evolutionary humanism, on the other hand, purports to explain the origin and development of the cosmos entirely by natural processes innate to the universe itself. In its current form, evolutionism says that the cosmos came into existence as an evolutionary accident, a “quantum fluctuation of some pre-existent state of nothingness.” From this remarkable beginning, it evolved through a stage of cosmic inflation, then explosive expansion and eventual formation of elements, stars, planets, animals, and people—all by natural evolutionary processes.

The road of compromise looks attractive

at first, but long experience has proved it to be a one-way street. The evolutionists at the end of the road are never satisfied until their opponents travel all the way to the atheistic void at its end.

Charles Darwin set the pattern. Starting out as a Bible-believing creationist, he first became enamored of Charles Lyell’s uniformitarianism and his “progressive creationism.” Soon he abandoned the Bible and creationism altogether, moving on into the domain of theistic evolutionism. Eventually he became an agnostic and finally an atheist.

Many others in his day followed this compromise road. Darwin’s chief opponents, in fact, were scientists, not the theologians of his day.

Despite abundant evidence to the contrary, it is widely believed that the church was a bitter opponent of evolution.¹

Whole denominations and their religious colleges and seminaries were teaching evolution during Darwin’s lifetime, and multitudes of more fundamental Christians were accommodating the evolutionary ages of geology by their “gap theory,” “local flood theory,” and other devices of artificial biblical exegesis.

But did such compromises ever persuade



the evolutionists to meet them half way? The present state of the schools and colleges and the intellectual community in general is the obvious answer.

Science and religion are dramatically opposed at their deepest philosophical levels. And because the two world views make claims to the same intellectual territory—that of the origin of the universe and humankind’s relation to it—conflict is inevitable.²

Despite the attempts by liberal theology to disguise the point, the fact is that no biblically derived religion can really be compromised with the fundamental assertion of Darwinian theory. Chance and design are antithetical concepts.³

Despite these lessons of the past, most modern Christians seem oblivious to the fact that all their different accommodational schemes were discredited a hundred years ago and that none of them ever budged the evolutionary establishment from its base of total naturalism.

A good modern example is found in the writings of Davis Young. As a beginning graduate student, Dr. Young originally believed in a literal six-day creation and flood geology. Under the guidance of his Princeton professors, however, he converted to “progressive creationism” and the venerable “day-age theory” of Genesis. This position he strongly advocated in two influential books.^{4,5} He did acknowledge, however, that the “natural” interpretation of Genesis, as well as the teaching of the early Christians and the Protestant reformers, was the *literal* interpretation. He had simply decided this had to be abandoned because of its supposed geological difficulties.

His progressive creationism did not even satisfy his theistic-evolutionary colleagues at Calvin College, however, let alone his geological peers at the secular universities. So how far was he willing to travel down this road?

I further suggest that both literalism and concordism have outlived their usefulness, and that these approaches should be abandoned for a newer approach that does not try to answer technical scientific questions with biblical data.⁶

By “literalism,” Young means taking the six days of creation as literal days and the flood as worldwide in geological effects, the position advocated by most scientific creationists. By “concordism,” he means any theory (gap theory, day-age theory, etc.) that attempts to develop a concordance between the creation record in Genesis 1 and the geological ages.

I suggest that we will be on the right track if we stop treating Genesis 1 and the flood story as scientific and historic reports.⁷

This approach is essentially that advocated by Christian “liberals” a century ago and now taught in most mainline seminaries.

Also consider the reception accorded the 48-page booklet *Teaching Science in a Climate of Controversy*, first published in 1986 by the American Scientific Affiliation (ASA) and distributed free to over 60,000 science teachers. The booklet accepts the geological ages and

The evolutionists at the end of the road are never satisfied until their opponents travel all the way to the atheistic void at its end.

much of evolution, but argues that the process was designed by God, advocating progressive creationism and/or theistic evolutionism as a compromise approach that should satisfy both creationists and evolutionists.

The response of the academic community was almost totally negative. Biologist William Bennetta edited a collection of essays “from leading evolutionists” reviewing the ASA publication, and they all attack it as viciously as they do the strict creationism of ICR.⁸ Lynn Margulis says:

The result is treacherous. Authentic scientific and didactic principles have been put to nefarious use, for the writers’ ultimate purpose is to coax us to believe in the ASA’s particular creation myth.⁹

Stephen Gould, Niles Eldredge, Douglas Futuyma, Michael Ghiselin, and others all contributed bitterly negative critiques to this collection of reviews. The anti-creationist Committees of Correspondence also came down hard on the booklet,¹⁰ followed by a rather plaintive response by Walter Hearn, one of the booklet’s co-authors, complaining that the ASA was merely trying to defend evolutionism against

the scientific creationists.¹¹

This is ironic. The compromising creationists are attacked as viciously as the strict creationists, by those with whom they are trying to compromise. And in the process, they are rejecting the plain teaching of the Word of God. Even the secular evolutionists can see this.

Cheer Number One goes to the creationists for serving rational religion by demonstrating beautifully that we must take the creation stories of Genesis at face value. . . . Many Christians have taken the dishonest way of lengthening the days into millions of years, but the creationists make it clear that such an approach is nothing but a makeshift that is unacceptable biblically and scientifically. . . . Creationists deserve Cheer Number Two for serving rational religion by effectively eliminating “theistic evolution.” . . . Creationists rightly insist that evolution is inconsistent with a God of love. . . . Three cheers, then, for the creationists, for they have cleared the air of all dodges, escapes, and evasions made by Christians who adopt non-literal interpretations of Genesis and who hold that evolution is God’s method of creation.¹²

The road of compromise, however attractive it seems, is a one-way street, ending in a precipice and then the awful void of “rational religion,” or atheism. Our advice is to stay on the straight and narrow road of the pure Word of God. ●

References

1. Glasson, F. 1983. Darwin and the Church. *New Scientist*. 99: 639.
2. Hall, N. K. and L. K. B. Hall. 1986. Is the War Between Science and Religion Over? *The Humanist*. 46: 26.
3. Denton, M. 1985. *Evolution: A Theory in Crisis*. London: Burnett Books, Ltd., 66.
4. Young, D. K. 1977. *Creation and the Flood*. Grand Rapids: Baker Book House, 188 pp. See especially pp. 19-25.
5. Young, D. K. 1982. *Christianity and the Age of the Earth*. Grand Rapids: Zondervan Publishing House, 217 pp. See especially pp. 44-48.
6. Young, D. K. 1987. *Scripture in the Hands of Geologists*, Part I. *Westminster Theological Journal*. 49: 6.
7. *Ibid*, Part II, 303.
8. Bennetta, W. J., ed. Scientists Decry a Slick New Packaging of Creationism. *The Science Teacher*. May 1987, 36-43.
9. *Ibid*, 40.
10. *Creation-Evolution Newsletter*. 1986. 6 (6): 3-9. Reviews by Robert Schadewald, William Bennetta, and Karl Tezer.
11. *Creation-Evolution Newsletter*. 1987. 7 (1): 16-19.
12. Mattell, Jr., A. J. 1982. Three Cheers for the Creationists. *Free Inquiry*. 2: 17-18.

Adapted from Dr. Morris’ article “The Compromise Road” in the March 1988 edition of *Acts & Facts*.

Dr. Morris (1918-2006) was Founder of the Institute for Creation Research



Werner Arber:

An Honest Evolutionist?

LAWRENCE E. FORD



Our September 2008 issue featured the article “Werner Arber: Nobel Laureate, Darwin Skeptic” by Dr. Jerry Bergman, a frequent contributing author.¹ While not labeling Dr. Arber a creationist, Dr. Bergman demonstrated to readers that this brilliant scientist has included God in his equation when considering the origin of life.

Although a biologist, I must confess I do not understand how life came about....I consider that life only starts at the level of a functional cell. The most primitive cells may require at least several hundred different specific biological macro-molecules. How such already quite complex structures may have come together, remains a mystery to me. The possibility of the existence of a Creator, of God, represents to me a satisfactory solution to this problem.²

While not an admission that God is Creator, Dr. Arber demonstrates a level of genuine intellectual honesty that other evolutionists are afraid to reveal.

In December, prodded by evolution activists here in the United States, Dr. Arber contacted ICR and kindly asked us to consider retracting Dr. Bergman’s characterization of him as a “Darwin Skeptic.” In a series of subsequent email exchanges with him, Dr. Bergman sought to address his particular concerns. A central issue was the definition of Darwinism. In one message, Dr. Arber wrote:

From my scientific point of view, the essential pillars of Darwin’s original publications are (1) the existence of phenotypic variants among members of a given species and (2) that populations of parental and variant forms are steadily submitted to natural selection: Those which can deal

best with the encountered living conditions are favoured.³

In a letter to ICR, Dr. Bergman indicated he has no problem with this definition, but cited the description of evolution Dr. Arber gave in his response statement to the September article:

Genetic variation [not mutations] is clearly the driving force of biological evolution. A number of different specific molecular mechanisms contribute to spontaneous genetic variation. Together with non-genetic elements specific gene products are thereby involved as variation generators and as modulators of the rates of genetic variation.⁴

Dr. Bergman commented that he would describe this process “as microevolution or variation within the Genesis kinds, as I noted in my original article.”⁵ He also agreed with Dr. Arber that “there is, so far, neither satisfactory scientific knowledge nor theory on the origin and early evolution of life on our planet.”⁴ A hypothesis regarding life’s origins that extrapolates from the present must necessarily rely on an *interpretation* of the research. Dr. Bergman wrote, “My conclusion...is that the weight of evidence, by far” supports the view that life was created by God.³

In a peer-reviewed article, Dr. Arber stated that “rather than being the result of an accumulation of errors, biological evolution may depend on a multitude of specific functions, as well as on a certain degree of intrinsic structural flexibility of biological molecules.”⁵

Dr. Bergman noted:

Arber then discussed several potential mechanisms that produce what he called

genetic evolution which actually produce only variation. This conclusion is important because it points to a source of variation that does not rely on chance, natural selection, mutations as does neo-Darwinism, but rather a built-in intelligently designed system that allows for rapid creationism of variation such as that which has been shown to occur after a severe genetic bottleneck such as a catastrophic flood.³

Although Dr. Arber indicates that he supports the neo-Darwinian theory of biological evolution, he has not rescinded his published statement that a Creator is a possible explanation for the origin of life. Dr. Bergman’s correspondence with him and review of the original materials supports the conclusions of the *Acts & Facts* article. Those who rely on macroevolution as the source of life stand on shaky ground because of the obvious design in molecular structures. Creationists, however, have no trouble finding an explanation—life was designed by God. ●

References

1. Bergman, J. 2008. Werner Arber: Nobel Laureate, Darwin Skeptic. *Acts & Facts* 37 (9): 10-12.
2. Arber, W. 1992. The Existence of a Creator Represents a Satisfactory Solution. In Margenau, H. and R. A. Varghese (eds.), *Cosmos, Bios, Theos: Scientists Reflect on Science, God, and the Origins of the Universe, Life, and Homo sapiens*. La Salle, IL: Open Court, 141-143.
3. Correspondence from Dr. Jerry Bergman to the Institute for Creation Research, March 23, 2009.
4. Arber, W. Statement on my view on biological evolution, December 9, 2008.
5. Arber, W. 1993. Evolution of Prokaryotic Genomes. *Gene* 135 (1-2): 49-56.

Mr. Ford is Executive Editor.

ICR EVENTS JUNE 2009

JUNE 1-6

Johnson City, TN – Biblical Worldview Student Conference
(J. Morris) 423.247.7341

June 14 & 17

Rapid City, SD – Genesis Presentation
(Guliuzza) 605.342.9000

June 25-27

Atlanta, GA – 2009 Annual Association of Classical & Christian Schools Conference
208.882.6101

June 26-27

Austin, TX – CHEACT 22nd Annual Home Educators Conference & Book Fair
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Discovering and Defending the Certainties of CREATION

HENRY M. MORRIS III, D.M.I.N.

For nearly 40 years, the Institute for Creation Research has conducted scientific research founded on two fundamental principles. The first is a bedrock belief that the biblical record is accurate and authoritative. The second is an unwavering commitment to research using sound science.

As our name implies, ICR's focus on research deals with origins, most aptly described in Genesis 1-11. The scientists working with ICR in its labs and on the field are men and women who are specially trained in the disciplines of geology, genetics, paleontology, astro/geophysics, astronomy, and other fields of science. Their work through the years has uncovered a multitude of evidence that supports the truth of the Genesis record, while at the same time confirming that the origins-by-accident story (a.k.a. evolution) cannot possibly be verified by sound scientific principles—and cannot be supported by the clear biblical text, either. If

the Bible is revelation from an omnipotent and omniscient God, then the biblical text must fit with the empirical information gained from His creation.

The certainty of this evidence—from DNA studies, from sedimentary flood geology, from radioisotopic research, from forensic paleontological analysis, etc.—is unmistakable from our viewpoint (as even well-known evolutionists have admitted through the years).

Certainty is an important part of what ICR research is all about. Our objective is not to claim that science can “prove” our total understanding of origins, but rather to discover through scientific research the evidence that demonstrates the validity of specific issues related to man's origins and development upon earth. Can we be certain about these issues?

♦ Can man live life based on a certain foundation that will accurately guide him on earth?

- ♦ Do human beings exist with certain absolute distinctives from other creatures?
- ♦ Can it be shown with certainty that creative design exists everywhere in the world around us, thus eliminating random chance as the primary developmental process?
- ♦ Does the animal kingdom display certain observable and creative differences between kinds that are explainable only by design?
- ♦ Is there evidence here on earth that demonstrates the existence of a certain and personal Judge over all creation?
- ♦ Can people know for certain that this Judge and Creator exists and desires a relationship with them?

These questions and more can be investigated and to some degree answered, but not from laboratory study alone. And that's why ICR research is unique, combining sound scientific principles and methodology with clear biblical exegesis and textual integrity.

Through our staff scientists, ICR's National Creation Science Foundation, and researchers in a wide variety of fields—archaeology, astronomy, biology, geology, history, paleontology, and theology—ICR is exploring the answers to questions about mankind and the world around him. The goal? To discover, understand, and formulate an apologetic that supplies all of us with a measure of certainty about who we are and what our purpose is in the lifetime God has granted us. If God's people are to be equipped to give an “answer to every man” who is interested enough to ask about the “hope that is in [us],” then we must be “ready” to do so when the questions come (1 Peter 3:15).

The work that fulfills the Genesis mandate (Genesis 1:28) involves understanding and managing the world God created, and acknowledging Him as Creator, Judge, and King, while resting in the certain hope that He exists and is a rewarder of those who diligently seek Him (Hebrews 11:6). With a reliance on God's authoritative Word and research based on sound science, ICR will continue to discover and defend the certainties of God's creation. ●

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



WATCH YOUR HEAD

C H R I S T I N E D A O

While the Institute for Creation Research is a ministry dedicated to serving believers all around the world, we also take care of our hard-working employees.

In April, ICR Director of Communications Lawrence Ford suffered a head injury after a fall in his Dallas home. While Mr. Ford was recovering, his communications team members took a moment to help “secure” his office.

Extra attention was given to the area

around the bookcase, since this item of furniture had been the culprit at the Ford household. Mr. Ford was in the process of changing fire alarm batteries when he slipped. He collided with the edge of a bookshelf, incurring an eight-inch laceration across the upper part of his forehead that required 21 staples to close.

In order to provide extra protection, the ICR staff also secured corners and edges of desks, tables, and shelves with professional-grade bubble wrap for maximum protection

against any future furniture mishaps—in the office at any rate.

Mr. Ford was in good spirits when he returned to duty the following week. He continues to mend and especially appreciates the gift of a hard hat signed by ICR staff members. It now sits on his desk, serving as a reminder to exercise caution, as well as a remembrance that his life is precious to us.

Ms. Dao is Assistant Editor.



Breath of Life

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

In American football, the quarterback can hand off the football to a team member, who then may do a handoff to another player. Exciting plays may be put together that combine several handoffs and even a pass downfield to an awaiting player who, hopefully, carries the ball to the goal.

The handoff is a great idea that was used long before football came along. In fact, it is a key factor in the human respiratory system. There, the “goal” is to take molecules of oxygen gas (O_2), “hand them off” to all body tissues, and then transfer carbon dioxide gas (CO_2) out of those tissues back to the atmosphere. Intelligent players move a football, but the human body accomplishes its handoffs with unthinking molecules that use the laws of nature and the same physical components to move the gases both ways.

Natural Handoffs

Recall that breathable air is about 78 percent nitrogen, 21 percent O_2 , and the remaining gases—including CO_2 —are less than 1 percent. The combined weight, or force, of these gases pushing on a surface is called its *pressure*. Oxygen itself contributes a “partial” pressure of 21 percent of the total. In the human body, the amount of O_2 is highest in the lungs, so the pressure of O_2 in lungs is greater than in muscle. (Muscle tissue is used here to represent all tissues in a person’s body.)

Why is this important? Because the human respiratory system utilizes a principle of nature that gas *exchanges* go from places of high pressure to low pressure—that’s one way a handoff is done.

The respiratory system also exploits two other natural phenomena. Some gases will dissolve in liquids, just like CO_2 does in a can of soda. Gases may dissolve easier in certain liquids. How easily a gas dissolves in a liquid is

called its *solubility*. Moving liquids transport the dissolved gas, but under the right conditions they let the gas escape—which is another type of handoff.

Finally, some tissue molecules “like” to grab and hold gases. How strongly they bind them is called the molecule’s *affinity* for that gas. When one low affinity tissue turns over a gas to a high affinity tissue, a third type of handoff happens.

Partial Pressures

The normal conditions in the atmosphere *compared* to those inside the body are such that the pressure of O_2 in the air is higher than in lungs, which is higher than in blood, which is higher than in muscles. Oxygen is handed off on each step from areas of high to low pressure. Muscles “burn” sugar molecules for energy best using O_2 , which results in CO_2 as waste. Carbon dioxide gets pushed out of the body from high to low pressure, since CO_2 pressure in muscles is higher than in blood, which is higher than in lungs, which is higher than in a normal atmosphere.

Based on earth’s concentrations of atmospheric gases, it just “happens” that the body’s concentration of O_2 as a combustion source and CO_2 as a waste product are able to take advantage of the principle of *partial pressures*. However, at every step the *speed* of exchange is vital, and key molecules made in the body enable the handoffs to go extremely fast—fast enough to support life.

Hemoglobin Carries Oxygen

The components of blood are essential for life. Blood is made up mostly of a liquid called *plasma*, which carries red blood cells. Plasma is mainly water, but O_2 is poorly soluble in water. If humans relied on dissolved O_2 in the water portion *alone* to supply the body, a person’s

resting heart rate would need to be 1,050 beats (contractions) per minute even if it could pump the same volume of blood with each beat as under normal conditions (which it cannot).

The problem is solved with a molecule packaged within red cells called *hemoglobin*, which rapidly binds and transports 99 percent of all O_2 . Hemoglobin consists of four protein-*heme* subunits. Heme holds an iron atom that helps bind O_2 and thereby turns bright red. Thus, one hemoglobin carries four O_2 molecules.

Hemoglobin’s performance is optimized not only by its components, but also by its shape. Surprisingly, once the first O_2 molecule is bound, hemoglobin continuously changes shape so the rate of loading for each remaining O_2 molecule is a *faster* rate than the one before it. At rest, every minute the heart will pump over one gallon of oxygen-saturated hemoglobin via red cells to active tissues that are constantly in need of a fresh supply.

Oxygen Offloads to Muscle

Oxygen-holding proteins in muscle are called *myoglobin*. Myoglobin wants O_2 and, in fact, its shape lends naturally to an even higher affinity for O_2 than hemoglobin. So O_2 moves from blood to muscle just as it’s needed.

But the environment in muscle tissue actually accelerates the offloading of O_2 . How? First, high CO_2 concentrations actually force a faster *release* of O_2 . The attraction for O_2 is high due to a very low partial pressure of O_2 . Then once again, unloading the first O_2 molecule induces hemoglobin to change shape, so the rate of O_2 unloading gets progressively faster.

Removing Carbon Dioxide

Transport of CO_2 back to the lungs fulfills two life-sustaining functions: offloading a deadly waste product, and helping to keep the inter-

Who would have thought that a few principles of nature like solubility and partial pressures would be so important for life? The Lord Jesus Christ did!

nal acid-base conditions in perfect balance so other biochemical processes can happen. Water will combine with CO₂ in red cells to form carbonic acid, which is almost immediately pushed into plasma as a (+) hydrogen ion and a (-) bicarbonate ion. These form a huge pool of ions that can be finely tuned to keep body pH in a tight range.

However, water and CO₂ naturally combine too slowly under normal conditions, thus requiring days of reaction time. That problem is solved by an enzyme in red cells called *carbonic anhydrase* that completes the reaction—going both ways—in a fraction of a second.

Alveoli Gas Exchanges

Every *minute*, 25 billion red cells move through lung tissues, so gas exchange speeds are again crucial. Each cell can spend only 0.75 second in units called *alveoli* where exchanges take place.

Engineers that design structures to exchange heat or gases know that the central factors are the total surface area and the properties of the medium. If the surface area for all alveoli in lungs was flattened out, it would cover the floor of about a 960-square-foot house with a membrane that has about the thickness of a human hair. (For an average adult, this is 40 times the total surface area of his skin.)

The natural pressure difference from atmosphere to lung is high for O₂, but lower for CO₂, resulting in different exchange rates—but an equal quantity of these gases *must* be swapped. It just “happens” that the solubility of CO₂ in plasma *and* alveolar fluids is 20 times higher than O₂, which is just right to compensate for the pressure differences. So, equal amounts of these gases are exchanged in less than 0.25 second—leaving over 0.5 second to spare.

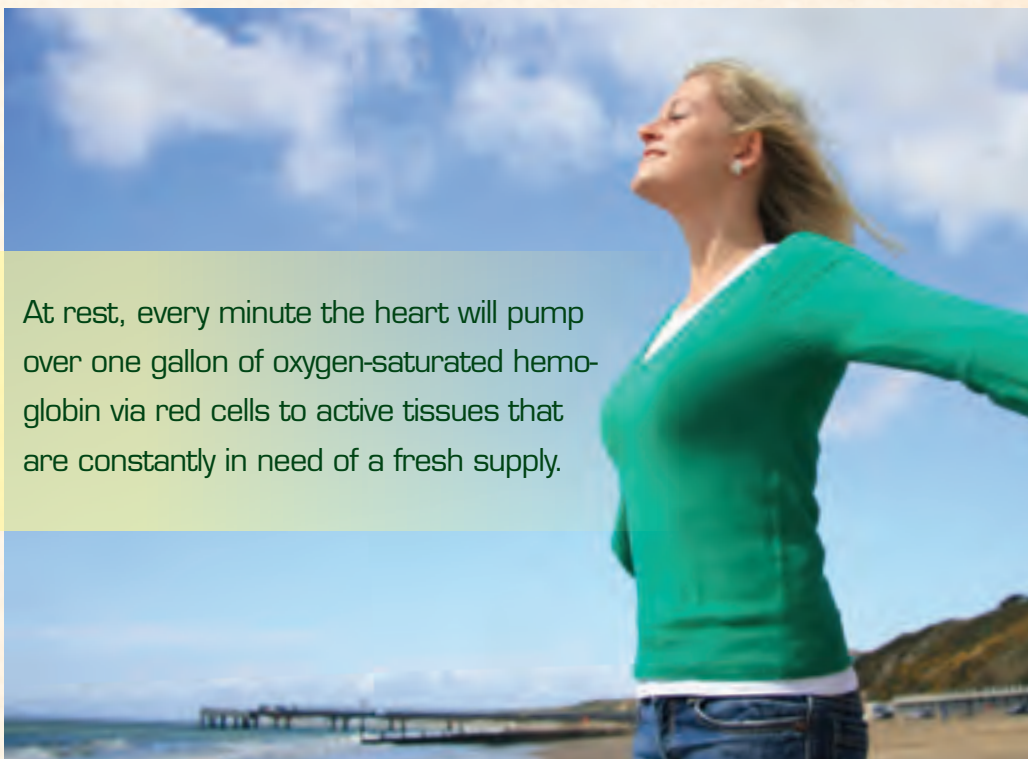
Fetal Hemoglobin

Astute readers may protest, “I can see how the gas exchanges from blood to tissue because of the different conditions involved. But a baby forming in the womb uses the placenta to exchange gases from the mother’s *blood* to the baby’s *blood*. Mom and baby’s red cells will

is better suited for life outside the womb. The transition is finished in about four months.

Conclusion

Who would have thought that a few principles of nature like solubility and partial pressures would be so important for life? The Lord



At rest, every minute the heart will pump over one gallon of oxygen-saturated hemoglobin via red cells to active tissues that are constantly in need of a fresh supply.

bind O₂ and CO₂ *equally* well. Blood-to-blood exchanges will fail and the baby will die from lack of O₂.”

Not if the baby in the womb has a *different kind* of blood from his mother! Amazingly, the baby’s *fetal* hemoglobin has a higher affinity for O₂ (and several other things) than mom’s. So gases do exchange properly. Once born, genetic switches for hemoglobin production within bone marrow will automatically “turn off” for fetal and “turn on” for the adult kind—which

Jesus Christ did! He crafted the essential enzymes, hemoglobin, membranes, blood vessels, muscles, and dozens of other tissues necessary to utilize those principles. *All things* definitely work after the counsel of His own will, just as the Bible says (Ephesians 1:11). ●

Dr. Guliuzza is ICR’s National Representative.





Human-Chimp Similarities

Common Ancestry or Flawed Research?

J E F F R E Y T O M K I N S , P H . D .

In 2003, the human genome was heralded as a near-complete DNA sequence, except for the repetitive regions that could not be resolved due to the limitations of the prevailing DNA sequencing technologies.¹ The chimpanzee genome was subsequently finished in 2005 with the hope that its completion would provide clear-cut DNA similarity evidence for an ape-human common ancestry.² This similarity is frequently cited as proof of man's evolutionary origins, but a more objective explanation tells a different story, one that is more complex than evolutionary scientists seem willing to admit.

Genomics and the DNA Revolution

One of the main problems with a comparative evolutionary analysis between human and chimp DNA is that some of the most critical DNA sequence is often omitted from the scope of the analysis. Another problem is that only similar DNA sequences are selected for analysis. As a result, estimates of similarity become biased towards the high side. An inflated level of overall DNA sequence similarity between humans and chimps is then reported to the general public, which obviously supports the case for human evolution. Since most people are not equipped to investigate the details of DNA analysis, the data remains unchallenged.

The supposed fact that human DNA is 98 to 99 percent similar to chimpanzee DNA is actually misleading.

The availability of the chimp genome sequence in 2005 has provided a more realistic comparison. It should be noted that the chimp genome was sequenced to a much less stringent level than the human genome, and when completed it initially consisted of a large set of small un-oriented and random fragments. To assemble these DNA fragments into contiguous sections that represented large regions of chromosomes, the human genome was used as a guide or framework to anchor and orient the chimp sequence. Thus, the evolutionary assumption of a supposed ape to human transition was used to assemble the otherwise random chimp genome.

At this point in time, a completely unbiased whole genome compar-

ison between chimp and human has not been done and certainly should be. Despite this fact, several studies have been performed where targeted regions of the genomes were compared and overall similarity estimates as low as 86 percent were obtained.³ Once again, keep in mind that these regions were hand-picked because they already showed similarity at some level. The fact remains that there are large blocks of sequence anomalies between chimp and human that are not directly comparable and would actually give a similarity of 0 percent in some regions. In addition, the loss and addition of large DNA sequence blocks are present in humans and gorillas, but not in chimps and vice versa. This is difficult to explain in evolutionary terms since the gorilla is lower on the primate tree than the chimp and supposedly more distant to humans. How could these large blocks of DNA—from an evolutionary perspective—appear first in gorillas, disappear in chimps, and then reappear in humans?

Analyzing the Source of Similarity

So how exactly did scientists come up with the highly-touted 98 to 99 percent similarity estimates?

First, they used only human and chimp DNA sequence fragments that already exhibited a high level of similarity. Sections that didn't line up were tossed out of the mix. Next, they only used the protein coding portions of genes for their comparison. Most of the DNA sequence across the chromosomal region encompassing a gene is not used for protein coding, but rather for gene regulation, like the instructions in a recipe that specify what to do with the raw ingredients.³ The genetic information that is functional and regulatory is stored in "non-coding regions," which are *essential* for the proper functioning of all cells, ensuring that the right genes are turned on or off at the right time in concert with other genes. When these regions of the gene are included in a similarity estimate between human and chimp, the values can drop markedly and will vary widely according to the types of genes being compared.

The diagram in Figure 1 illustrates how a gene is typically repre-

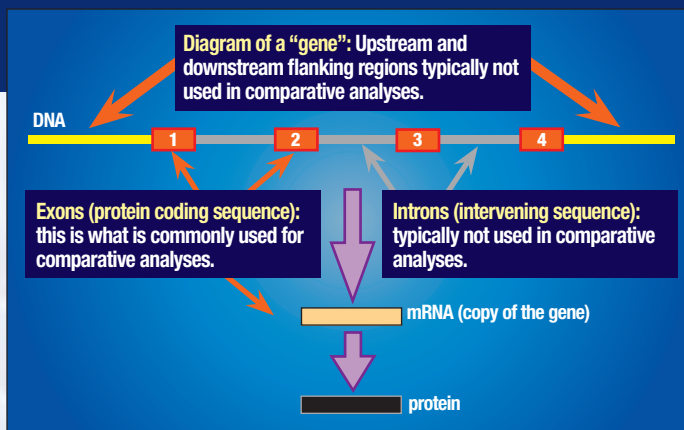


Figure 1. Simplified model of the linear layout of a gene on a chromosome. Most of the sequence is non-coding, used to regulate protein production. Evolutionary scientists have used only the coding portion of a gene for comparative analyses, which in this case would just be the *exon* blocks 1-4 in orange. The remaining sequences—supplying critical information that specifies when, why, how much, and how often the coding region is to be transcribed into RNA—are regularly *omitted* from sequence comparisons.

sented as a portion of a chromosome. As indicated, there is considerably more non-coding sequence ahead of the gene, within it (“introns”), and behind it. The 98 to 99 percent sequence similarity estimates are often derived from the small pieces of coding sequence (“exons”). Other non-coding sequences, including the introns and sequences flanking the gene region, are often omitted in a “gene for gene” comparative analysis. The critical importance of the non-coding sequences in the function of the genome was not well understood until recently, but this does not excuse the bias of the “98 to 99 percent similarity” claim.

Another important factor concerns the potential for variants of the same protein to have *different* functions that can perform different tasks in different tissues. There is now no doubt that gene or protein sequence similarities, in and of themselves, are not as significant as other functional and regulatory information in the cell. Unfortunately, evolutionary assumptions drove a biased approach of simple sequence comparisons, providing few answers as to why humans and chimps are obviously so *different*.

Interestingly, current research is confirming that most of what makes humans biologically unique when compared to chimps and other animals is how genes are controlled and regulated in the genome. Several studies within the past few years are demonstrating clear differences in individual gene and gene network expression patterns between humans and chimps in regard to a wide number of traits.^{4,5} Of course, the largest differences are observed in regard to brain function, dexterity, speech, and other traits with strong cognitive components. To make the genetic landscape even more complicated, a number of recent studies are also confirming that close to 93 percent of the genome is transcriptionally active (functional).⁶ Not so long ago, scientists thought that only 3 to 5 percent of the genome that contained the protein coding regions was functional; the rest was considered “junk DNA.”

Conclusion

So what is an appropriate response to the assertion that a 99 percent similarity exists between human and chimp DNA, and thus proves common ancestry?

One can simply say that the whole genomes have never really been compared, only hand-selected regions already known to be similar have been examined, and the data is heavily biased. In fact, due to limitations in DNA sequencing technology, researchers do not even have the complete genomic sequence for human or chimp at present. In the sequence that they do have, much more analysis needs to be done.

Here are a number of key points that counter the evolutionary claims of close human-chimp similarity:

- The chimp genome is 10 to 12 percent larger than the human genome and is not in a near-finished state like the human genome; it is considered a rough draft.
- When large regions of the two genomes are compared, critical sequence dissimilarities become evident.
- Extremely large blocks of dissimilarity exist on a number of key chromosomes, including marked structural differences between the entire male (Y) chromosomes.
- Distinct differences in gene function and regulation are now known to be a more significant factor in determining differences in traits between organisms than the gene sequence alone. Research in this area has clearly demonstrated that this is the case with humans and apes, where marked dissimilarities in expression patterns are evident.

It is clear that the only way to obtain extreme DNA-based similarity between man and chimpanzee is to use comparative analyses that are heavily skewed by an evolutionary bias where one picks and chooses what data or what part of the genome to use. At present, the DNA sequence differences between these genomes clearly indicate a much lower level than 98 to 99 percent. In fact, one evolutionary study suggests it may be as low 86 percent or less. In addition, the complex functional aspects of genes and their regulatory networks differ markedly between humans and chimps and play a more important role than DNA sequence by itself.

The DNA data, both structural and functional, clearly supports the concept of humans and chimps created as distinct separate kinds. Not only are humans and chimps genetically distinct, but only man has the innate capacity and obligation to worship his Creator.⁷ ●

References

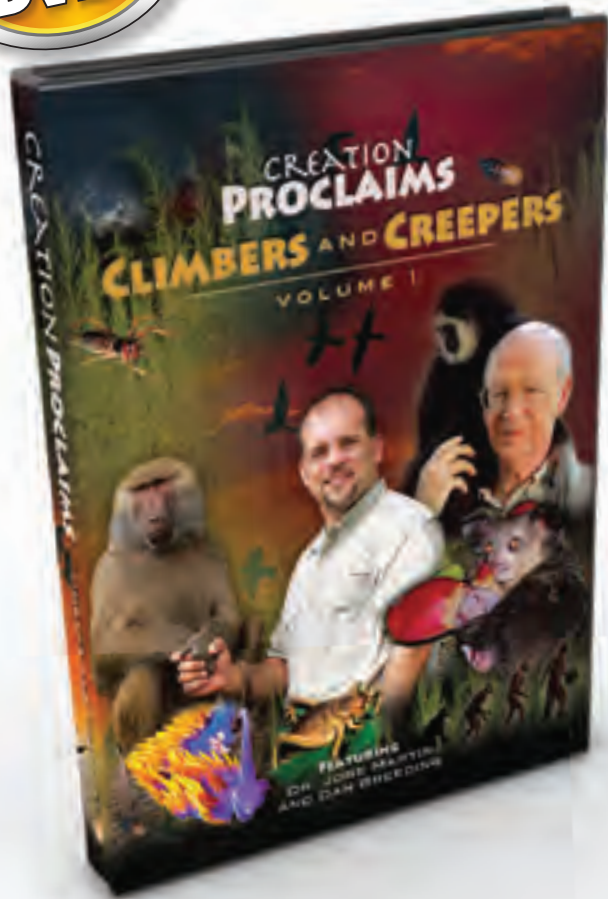
1. International Human Genome Sequencing Consortium. 2004. Finishing the euchromatic sequence of the human genome. *Nature*. 431 (7011): 931-945.
2. The Chimpanzee Sequencing and Analysis Consortium. 2005. Initial sequence of the chimpanzee genome and comparison with the human genome. *Nature*. 437 (7055): 69-87.
3. Anzai, T. et al. 2003. Comparative sequencing of human and chimpanzee MHC class I regions unveils insertions/deletions as the major path to genomic divergence. *Proceedings of the National Academy of Sciences*. 100 (13): 7708-13.
4. Calarco, J. et al. 2007. Global analysis of alternative splicing differences between humans and chimpanzees. *Genes & Development*. 21: 2963-2975.
5. Cáceres, M. et al. 2003. Elevated gene expression levels distinguish human from non-human primate brains. *Proceedings of the National Academy of Sciences*. 100 (22): 13030-13035.
6. The ENCODE Project Consortium. 2007. Identification and analysis of functional elements in 1% of the human genome by the ENCODE pilot project. *Nature*. 447 (7146): 799-816.
7. Criswell, Daniel. 2006. What Makes Us Human? *Acts & Facts*. 35 (1).

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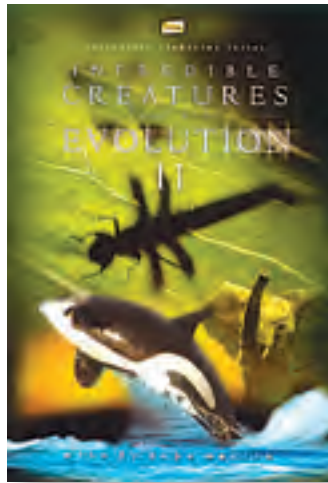
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Evolution, the concept that each type of animal arose from some other sort of animal, faces many daunting challenges. Among the more difficult hurdles for evolution to clear is the formation of turtles from non-turtles, and the development of snakes from non-snakes. Darwin was fascinated by them both, and openly wondered what path they took on their evolutionary journey. Turtles and snakes are reptiles—along with lizards, plesiosaurs, crocodiles, and pterodactyls,



to name a few others. The wide variety of unique design observed in reptiles argues for the purposeful design of all.

Consider the slow-moving turtle. Turtles are quite different from other creatures, yet there is no difficulty in recognizing them or their fossils, which are easily preserved. Their hard upper shell (the carapace) and their hard lower plate (the plastron) resist decay and are easily recognized even when shattered. No other reptile has anything even comparable that potentially could have been modified to produce such a dominant feature. One paleontology textbook states, “The first true turtles made their appearance by the late part of the Triassic period, by which time they were far advanced along the lines of adaptive radiation typical of modern turtles.”¹

Suggested transitional forms have not been found. From what other reptile could they have possibly evolved? Or did they

evolve separately from an even more different amphibian? Predictably, no such proposition can be supported by any fossil evidence.

This should be an excellent test case for evolution. The signature features are so easily fossilized, so recognizable, and so

as they habitually burrowed underground. Where is the evidence to support such a story? Why would natural selection select for the loss of a useful structure?

Turtles and Snakes: No Evolutionary Journey

JOHN D. MORRIS, PH.D.

different from any other earlier creature that surely transitional forms would be found if they ever existed. Such forms are, however, nowhere to be found. Evolutionary theory loses another one.

Snakes are equally mysterious. They are placed in the same order as lizards and are thought to have evolved from them, having lost their legs along the way. They are quite different from lizards, however, with a greatly extended vertebral column, sometimes with several hundred vertebrae. There are no forelimbs in any snake, and in only a few snakes are found rudimentary hind limbs, tiny features used in copulation.

Obviously, the differences between snakes and lizards are great, and if one evolved from the other we would expect to see some fossil evidence. It is not sufficient to simply tell the story, as is common, that selection pressures caused the snakes to lose their legs



Paleontologist Michael J. Benton claimed that snakes “are believed to have arisen from ‘lizard’ ancestors, but the nature of those ancestors is a mystery.”² There are thousands of

fossils of snakes, and many thousands of fossils of lizards. “Unfortunately, the fossil history of the snakes is very fragmentary, so that it is necessary to infer much of their evolution from the comparative anatomy of modern forms.”³ Once again, the assumption of evolution negates the need for evidence and ignores the lack of evidence.

It seems that the fossil record fits the idea that the God of the Bible created each basic type of animal “after their kind”⁴ not very long ago, just like we read when we go “Back to Genesis.” ●

References

1. Colbert, E. H. and M. Morales. 1991. *Evolution of the Vertebrates*. New York: John Wiley and Sons, 216, as cited in Gish, D. T. 1995. *Evolution: The Fossils Still Say No!* El Cajon, CA: Institute for Creation Research, 113.
2. Benton, M. J. 2005. *Vertebrate Palaeontology*. Malden, MA: Blackwell Science, 244.
3. Colbert and Morales, *Evolution of the Vertebrates*, 223, as cited in Gish, *Evolution: The Fossils Still Say No!*, 112.
4. Genesis 1:25.

Dr. Morris is President and Director of Research.

No Seal of Approval for EVOLUTION



FRANK SHERWIN, M.A.

The recent discovery of an incomplete northern Canadian fossil is causing waves in certain evolutionary circles.¹ Some scientists claim that *Puijila darwini* is a flipper-free pinniped (a group that includes walruses, sea lions, and seals) that is supposedly a long sought-after Darwinian transition between a land and freshwater animal. But although a BBC headline proclaimed it a “missing link,” this status is made doubtful by the article’s uncertain verbiage. Terms such as “probably,” “very likely,” “suggest,” “hint,” “apparently,” “may have,” and “appears to have” are used to describe this animal and its characteristics. It is also important to note that a third of this fossil is missing.

The story stated that *Puijila* holds “the secret of seal evolution in its feet.” But when it comes to those critical feet, the author said only that they “were probably webbed.” The article also suggested that this “proto-seal would have walked on land and swum in fresh water”—but isn’t that, with minor variation, what seals do today? The Baikal seal (*Pusa sibirica*) is a freshwater seal and the Caspian seal (*P. caspica*) lives in brackish water.

Mary Dawson of the Carnegie Museum of Natural History said, “*Puijila* is the evolutionary evidence we have been lacking for so long.” However, this questionable evidence will no doubt go the way of other false starts in the evolutionarily-interpreted fossil record. It is significant that Dawson admitted there really are gaps in the fossil record (as maintained by non-evolutionists ever since Darwin). Indeed, prior to this dubious discovery, there was (and non-Darwinists maintain, still is) a massive gap between land animals and pinnipeds.

Co-researcher Natalia Rybczynski of the Canadian Museum of Nature presupposed evolution when she said, “It also provides us with a

glimpse of what pinnipeds looked like before they had flippers.” Evidently Rybczynski considered macroevolution (descent with modification) to be a foregone fact—and then looked for evidence to verify it. This is not how objective science should be conducted.

The article stated that before the discovery of *Puijila*, “the most primitive fossil pinniped was a creature called *Enaliarctos*” but this assertion is open to serious question. One evolutionary text discusses “the almost complete skeleton” of *Enaliarctos* (an undoubted pinniped), but does not include a picture or illustration showing the “numerous anatomical characters that indicate its derivation from terrestrial canoid ancestors.”² Although evolutionist Michael Benton called *Enaliarctos* a fossil pinniped, he said only that *Enaliarctos* “retains some features of its terrestrial bear-like ancestors” and then went on to mention the “simplified” teeth.³ Creationists maintain that *Enaliarctos*, like *Puijila*, was a pinniped variety—not a transition. After all, from the fragmentary evidence that exists, *Puijila* had the same features as other pinnipeds—no new features are apparent.

The BBC story concluded, “Darwin forecast the transition from land to sea via fresh water in his seminal work *On the Origin of Species*, published 150 years ago this year.”⁴ Darwin’s predictions are still unfulfilled. According to Benton, “It is hard to imagine how [great blue whales and dolphins] evolved from terrestrial mammal ancestors, and yet that is what happened.”⁴ Paleontologist Edwin Colbert stated what creationists have been saying for decades—whales have always been uniquely designed (“adapted”) as whales and appear abruptly in the fossil record.

Like the bats, the whales appear suddenly in early Tertiary times, fully adapted by profound modifications of the basic mammalian structure for a highly specialized mode of life. Indeed the whales are even more isolated with relation to other mammals than the bats; they stand quite alone.⁵

The pinnipeds are a unique type of marine carnivore designed by the Creator to live in an aquatic environment, with no compelling evidence for any sort of evolutionary background. ●

References

1. Black, R. ‘Missing link’ fossil seal walked. *BBC News*. Posted on news.bbc.co.uk April 22, 2009, reporting research published in Rybczynski, N., M. R. Dawson, and R. H. Tedford. 2009. A semi-aquatic Arctic mammalian carnivore from the Miocene epoch and origin of Pinnipedia. *Nature*. 458 (7241): 1021-1024.
2. Colbert, E. H. 2001. *Colbert’s Evolution of the Vertebrates*. New York: Wiley-Liss, 387.
3. Benton, M. J. 2005. *Vertebrate Palaeontology*. Malden, MA: Blackwell Publishing, 352.
4. *Ibid*, 342.
5. Colbert, *Colbert’s Evolution*, 392.

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Fossilized Biomaterials

Must Be Young



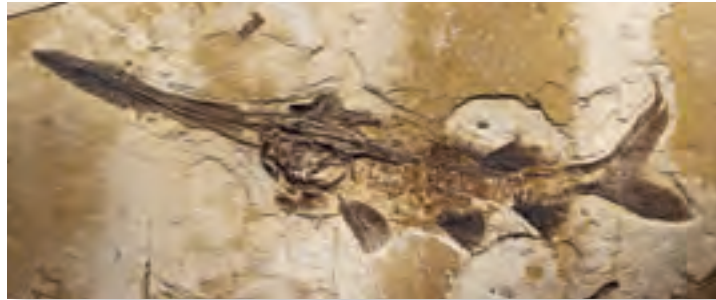
BRIAN THOMAS, M.S.

Institute for Creation Research scientists documented several clock-like processes in rocks during the groundbreaking Radioisotopes and the Age of the Earth (RATE) project, confirming an age of 6,000 years.¹ Remarkably, they found helium—an atom that diffuses rapidly out of rocks and into the atmosphere—trapped in granites, and carbon present in deep diamonds and coal, which should not be possible if they were formed millions of years ago.

Fossil-containing rocks with original animal material add decisive evidence for a young earth. Researchers have uncovered biological molecules like proteins, DNA, and pigments from rocks that are supposedly millions of years old. Laboratory studies on many of these materials indicate that they will only survive thousands, not millions, of years.

DNA is particularly prone to decay, yet ancient fossil “plants, bacteria, mammals, Neanderthals, and other archaic humans have had short aDNA sequences identified.”² Such remnant DNA should not be able to last more than 10,000 years.³ Just as finding the phrase “cell phone” in a reputedly ancient stone inscription would immediately identify it as a fraud, finding a ribosomal gene in bacteria supposedly 250 million years old causes deep suspicion of its assigned age.⁴

Bones are often fossilized through mineral replacement. However, *soft* bone and other original biomaterials are continually being discovered. For example, some “fossil” material is actual collagen protein from the original animal. Since laboratory studies have consistently shown that even well-preserved



collagen should turn to dust in 30,000 years, these fossils must be much younger than conventional dating indicates.⁵ One mummified (not fossilized) hadrosaur that was examined in a Discovery Channel special in September 2008 is not made of scattered collagen fibers, but whole tissues—in fact, its whole body—are still intact! Dubbed “Leonardo,” its skin pattern and stomach contents are discernible, making it “unquestionably one of the most unexpected and important dinosaur discoveries of all time.”⁶ But its startling preservation was only “unexpected” by those who believe that Leonardo is 77 million years old.

The most striking examples of biomaterials that defy old-earth thinking are ancient bones that even have blood vessels. Dinosaur soft tissues have been reported since 1987, but Mary Schweitzer found fresh *T. rex* femurs in 1991 and 2000, and a hadrosaur femur with blood cells in 2009. She told *Science* in 1993, “It was exactly like looking at a slice of modern bone. But, of course, I couldn’t believe it. The bones, after all, are 65 million years old. How could blood cells survive that long?”⁷

Some scientists reject experimentally-derived knowledge of molecular decay rates, just so they can uphold the “millions of years” dogma. For example, a *BBC News* discussion of Brazilian fossilized melanosomes, tiny pigment-containing cells from ancient bird feath-

ers, noted that “somehow [the melanosomes] are retained and replaced during the preservation process and hence you preserve a very lifelike representation of the color banding.”⁸ These melanosomes are a mystery to evolutionary thinking, since they should have been chemically converted

to simpler molecules by now, particularly if the fossils are over 100 million years old.

Extra-biblical evidence demonstrating a young earth continues to mount. “Vast eons” are exposed as only a belief that is becoming increasingly difficult to hold. Adherents must maintain it against all odds, though, because to admit that the world is young is to permit the God of the Bible to invade their lives. ●

References

1. Vardiman, L., A. A. Snelling, and E. F. Chaffin, eds. 2005. *Radioisotopes and the Age of the Earth, II: Results of a Young-Earth Creationist Research Initiative*. El Cajon, CA: Institute for Creation Research; and Chino Valley, AZ: Creation Research Society.
2. Criswell, D. 2006. How Soon Will Jurassic Park Open? *Acts & Facts*. 35 (6).
3. Sykes, B. 1991. The past comes alive. *Nature*. 352 (6334): 381.
4. Vreeland, R. H., W. D. Rosenzweig, and D. W. Powers. 2000. Isolation of a 250 million-year old halobacterium from a primary salt crystal. *Nature*. 407 (6806): 897–900.
5. “In bones, hydrolysis [breakdown] of the main protein component, collagen, is even more rapid and little intact collagen remains after only 1–3x10⁴ [10,000 to 30,000] years, except in bones in cool or dry depositional environments.” Bada, J., X. S. Wang, and H. Hamilton. 1999. Preservation of key biomolecules in the fossil record: current knowledge and future challenges. *Philosophical Transactions of the Royal Society B: Biological Sciences*. 354 (1379): 77–87.
6. Unveil the “Holy Grail” of Paleontology in *Secrets of the Dinosaur Mummy*. Discovery Channel. Posted on discovery.com, accessed April 2, 2009.
7. Morell, V. 1993. Dino DNA: The hunt and the hype. *Science*. 261 (5118): 160.
8. Fossil feathers reveal their hues. *BBC News*. Posted on news.bbc.co.uk July 8, 2008, accessed April 2, 2009.

Mr. Thomas is Science Writer.



MORE THAN STAR STUFF

DAVID F. COPPEDGE

Carl Sagan famously said “we are all star stuff” in his 1980s TV series *Cosmos*. The stuff theme stuck. Lawrence Krauss wrote in *New Scientist* for February’s Darwin Bicentennial that we should all “celebrate evolution as only star children can.” He said, “Since the days of Galileo, astronomy has established a fundamental connection between humans and the cosmos. We have learned that ‘star stuff’ and ‘earth stuff’ have the same elemental composition. The very atoms in our bodies come from the stars.”¹

Logically, the statement is reversible. One could say that stars are made of human stuff. But evolutionists don’t want the statement to be commutative. They want to teach a one-way progression from Big Bang to stars to man to mind. Why not teach it the other way? Mind first, then a plan, then the creation of a diverse array of living and nonliving phenomena, all sharing the same basic atomic structure.

The star stuff metaphor commits the fallacy of reductionism. It is like saying the Constitution is earth stuff. Reductionism distracts attention from the most important properties of an object. We think of the Constitution for its political philosophy, not its atoms of ink on paper. The outstanding features of human nature are not the carbon, hydrogen, oxygen,

and other elements that make up our physical bodies, but rationality, morality, aesthetics, and spirit. God breathed the breath of life into Adam to make him a living soul. A soul is not star stuff.

Krauss could not sustain his reductionist doctrine. In the *New Scientist* article, he launched into a crusade:

[T]he intimate connections between humanity and the entire cosmos, as illustrated by both evolution and astronomy, suggest that the only sensible perspective of humanity is a global one. The need for a global perspective is of vital importance now, as we are the first generation in history that must seriously confront global limits to our future on Earth, from energy to climate change.¹

Star stuff suggests no such thing. Krauss just appealed to morals. Here is another logical fallacy, a non sequitur (Latin, “it does not follow”). How did “sensible perspective” and “vital importance” emerge from atoms? Krauss followed this statement by saying that “science raises the human spirit.” Now he smuggled in spirituality and science (knowledge).

If anything is “suggested” by the linkage of our bodies to star stuff, it is the fundamental ability of intelligence to organize materials, and the inadequacy of atoms alone to describe the mind. Stars have a simple structure defined by physical laws. We, however, can order and direct our material bodies by our minds.

When someone says you are star stuff, ask if a computer is star stuff, too, or a car, or a book. Yes, we have stuff, but we are not *mere* stuff. “For he knoweth our frame; he remembereth that we are dust” (Psalm 103:14)—yet He took on human form and died to save us. The dry bones in Ezekiel’s vision were just stuff until God organized them into an army (Ezekiel 37:3). Even then, they were merely organized stuff until God’s Spirit breathed life into them.

Christians can choose to order their “stuff” toward a star-like goal: “And they that be wise shall shine as the brightness of the firmament; and they that turn many to righteousness as the stars for ever and ever” (Daniel 12:3). ●

Reference

1. Krauss, L. Celebrate evolution as only star children can. *New Scientist*, February 24, 2009.

David Coppedge works in the Cassini Program at the Jet Propulsion Laboratory. The views expressed are his own.



The Calendar and the Antiquity of Genesis

BILL COOPER, P.H.D., T.H.D.

The moon orbits the earth every 29.5 days or so, and the year is (roughly) 365.25 days in length. It is an untidy arrangement that makes alignment of the lunar and solar calendars virtually impossible.¹ How much simpler it would have been had God, at the creation, decreed that the year should be 360 days and the lunar month 30 days in length.

Evidence shows that God so ordained it at the beginning. The lunar year consisted of 12 months of 30 days' duration, equaling exactly the solar year of 360 days. Only after the Flood did the two calendars drop out of line with each other, necessitating numerous calendar reforms which even today have not resolved the problem.

But how can one possibly know that the pre-Flood year consisted of 12 equal months of 30 days? Today's lunar calendar doesn't consist of 12 equal months. Nor does the solar calendar. Today's lunar months are alternately 29 and 30 days, making the lunar year one of just 354 days, 11 days or more short of the present solar year. Is there evidence that the pre-Flood lunar calendar did not contain this aberration?

The evidence is found in the book of Genesis. The writer notes two specific calendar events: the exact day on which the fountains of the deep were broken up and the windows of heaven were opened (7:11), and the exact day on which the waters abated (8:3-4). The im-

portance of this information is this: The Flood began on the 17th day of the 2nd month (7:11), and was over by the 17th day of the 7th month (8:4). That makes 5 months of 30 days duration each, which Genesis stresses by adding the day-count of 150. Five months in the "modern" (ac-

or Persia (6th-5th centuries BC), as modernists claim, it would have used the intercalationary calendar of Babylon and Persia, which, like the Jewish calendar, would certainly not have measured five months as 150 days.

Besides, the post-exilic Jews always named the months after the Babylonian fashion and would have used those names in any "edited" account. Genesis doesn't. It merely numbers the months in accordance with pre-Babylonian usage. Illustrated is an Assyrian lunar calendar (which names the months) from circa 1800 BC. It still works, but measures the post-Flood lunar year as 354 days. The Flood account in Genesis pre-dates its manufacture.

In other words, this part of Genesis was written before the effects of the Flood—the sudden slippage between lunar and solar time and so on—began to be observed and measured.² Thus, the calendar portrayed in its first chapters is a further evidence of the antiquity of Genesis. ●

References

1. Even when we try, the arrangement is never perfect. The lunar month divides into the solar year roughly 12.4 times (being about, but never exactly, 11 days short of the present solar year). It doesn't get any better when we compare solar and lunar time with sidereal time, in which the fixed stars appear to go round the earth not once every 24 hours like the sun, but every 23 hours 56 minutes and 4 seconds, a slippage of nearly 4 minutes a day!
2. "[T]he great Flood of Noah's day forever altered Earth's systems....With the fountains of the great deep relocating a huge volume of liquid, moving continents, possible asteroid bombardment, etc., shifting the location of much mass, the length of the day, the length of the year, and the tilt of the axis could have all changed." Morris, J. 2005. In the Early Earth, Were All the Months Exactly Thirty Days Long? *Acts & Facts*. 34 (12).

Dr. Cooper, historian and author, resides in England



tionally ancient) Jewish calendar would have been either of 147 or 148 days' duration, depending on whether the 5-month period began on a 29-day or a 30-day month.

The fact that Genesis uses here a pre-intercalationary calendar is a most important indication of its antiquity. Had Genesis been written during or after the Jewish exile in Babylon

LETTERS TO THE EDITOR

Our society is, as you well know, so critical of people that stand firm on the absolute truth of God's Holy Word. Sometimes it is hard to maintain a strong faith in Creation when one is being assaulted from every angle by atheistic Darwinism. Thank you so very much for arming me with solid information so that I can intelligently answer the critics.

—J.H.

Recent comment from a college student on Facebook: "I love ICR—I am currently going to school to be a science teacher, and their publications are unlike any other. They inspire me to learn more about everything, teach everyone what I have learned, and most importantly, praise the Lord for what He has given us!"

I have thought so many times I should donate to the Institute for Creation Research and then forgot about it. Here is a very small donation—but it's something. I would be sad if you went "under" because of lack of funds.

—M.S.

Thanks for developing this great [web]site! I am beginning an outdoor education program for our Christian camp. I am so blessed to have found you....The information you provide will provide a valuable resource in the development of the curriculum.

—D.T.

Dear Fellow Creationists, thank you for *Acts & Facts* and *Days of Praise*. I read the magazine several times before passing it on. Several friends also obtain much from your publication. Then it is given to our local library. I am a low income widow who walks daily with our Lord....Please thank those who generously give so that those (like me) may gain from your publications.

—G.W.

Thanks for making this devotional available via email. One year ago we moved to the Philippines as missionaries and I was missing your *Days of Praise* after reading them for many years.

—S.&M.P.

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



This month on "Science, Scripture, & Salvation"

WEEKEND OF JUNE 6

All That Glitters

Eureka! The gold rushes of the 1800s and 1900s were exciting times in history, but even more exciting than the finding of gold was the geological event that made it accessible to miners. Get your burro, canteen, and pick, and come with us as we "prospect" for information about gold and discover the connection between Noah's Flood and the mother lode!

WEEKEND OF JUNE 13

Haeckel's Theory and Dr. Spock

For over a hundred years, a major evolutionary fraud involving fake drawings of human and animal embryos has been deceiving society. Although these pictures have been proven wrong both biblically and scientifically, they are still used as evidence for human evolution. Just how much damage has this fraudulent scheme caused? The answer will surprise you.

WEEKEND OF JUNE 20

Evolution and the Movies

So many movies and TV shows today not only feature evolution, but flaunt it as pure fact. Although this is nothing new for Hollywood, it seems to be getting worse. Why is this happening, and what effect does it have on our culture? Why does Hollywood put such a positive emphasis on evolution and cult religions? Don't miss this intriguing discussion!

WEEKEND OF JUNE 27

Animal Rights and Evolution

Oftentimes Christians are misunderstood and accused of being wasteful and destructive when they stand up against animal rights groups and extreme environmental views. God has given man dominion over creation and we're commanded to be wise stewards of it, but when evolutionists put animals on the same level as humans, both people and wildlife suffer. How is this so? Tune in to find out more!

To find out which radio stations in your city air our programs, visit our website at www.icr.org. On the radio page use the station locator to determine where you can hear our broadcasts in your area. You can also listen to current and past *Science, Scripture & Salvation* programs online, so check us out!

The Crown of Fatherhood

HENRY M. MORRIS IV

Holidays honoring parents have become official only in the 20th century, even though somewhat similar recognitions were customary in ancient times. Father's Day in particular was not officially recognized as a national American holiday until 1972, after acceptance slowly grew from its initial observances in the early 1900s.

Biblically, it is surely fitting to have special days to express love and gratitude for our parents. After all, the fifth of God's Ten Commandments begins, "Honour thy father and thy mother" (Exodus 20:12), and was further affirmed and even strengthened through the apostle Paul when, in honoring and obeying our parents, we are promised "it may be well with thee, and thou mayest live long on the earth" (Ephesians 6:3).

So this month as we celebrate fatherhood, it is fitting to ask: What does it take to be worthy of such honor? Biblically speaking, Christian fathers are exhorted to "train up" (Proverbs 22:6) their children in an environment of "nurture and admonition of the Lord" (Ephesians 6:4), which naturally begins with the father's own commitment to godly leadership and godly living.

Perhaps the greatest incentive for godly living is the example fathers set for their own children. From King Solomon we know that "children's children are the crown of old men; and the glory of children are their fathers" (Proverbs 17:6). Therefore, children do indeed receive "glory" from their fathers and should desire to follow in their footsteps, especially with reference to their moral and spiritual examples.

One of the many joys of fatherhood is not only to have children, but, Lord willing, to see one's grandchildren as well. Most honorable men will also work hard to be able to leave an inheritance to their children and, through them, to their grandchildren. "A good man leaveth an inheritance to his children's children" (Proverbs 13:22).

Circumstances may not make it possible for fathers or grandfathers to leave a material estate to their descendants. Therefore, promises such as these must ultimately be understood in the spiritual sense. Even a poor man can leave a goodly inheritance—an inheritance of love and con-

cern and a godly life. The greatest of all gifts to pass on to your children, of course, is to lead them to saving faith in their Creator, the Lord Jesus Christ. This most precious heirloom will last forever.

So in this sense, even men who are biologically childless can have spiritual children as they witness for Christ. Paul, for example, could call Timothy "my dearly beloved son" (2 Timothy 1:2), and he could remind the believers at Corinth that "I have begotten you through the gospel" (1 Corinthians 4:15). Then, what further joy is ours when someone we have led to Christ begins to lead still others to Him! These become our spiritual "children's children" in the great family of God, and such spiritual grandchildren constitute a most beautiful "crown" of fatherhood!

Through the years, the ministry of ICR has equipped countless multitudes of fathers and grandfathers (and mothers and grandmothers, too!) with the tools necessary to lead their families in a godly manner. Perhaps our work has personally touched you in this manner, or, like me, you have had the tremendous privilege to "glory" in the inheritance passed on by a godly father and grandfather. If so, ICR prayerfully invites your help to ensure that the work for our ultimate heavenly Father will continue. ●

Mr. Morris is Director of Donor Relations.



“Argument weak at this point. Thump podium and holler louder!”

This cliché is quoted derisively from time to time to demonstrate that all arguments have presuppositional beginnings that are logically and empirically “weak.” Every idea, all religions (belief systems)—even scientific theories—have foundational concepts that are unprovable by physical means and intellectual acumen.

This is so commonly understood and widely accepted that we rarely think about this ubiquitous condition. Everybody believes in something. Even the atheist believes that there is no God; there is certainly no way to “prove” such a concept. All men and women have faith that their particular presuppositions provide an adequate basis for their actions and lifestyles.

That broad set of presuppositions is also known as a worldview.

Dallas Willard relates a concept in his book *Divine Conspiracy* that he occasionally uses in his classes:

In our culture one is considered educated if one “knows the right answers.” That is, if one knows which answers are the correct ones. I sometimes joke with my students at the university where I teach by asking them if they believe what they wrote on their tests. They always laugh. They know belief is not required. Belief only controls life.¹

Belief controls life. Now that piece of wisdom is important!

Jesus said it this way:

A good man out of the good treasure of his heart bringeth forth that which is good; and an evil man out of the evil treasure of his heart bringeth forth that which is evil: for of the abundance of the heart his mouth speaketh. (Luke 6:45).

Belief controls life. Ideas have consequences.

- 💡 What you *believe* determines what you think.
- 💡 What you *think* dictates what you do.
- 💡 And what you *do* dominates your life.

In 1981, Francis Schaeffer wrote *A Christian Manifesto* as a response to a “new” Humanist Manifesto. As he opened his critique of the humanist’s thinking, Dr. Schaeffer noted the fundamental “change in the overall way people think and view the world and life as a whole. This shift has been *away from* a world view that was at least vaguely Christian in people’s memory (even if they were not individually Christian) *toward* something completely different—toward a world view based upon the idea that the final reality is impersonal matter or energy shaped into its present form by impersonal chance.”²

Ideas Have Consequences

HENRY M. MORRIS III, D.M.I.N.



This wholesale shift in thinking has so permeated the evangelical church that *most* Christians struggle with the concept of an almighty, omniscient Creator to whom they must answer one day. The pervasive *symptom* of this change in thinking is the shift away from *trusting* the revealed Word of God as an absolute source of truth from the God who cannot lie (Titus 1:2).

Many evangelical churches believe that the Bible may “contain” truth, but that one can no longer be certain of its authority, accuracy, or applicability. Science has supposedly rendered the early chapters of Genesis either useless as history or downright deceptive. Scholars have uncovered so-called “new” secrets about the Lord Jesus and about the Bible. Famous preachers, politicians, and celebrities loudly proclaim allegiance to Jesus, only to be exposed in some scandal that would embarrass the heathen.

We have come far—but certainly not in the right direction! What, then, is the possibility or the potential for righteous correction?

Wherewithal shall a young man cleanse his way? by taking heed thereto according to thy word. With my whole heart have I sought thee: O let me not wander from thy commandments. Thy word have I hid in mine heart, that I might not sin against thee. (Psalm 119:9-11)

May the heart of the great Creator, whose word spoke the heavens into existence, draw us this day into a certainty about His *inspired* word of truth. ●

References

1. Willard, D. 1998. *The Divine Conspiracy: Rediscovering Our Hidden Life in God*. San Francisco: HarperSanFrancisco, 317.
2. Schaeffer, F.A. 1981. *A Christian Manifesto*. Westchester, IL: Crossway Books, 17-18.

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

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