

# Creation Matters

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## From the Appalachians to the Keys: An Update on the Florida Gravels

by Carl R. Froede Jr., B.S., P.G.

**F**or uniformitarians, Earth history is drawn directly from their geologic timescale. From this philosophical perspective, sediments are assigned a stratigraphic position consistent with modern depositional environments. Problems arise where geologic materials and the purported paleoenvironment(s) fall outside accepted expectations. Such is the case with Pliocene quartz sand and gravel deposits derived from the Southern Appalachian Mountains and transported southward over 650 miles all the way to the Florida Keys (Figure 1).

A diluvial perspective has already been presented and the interested reader can review Froede (2006) for additional information (Figure 2). This article provides an update documenting a new naturalist interpretation that downplays the physical condition of the sediment and emphasizes the conceptual framework.

### A new story

Several questions have been raised by naturalists regarding the Pliocene siliciclastics extending across the Florida peninsula:

- 1) Why did sediments cross the Suwannee Strait and then move southward across the relatively flat Florida peninsula?
- 2) What energy was necessary to transport flattened pebbles (Figure 3) as channel bed load?
- 3) Was there transport by longshore drift or prograding deltas?

A new article claims to resolve these issues through "...multiple sedimentary compartments (coastal plain, river deltas, coastlines, karst entrapment basins, and ultimately the open marine shelf and slope) and invoking multiple sedimentary transport

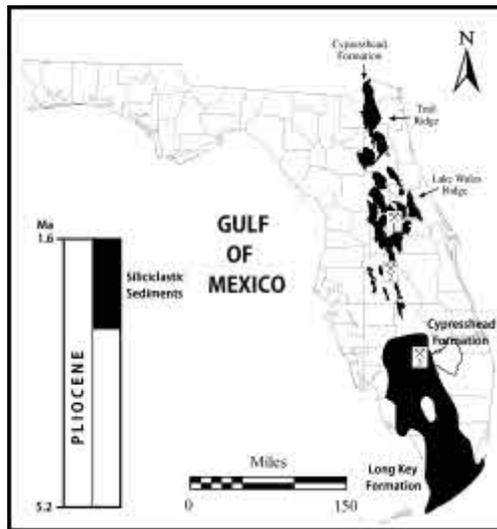


Figure 1. Pliocene sand, clay, and gravel deposits along the Florida peninsula. Surface exposures occur across the northern portion of the state while subsurface deposits occur in the south. The stratigraphic unit changes names as it moves across the state. Boxes with crossed pick-axes indicate where quartz gravel was collected in the original study (see Froede, 2006).

processes” (Hine et al, 2009, p. 191). The details provide a better understanding of how uniformitarian scientists envision the movement of clastic sediments from the Appalachians to the Keys:

Streams from the Appalachian Mountains and Piedmont brought sediment to the coastal plain where it was deposited along adjacent floodplains or reached deltas discharging into the marine environment. Through time, river deltas prograded across and filled the Georgia Channel System [Suwannee Strait] during sea-level lowstands in the late Eocene and early Oligocene. Probably, during the middle Oligocene major sea-level lowstand, the

Georgia Channel System was filled completely and siliciclastic sediments started to cover north-central peninsular Florida. Peninsular Florida, being elevated, could not support a long-distance, north-to-south fluvial system. Consequently, primary sediment movement probably occurred in coastal longshore transport systems during higher sea level. [Hine et al, 2009, pp. 191–192; brackets mine; see Figure 4]

To complete the sediment transport pathway to the southern Straits of Florida, data... indicate that a late Miocene-to-Pliocene prograding deltaic depositional system carried quartz sands and gravels on top of a carbonate ramp that had been exposed for 8 million years thus burying the underlying Arcadia Formation. As this delta complex approached the carbonate margin facing south into the Straits of Florida, a new siliciclastic shelf and slope system was formed. Fluvial-deltaic sedimentary processes merged into cross-shelf and downslope sedimentary processes, again all pulsed by variations in sea-level and climate (windiness, storminess, rainfall) as well as oceanographic processes (e.g., Florida Current and Loop Current activity). [Hine et al, 2009, pp. 192–193]

### Problems with the new story

The new story relies more on the assumptions of deep time and multiple changes of sea-level position than physical evidence. Unfortunately for uniformitarians, the needed evidence does not exist to defend the many changes in sea-level position that are invoked. Additionally, the proposed timing

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## Florida Gravels

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related to the rise and fall of sea-level position is inconsistent with established uniformitarian sea-level curves (see Bilal et al., 1988). So, we are left with an interesting story unsupported by any physical evidence and inconsistent with their own sea-level curves.

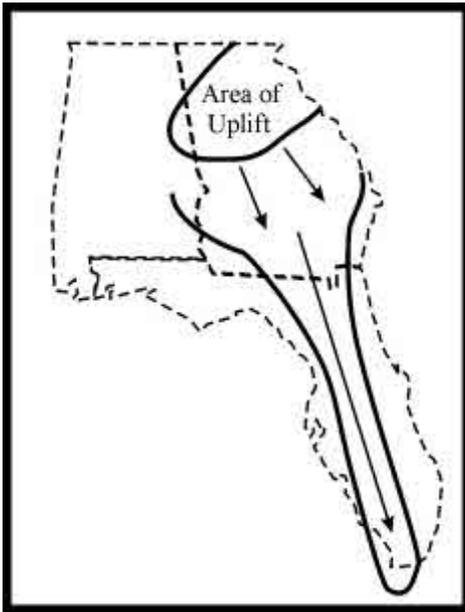


Figure 2. This drawing reflects the anticipated diluvial geologic conditions that occurred during the Flood. Erosion across the uplifted southern Appalachian Mountains created sands, clays, and gravels that were transported southward by Floodwater currents along the Florida peninsula all the way down to the modern Florida Keys.

Another serious problem for the naturalists is the lack of evidence in support of a former river coursing down the length of the Florida peninsula:

Since there is no evidence for an extensive long-distance palaeofluvial transport by a single large river flowing down peninsular Florida from the north, ...the rivers of the late Miocene to Pliocene must have [been local, of short-length, and] had a higher sediment discharge than present. We postulate that the warm period during the Pliocene stimulated local thunderstorm activity over peninsular Florida, thus increasing rainfall, runoff and sediment discharge. [Hine et al., 2009, p. 193; brackets include quoted words]

Notice that we have moved forward in geologic time from the end of the Miocene to the Pliocene in order to necessitate the southernmost transport of sediments at high rates reflected by the physical condition of the sediments. Hine et al. (2009) contend that numerous large-scale thunderstorms during the Pliocene can account for the increased transport energy for the sediments extending across an area approximately 62 miles wide, 180 miles long, in channels on top of the carbonate platform up to 164 feet (Froede, 2006).

### Conclusions

Conceptual geologic models are necessary to explain paleoenvironmental settings — both naturalists and diluvialists conduct geological investigations in this manner. Naturalists are forced to fit the stratigraphic



Figure 3. These flattened quartz pebbles were collected from the southernmost mine (see Figure 1) adjacent to Lake Okeechobee. Similar pebbles within the lower size range of those presented here have been identified further southward beneath the Florida Keys. The transport of flattened quartz pebbles of this size requires highly energetic conditions.

record to the philosophy of uniformitarianism. Diluvialists are forced to fit the rock record to the history outlined in Scripture. Naturalists invoke deep time and modern depositional environments while diluvialists invoke the Flood and geologic processes above and beyond anything occurring on Earth today. Obviously, there is no common ground between the conceptual models.

The physical evidence indicates a high-energy depositional setting unlike anything we have on Earth today. Increased deltaic progradation by thunderstorms is limited in scale and unsupported by the sediments. Naturalists must envision geologic processes far beyond any modern setting in order

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to explain the stratigraphic conditions found along the Florida peninsula. Diluvialists can invoke the global Flood and envision the turbulent setting in which these sands, clays, and gravels were eroded, transported, and deposited. The siliciclastic sediments extending down the entire length of the Florida peninsula reflect highly energetic transport and deposition. These conditions are expected and defended within the diluvial framework.

## Acknowledgments

I am grateful for my wife's continuing support of my research and writing efforts. I thank Jerry Akridge and John Reed for their review and helpful comments. Any errors that may remain are my own. Glory to God in the highest! Proverbs 3:5-6.

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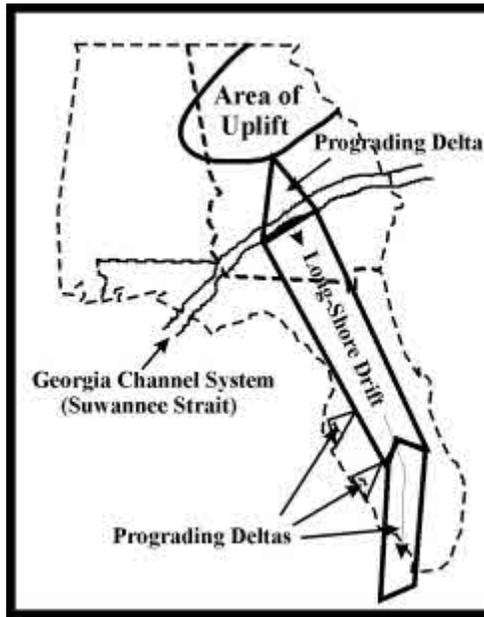


Figure 4. The naturalist-envisioned depositional setting varies between deltas and long-shore drift depending on a preconceived sea-level position necessary to explain the transport of sand, clays, and gravel. Uniformitarian sea-level curves are vague enough to be adaptable for almost any conceptualization. However, this proposal appears to be inconsistent with well-established uniformitarian sea-level curves. Such a fallacious interpretation is not necessary when the data are analyzed through the diluvial framework of Earth history.

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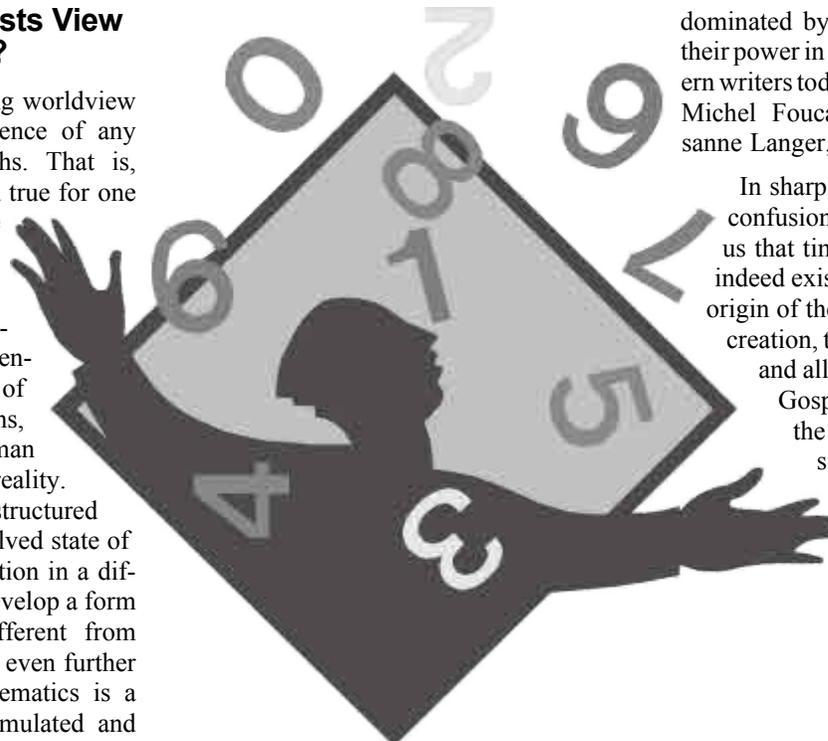
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## How Do Postmodernists View Mathematics?

Postmodernism is a fading worldview which denies the existence of any absolute universal truths. That is, ideas that are moral and true for one individual or culture may be immoral and false for another.

Postmodernists conclude that the present system of mathematics is purely a human invention. Our familiar collection of mathematical axioms, operations, and proofs is said to be a human invention with no intrinsic reality. Mathematics is thought to be structured and limited by the current evolved state of our brain. Some other civilization in a different place and time would develop a form of mathematics radically different from ours. Some postmodernists go even further and claim that modern mathematics is a conspiracy, a “construct” formulated and



dominated by white males to maintain their power in society. Leading postmodern writers today include Jacques Derrida, Michel Foucault, Richard Rorty, Susanne Langer, and Robin Dunbar.

In sharp contrast to postmodernist confusion, Christian theism assures us that timeless, universal truths do indeed exist. These truths include the origin of the universe by supernatural creation, the span of biblical history, and all of scripture, including the Gospel message. In contrast, the dogmatic postmodern position of no absolute truth is disqualified by its own definition.

—CM—

## ...without excuse!

by Timothy R. Stout

# The Testimony of *Could, May, and Perhaps*

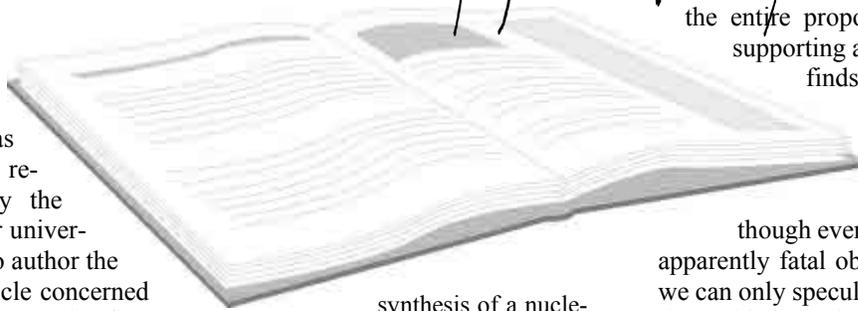
**E**arlier this evening I was reading a recent (2007) article speculating on the origin of life. It was in *RNA*, a highly prestigious research journal published by the RNA Society. A team of four university professors collaborated to author the article. The thesis of the article concerned a certain, proposed candidate as the first RNA species to emerge in an RNA world.

It is becoming a mantra among evolutionists that both evolution and a natural origin of life are “fact.” The evidence supporting these doctrines is reputed to be so broad and so conclusive that there is no room for alternative approaches, such as creation by a Living God. I always like to keep this in mind when I read the actual journal articles discussing the details of these topics.

Thus, when I started reading this particular article, I started laughing to myself. It was hard to believe the authors were serious. It was harder yet to believe that their thesis was considered worthy of publication, particularly in such a prestigious journal.

The following is a direct quote taken from the article (Ma, et al., 2007). The important thing is not the actual logic or the technical terms presented. Rather, it is the continuous speculation. Notice how many times words such as *could, may, would, and perhaps* are used. These words are italicized in the quote to help identify them. As you read this, remember how the authors are dealing with a subject whose ultimate conclusion, a natural origin of life, is decreed to be “fact.” Then, notice how little fact is presented for supporting evidence as opposed to speculation and wishful thinking.

In a nucleotide pool, if all RNA species compete for nucleotides to replicate themselves, based on the mechanism of nonenzymatic template-directed synthesis, nucleotides should be scarce. Then, if an RNA species *could* catalyze the synthesis of nucleotides (a “nucleotide synthetase ribozyme”), nucleotides *may* be more abundant near the species and that species *may* replicate more efficiently than others. Actually, the



synthesis of a nucleotide *could* be a chain process of a number of steps, which *may* involve a series of different ribozymes. The so-called nucleotide synthetase ribozyme, which *may* have emerged first, *would tend to be* a ribozyme enhancing the rate-limiting step in the chain...

When the population of the nucleotide synthetase ribozyme spreads in the pool, Darwinian evolution *may* occur, *perhaps* moving toward improving its efficiency and the emergence of ribozymes participating in other steps of the chain process. Meanwhile, if a ribozyme favoring the formation of a membrane, such as an amphiphilic molecule synthetase ribozyme, *could* appear, it *could* cooperate with the nucleotide synthetase ribozyme, and a protocell *may* emerge. In the protocell, the amphiphilic molecule synthetase ribozyme *could* replicate efficiently utilizing the nucleotides synthesized by the nucleotide synthetase ribozyme, and the nucleotide synthetase ribozymes *could* replicate more efficiently than their naked analogs, because the nucleotides would not diffuse away due to the limitation of the “cell membrane.”

Thus, a nucleotide synthetase ribozyme is a good candidate as the first (naked) RNA species emerging in the RNA world and has the potential to evolve into a cellular form.

This is a “good candidate”? Only in discussions supporting evolution and a natural origin of life does such empty speculation meet standards for publication.

The reality is that a natural origin of life is *not* a fact. Evolutionists run into roadblocks at every stage in their attempted explanations of how life came into being. When one examines not just this article, but

the entire proposed train of arguments supporting a natural origin of life, he finds nothing but fatal obstacles and unproven speculations every step of the way. The mindset seems to be, “even

though every step of the way reveals apparently fatal obstacles and even though we can only speculate on how to get around them, this is irrelevant because our conclusion is incontrovertible fact.”

According to the Bible, if a person rejects the truth, God will give him over to judgmental delusion to believe the lie (2 Thessalonians 2:10-12, Romans 1:18-19, 28). I believe this principle describes many evolutionists. It particularly describes those who reject the evidence God placed within creation, pointing to Him as Creator (Romans 1:20). Indeed, it is far simpler to believe that a Living God created life than to believe that empty speculation such as that described above could actually be successful. A person is “without excuse” for valuing arguments, such as we just read, above the Creator’s revealed Word.

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—CM—

## Renew today!!

→  
If you have not renewed your membership, this could be your final issue of *Creation Matters*.

## Summer Internship in Microscopy

A three-day hands-on internship was recently offered at the CRS's Van Andel Creation Research Center (VACRC) to provide intensive training in microscopy and microtechnique. The trainer was Mark Armitage, M.S., an expert microscopist and member of the CRS board of directors. The CRS was pleased to award the internship to Deidre Oberpriller, a 21-year-old college student at West Coast Baptist College in Lancaster, CA. Five goals were accomplished:

- 1) Communicate a basic understanding of optical and illumination principles for microscopy and a thorough discussion of all forms of light microscopy.
- 2) Communicate a basic understanding of specimen collection and processing for microscopy.
- 3) Gain hands-on experience with: dissecting microscopes; fiber optic and tungsten reflected and transmitted lighting; compound microscopes with reflected and transmitted lighting for brightfield, darkfield, DIC, polarized light and phase contrast; and digital and film cameras.
- 4) Dissect and prepare fish organs (gills, hearts, and livers) for processing for microscopy and examination



for fish parasites.

- 5) Prepare tissues for microscopy including: fixation in glutaraldehyde; post-fixation in osmium; dehydration through a graded acetone series; infiltration with a liquid polymer; curing of the polymer in a 60 degree C oven; sectioning of tissue blocks on an ultramicrotome; mounting sections on glass slides; staining of

slides with epoxy tissue stain; cover-slipping of slides; examination of slides under brightfield, darkfield, and phase-contrast microscopy; and recording images on film and with a digital camera.

Three days of intensive lecture, laboratory instruction, and laboratory work left little time for either discussion of scientific reporting, training with scanning and transmission electron microscopy, or performance of literature searches. These items can be covered at a future session. In spite of the busy schedule, a new parasite was discovered in fish (*Fundulus*, killifish) previously collected at South Padre Island, TX. A report of these findings is being prepared for a manuscript which will be submitted to a secular journal.

The trainer and intern expressed gratitude for funds from the CRS Research Committee which supported a portion of this work. They also expressed thanks to the CRS and especially to Kevin and Diane Anderson for their efforts to provide a working laboratory at which such research and training can take place.

— CM —

## Membership Matters by Glen Wolfrom, Ph.D.

### Membership benefits

**Why should you renew?** Membership in the CRS has a number of benefits. These include:

- 1 Membership in an international, professional society which includes many of today's prominent creationists
- 2 Receipt of the world-class, scientific creation journal, the *CRS Quarterly*
- 3 A subscription to the very popular, non-technical publication, *Creation Matters*
- 4 Participation in CRSnet, an email-based discussion forum where you can dialog with fellow creationists about topics directly related to creation and evolution
- 5 Participation in CRSforum, a more free-ranging forum, in a web-based format, in which almost any topic may be discussed
- 6 Submission of research proposals to be considered for possible funding with CRS grants
- 7 Discounts on books purchased either via the print catalog or the online bookstore
- 8 Online access to the Premium and Members Exclusive areas of the Society's website

### Premium and Members Exclusive areas

The Premium and Members Exclusive areas are accessed using the special Premium login page at the CRS website ([www.creationresearch.org](http://www.creationresearch.org)). Each member must register at the website, creating a unique username and password.

A major feature of the Premium area is the availability of the latest issues of the *CRS*

*Quarterly* and *Creation Matters*, usually before the print versions arrive in your mailbox. Also, if you are registered for the Premium area, you can check your current membership status.

Additionally, registered members have access to archival copies of the *CRSQ* from the last few years. Recent issues of *Creation Matters* are archived for a year, after which they are transferred to the public area of the website.

In the Members Exclusive area you will find the exclusive code for discounts from the print catalog and online bookstore. Information is also available on how to participate in CRSnet and CRSforum. Those who are interested will find a copy of the Society's Constitution and Bylaws.

— CM —

## Matters of Fact...

by Jean K. Lightner, DVM, M.S.

### 1. Evolution of Sexual Reproduction

### 2. Mutations as Copying Errors / Directed Mutations

*Editor's note: In this feature, Dr. Jean Lightner will answer questions from a variety of sources, including those from our readers. It will not be possible for her to answer each question, but she will choose those which have a broad appeal and lend themselves to relatively short answers. You may submit your questions to Dr. Lightner at [jean@creationresearch.org](mailto:jean@creationresearch.org).*

**Q** How do evolutionists explain the slow development of male and female reproductive systems? If some type of early creature is reproducing asexually, when and why does it start developing male and female reproductive systems? The complexity of these systems would also seem to preclude their evolutionary development.

**A** You make an excellent point. Evolutionists don't really have an answer to these questions. Those who are brave enough to bring up the topic of the evolution of sex tend to divide it into two parts: the origin of sex and the maintenance of sex. The latter topic includes information from scientific observations of sexually reproducing creatures today and is the major focus of much research on this topic (Wikipedia).

It would seem that reproducing asexually should be an advantage if leaving large numbers of offspring is helpful in maintaining a life form. So a major topic of research involves discovering what advantages there are to sexual reproduction. For example, "advantages of sexual reproduction" was a topic listed for the Evolution of Sex and Recombination: In Theory and In Practice conference held in Iowa in 2009 (Center for Comparative Genomics).

On a popular level, possible advantages of sexual reproduction are sometimes emphasized with the implication that such advantages make the development of sexual reproduction inevitable. This is obviously absurd. Chapter 11 of Jonathan Sarfati's *Refuting Evolution 2* discusses this in response to the 2001 PBS *Evolution* series (Sarfati, 2002). Yet these types of arguments make it clear that belief in a naturalistic origin of sexual reproduction is by blind faith.

None of this even begins to address the development of male and female reproductive systems. Not only do these systems have incredible design which allows for successful reproduction, but the only genetic difference between male and female in many creatures is a single sex chromosome.

The incredible design makes the inference of a Designer quite reasonable.

This can lead to some other interesting questions. What is the purpose of sex in the creation model? Did God design creatures that way because it was more efficient? Was there another purpose, such as emphasizing the importance of relationships for life to continue? Does it provide us with some picture of spiritual truth? These questions appear warranted given the recurring biblical analogy comparing the relationship of God with his people to the relationship of a man with his wife (Jeremiah 3:6-14; Hosea 1:2; Ephesians 5:22-32).

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**Q** Aren't mutations just copying errors? Why do some creationists talk about directed mutations?

**A** Historically, mutations (any changes in the sequence of DNA nucleotides) have been viewed as copying errors. This is very comfortable for individuals promoting evolution since they believe only naturalistic processes are at work. Creationists have often pointed out that it is absurd to think that complex biological systems can be built on a series of errors, regardless of how strong natural selection may be (Bergman, 2005a). Furthermore, there are a wide range of proofreading and repair mechanisms in place that considerably reduce the frequency of errors (Bergman, 2005b).

Over the past decades, mutations in bacteria have been observed to "conveniently" (for the bacteria) arise that appear environmentally directed. Sometimes terms like "induced" or "adaptive mutations" are used to describe these genetic changes which are more common under certain conditions (such as starvation due to lack of glucose) and help the bacteria adapt to those conditions (by giving them the ability to better use a different food source). Additionally, there are a number

of different complex mechanisms by which the DNA sequence can be changed. These require special enzymes and include several classes of transposable elements as well as several forms of homologous recombination (Shapiro, 1997). So it appears that to some extent, creatures were designed to be able to change on the DNA level.

Directed mutations do not appear to be confined to bacteria. There is strong circumstantial evidence that they have occurred in many creatures including mammals and humans (Lightner, 2008; 2009a; 2009b). This concept, that animals were designed to be able to undergo some genetic change to aid in adaptation, fits very well in the creation model. The Bible not only tells us that creatures were created according to their kinds, but able to reproduce and fill the earth (Genesis 1:22, 28; Isaiah 45:18). Adaptive genetic changes appear to be just one way that God provides for His creation (Matthew 6:25-34).

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# Speaking of Science

Editor's note: Unless otherwise noted, S.O.S. (Speaking of Science) items in this issue are kindly provided by David Coppedge. Opinions expressed herein are his own. Additional commentaries and reviews of news items by David, complete with hyperlinks to cited references, can be seen at: [www.creationsafaris.com/crevnews.htm](http://www.creationsafaris.com/crevnews.htm). Unless otherwise noted, emphasis is added in all quotes.

## We Know Less Than We Think

Strange reports come from science news outlets on occasion that call into question facts we thought we understood. These raise a question: do we really know what we think we know?

**Cutting dinosaurs down to size:** Dinosaurs may have been half as heavy as previously thought, said *Science Daily*.<sup>1</sup> Some paleontologists are claiming that widely-used methods for estimating their mass are flawed.

**Life as old as the universe?:** Evolutionists typically date the origin of life on earth *after* the planets formed, but a story on *Space.com*<sup>2</sup> asks, "Could Life Be 12 Billion Years Old?"

**Ultrahuge lightweights:** Neutrinos are supposed to be among the fleetest, tiniest particles in the particle zoo, but *New Scientist*<sup>3</sup> reported on conclusions by some UC San Diego astronomers who postulate they could have been stretched in the early stages of the big bang. Conclusion: some neutrinos might span the universe.

**Lawless and timeless:** A cosmologist pondering the ramifications if there is only one universe is questioning natural laws and time, according to *PhysOrg*.<sup>4</sup> Lee Smolin is the author of *The Trouble With Physics*. You may not have thought physics was in trouble, but "Smolin points out why a timeless multiverse means that our laws of physics are no longer determinable from experiment and how the connection between fundamental laws, which are unique and applicable universally from first principles, and effective laws, which hold based on what we can actually observe, becomes unclear."

**Imagining things:** One of the craziest headlines on *Live Science*<sup>5</sup> recently was this one: "Is the Universe All in Your Mind?" It probably is for some people, but a quantum physicist reasoned that "reality works the way it does because that's how our senses and neurons are structured to perceive it."

When reality itself is a function of the observer, how can anyone do a reality check on anyone else?

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## Functional Pseudogenes

[An SOS contribution by Jean Lightner]

By definition, pseudogenes have no function. In reality, many pseudogenes are copied (transcribed) and used. They may be used to control or modify other genes, or in the production of antibodies.<sup>1</sup> Scientists were surprised when they discovered a human pseudogene that actually codes for a protein.<sup>2</sup> It turns out that the gene is read in an unusual way and produces a receptor that detects certain odors. That is nothing to turn up your nose at. Instead, it should inspire awe for our Creator who designed the genome in such a spectacular way that we are constantly discovering new things about how it works.

1. Balakirev, E.S. and F.J. Ayala. 2003. Pseudogenes: Are they "junk" or functional DNA? *Annual Review of Genetics* 37:123-151.

2. Lai, P.C., G. Bahl, M. Gremigni, V. Matarazzo, O. Clot-Faybesse, C. Ronin, and C.J. Crastro. 2008. An olfactory receptor pseudogene whose function emerged in humans: a case study in the evolution of structure-function in GPCRs. *Journal of Structural and Functional Genomics* (1-4):29-40.



## Cells Use Cloud Computing

"Cloud computing" is the up-and-coming trend in information technology.

It allows processes to run in parallel on multiple networked processors with more robustness, because other processors can pick up the slack if a major server fails. Scientists are finding that cells have been using this technology all along.



*Science Daily*<sup>1</sup> reported on research by biologists in Spain and Israel working with Carnegie Mellon University. "Gene regulatory networks in cell nuclei are similar to cloud computing networks, such as Google or Yahoo!, researchers report today in the online journal *Molecular Systems Biology*," the article began. "The similarity is that each system keeps working despite the failure of individual components, whether they are master genes or computer processors." Later, the article brought in another internet giant:

We now have **reason to think of cells as robust computational devices**, employing **redundancy** in the same way that **enables large computing systems, such as Amazon, to keep operating** despite the fact that servers routinely fail.

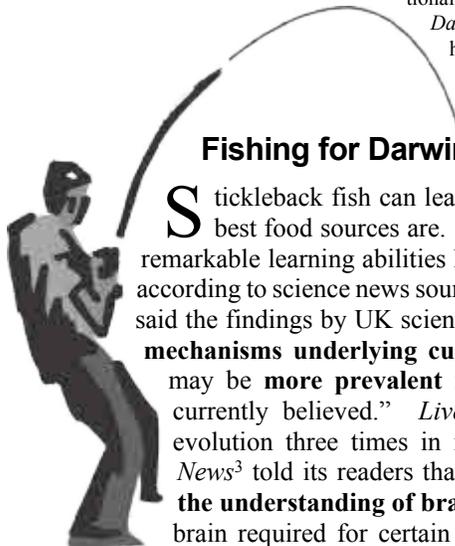
Cells have master control genes that turn on other genes. Researchers have been puzzled by experiments in which de-activating these genes one at a time did not interrupt the cell. It turns out that parallel copies, called paralogs, are able to step in. Paralogs have more or less sequence similarity to the master genes. The more similar they are, the more they can fill in for the master gene. The article explained, "if one of these genes is lost, other 'parallel' master genes with similar sequences, called paralogs, often can replace it by turning on the same set of genes."

Scientists estimate that 5 to 10 percent of genes are in this master-gene category. Many diseases are associated with mutations

in one or more of these transcription factors, the article said.

All together now: "This article said nothing about evolution." It's such an ingrained pattern (that the more scientific detail, the less Darwin), it is becoming wallpaper. For fun, make up a just-so story about how this cloud computing technology in the cell came about. The crazier the better. You might even get it published by *New Scientist*, the euphemistic label for Old Materialist.

1. Carnegie Mellon University (2009, June 17). Cells are like robust computational systems, scientists report. *ScienceDaily*. Retrieved June 25, 2009, from <http://www.sciencedaily.com/releases/2009/06/090616103205.htm>



## Fishing for Darwinian Stories

**S**tickleback fish can learn from each other where the best food sources are. This proves that your brain's remarkable learning abilities have their roots in fish heads, according to science news sources this week. *Science Daily*<sup>1</sup> said the findings by UK scientists "show that the **cognitive mechanisms underlying cumulative cultural evolution may be more prevalent in nonhuman animals than currently believed.**" *Live Science*<sup>2</sup> used the E-word evolution three times in its coverage. And the *BBC News*<sup>3</sup> told its readers that "the findings **contribute to the understanding of brain evolution** and the types of brain required for certain cognitive functions, **both in humans and animals.**"

The *Science Daily* entry said something that may cast doubt on the common assumption that brain size matters. "The findings show that big brains, like those in humans, are not necessarily needed as a pre-requisite for cumulative culture." What does that say about human evolution research?

However that controversial question shakes out, the three articles were overcome with awe at how these fish mimic human intelligence. The *BBC News* called them the geniuses of the fish world. *Live Science* quoted Jeremy Kendal [U of Durham] claiming that with evolution, pressure alone can give rise to wisdom:

What **we're finding** is that it's not necessarily how closely related a species is to the human [that's the] defining feature of **how cognitively complex you might be**; it can also be your local **ecological circumstances** which provide **selective pressures favoring evolution** of these **cognitive facilities**.

If what Kendal said were true, fire would become more intelligent when water is sprayed at it. Or is he claiming that matter in motion acts differently in life than it does in fire? On what basis would he propose the distinction? Vitalism is out in their philosophy. You can't produce cognition by putting pressure on atoms and molecules. You can select out all the non-intelligent atoms you want till the cows come home, putting "selective pressure" on them, and you won't ever get intelligent molecules. All you will prove is that it takes intelligence to select things.

How long will it take before the Darwinians realize they are making utter fools of themselves with their continued storytelling about selective pressures producing all the wonders of biology? It doesn't "contribute to the understanding of brain evolution" unless you are already drunk on Dar-wine and having hallucinations. Drunkards are convinced they are the smartest people in the world.

Zechariah wrote of a time when false prophets would be too embarrassed to show their faces in public (Zech. 13:2-6). They wouldn't wear a prophet's robe, and they would lie about what they did for a living. Would that day would come for the Alumni Association of the Darwin Fake Science University.

1. Durham University (2009, June 17). Common fish species has 'human' ability to learn. *ScienceDaily*. Retrieved June 25, 2009, from [www.sciencedaily.com/releases/2009/06/090616205515.htm](http://www.sciencedaily.com/releases/2009/06/090616205515.htm)
2. Rettner, R. (2009, June 16). Fish are surprisingly smart. *LiveScience*. Retrieved June 25, 2009, from [www.livescience.com/animals/090616-fish-learning.html](http://www.livescience.com/animals/090616-fish-learning.html)
3. Anonymous (2009, June 17). 'Genius' claim for sticklebacks. *BBC News*. Retrieved June 25, 2009, from [http://news.bbc.co.uk/2/hi/uk\\_news/scotland/edinburgh\\_and\\_east/8104759.stm](http://news.bbc.co.uk/2/hi/uk_news/scotland/edinburgh_and_east/8104759.stm)

## Raising a Titanic Geological Plateau

**T**he Colorado Plateau is a huge region covering parts of four states. It's over a mile higher than its surroundings, but its layers are remarkably flat. How did this region, littered with marine fossils, rise into the sky? Three American scientists writing in *Nature* last week believe they have a mechanism: it heated from underneath and rose like a cake.<sup>1</sup>



"The **forces that drove rock uplift of the low-relief, high-elevation, tectonically stable Colorado Plateau are the subject of long-standing debate,**" they acknowledged. This vast area in Utah, Colorado, New Mexico and Arizona "experienced ~2 km of rock uplift **without significant internal deformation.**" That fact is clearly evident at the lookouts of the Grand Canyon. Geological layers extend as flat as a pancake as far as the eye can see. It takes a lot of delicately-balanced force to lift up a region this large without deforming it. Imagine how you would you try to pick up a Guinness World Record layer cake the size of a city block and keep it from breaking.<sup>2</sup>

To try to get a grip on complex systems, scientists employ models. These allow them to focus on certain aspects they deem important without getting bogged down in details. The danger is that different scientists may disagree on the salient features needing to be explained. In addition, uncooperative details cannot be ignored; they might falsify the model.

The bulk of their paper explained the details of their model. It is important to realize that no model of a historical episode can be proven, or even adequately tested. At best, scientists can try to find data consistent with it, and see if the overall scenario explains the bulk properties of the system. A good model should also make predictions.<sup>3</sup> These scientists felt that by having a slab of rock slide away under the plateau, leading to increased heating from the mantle, they could explain the 2 km rise. A model is never the final answer, however. "Future, more detailed, comparisons with phase relationships in a melting model must incorporate variable chemistry and hydration of source regions and changes in both chemical and thermal buoyancy during and following the mid-Tertiary ignimbrite flare-up," they said. They did not return

to the observation that the layers are flat and largely undeformed.

1. Roy, M., T.H. Jordan, and J. Pederson. 2009. Colorado Plateau magmatism and uplift by warming of heterogeneous lithosphere, *Nature* 459:978–982 | doi:10.1038/nature08052.
2. Note also that this is just the latest uplift. Geologists believe this vast area rose and sank several times without significant deformation. In the Grand Canyon, for instance, the Hermit formation (marine) is very flat along the Bright Angel Trail. But the Coconino Sandstone, supposedly consisting of petrified sand dunes from a desert, sits just as flat on top of it. Above those, the Kaibab and Toroweap limestones sit as testaments to another undersea episode. Thousands of feet of more layers from alternating wet and dry periods are above those. It stretches credulity to think that these layers bobbed up and down repeatedly without deforming.
3. The fallacy of “affirming the consequent” renders many predictions dubious: “p predicts q; q occurs; therefore p caused q.” Just because a prediction is confirmed, it does not guarantee that no other model could account for it. In fact, there could be an infinite number of other theories that could account for the phenomenon. This is what caused Karl Popper to jettison prediction as a criterion of science and propose falsification instead (but falsification only lasted a couple of decades before other philosophers discounted its value in science).

## How Cells Proofread DNA Is Still Mysterious

An amazing fact about DNA transcription is that the machinery not only copies DNA onto RNA, but checks it for errors. A story in *ScienceDaily*<sup>1</sup> says that researchers would expect 100 times more errors statistically than the actual results of transcription in the cell.

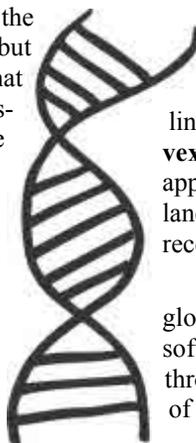
One of the mechanisms revealed in more detail by researchers at University of Bristol and University of Leeds is a linear stalling process akin to an old-style typesetting machine. DNA “letters” are transcribed single-file by a machine called RNA polymerase. When a wrong letter is inserted into the RNA transcript, the machine stalls and backs up. It then has a tiny “molecular scissors” that snips out the incorrect nucleotide and inserts the correct one.

This is only part of the proofreading process, however. The article ended,

... there is **more than one identified mechanism** for ensuring that **genetic code is copied correctly**. The challenge now is to find out — through a combination of experimental biology and modeling — which mechanism is dominant.

One can expect that their analogy to a typesetting machine will develop over time into something more sophisticated: perhaps an office full of specialists using computerized error correction technologies.

Stephen Meyer’s new book *Signature in the Cell*<sup>2</sup> explains why these discoveries are undermining evolution at its base. In chapter two, he recounts the history of discoveries about DNA. It reads like a detective story. Since the mid-19th century, biologists and chemists tried to understand what was going on in the cell, then in the nucleus, then in the chromosomes, then in the bands within the chromosomes, then in the nucleic acids and their bases, then in the structure of the double helix. It took a century to uncover the answer. The reality turned out to be far more astonishing than anything they could have imagined. In Darwin’s day, who would have thought that the cell has computer codes that are transcribed and translated, and proofread with multiple levels of error correction?



Evolutionists have few options for responding to these discoveries. One method they use is to say, “Well, if these mechanisms weren’t there, we wouldn’t be here.” How satisfying is that? If the universe weren’t finely tuned for life, we wouldn’t be here. If life had not emerged, we wouldn’t be here. If complex life had not emerged, we wouldn’t be here. If DNA proofreading didn’t exist, we wouldn’t be here. That’s not an answer; it’s a dodge. If sensible people weren’t so tolerant of the Darwinists and their nonsense, they wouldn’t be here.

1. University of Leeds (2009, June 23). Molecular typesetting: How errors are corrected while proteins are being built. *ScienceDaily*. Retrieved July 3, 2009, from www.sciencedaily.com/releases/2009/06/090623090157.htm
2. Meyer, S.C. 2009. *Signature in the Cell: DNA and the Evidence for Intelligent Design*. NY: HarperOne.

## Computer Programmers Borrow Eye Technology

Computer processing of video images may become twice as accurate with 10 times the speed of earlier models, thanks to what scientists are imitating in the human eye. “The



linear solution to **one of the most vexing challenges to advancing computer vision** has direct applications in the fields of action and object recognition, surveillance, wide-base stereo microscopy and three-dimensional shape reconstruction,” a report in *ScienceDaily*<sup>1</sup> said.

A Boston College team noticed how the eye performs a rough global search, then zeroes in for the details. They devised their software after this linear algorithm. It avoids having to comb through haystacks of data for the needle of interest. A member of the research team, Hao Jiang, was quoted:

Our method behaves in a similar fashion, using a linear approximation to explore the search space globally and quickly; then it works to identify the moving object by frequently updating trust search regions.

The technique allows the new program to “maintain spatial consistency as an object moves and reduces the number of variables that need to be optimized from several million to just a few hundred.” It increased their detection rate to 95% over the 50% rate of earlier methods.

OK, so who wrote the software in the human eye that these guys reverse-engineered?

1. Boston College (2009, June 22). Human eye inspires advance in computer vision. *ScienceDaily*. Retrieved July 3, 2009, from www.sciencedaily.com/releases/2009/06/090618084258.htm



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## All by Design

by Jonathan C. O'Quinn, D.P.M., M.S.

## Wonders of the Deep

Even in the dark waters of the deep sea, at least 50 species of fishes have well-developed eyesight. This is critically important in the dark, because many deep sea organisms produce bioluminescent light, and sharp vision helps these fishes find prey, avoid predators, and find mates.

Cells known as ganglion cells are found in the retina. They carry visual information to the brain through the optic nerve. Ganglion cells receive visual information from photoreceptors lining the retina. However, there is a small, specialized area of the retina in these particular fishes known as the fovea. It is a 300  $\mu\text{m}$  wide, pit-like structure with a steep concavity that is lined with an especially high density of ganglion cells, oriented in each eye to produce binocular vision with excellent spatial resolution.

The structure of these eyes focuses a 40-degree cone of light onto the fovea, which then diverges due to the concavity of the fovea, producing magnification of the

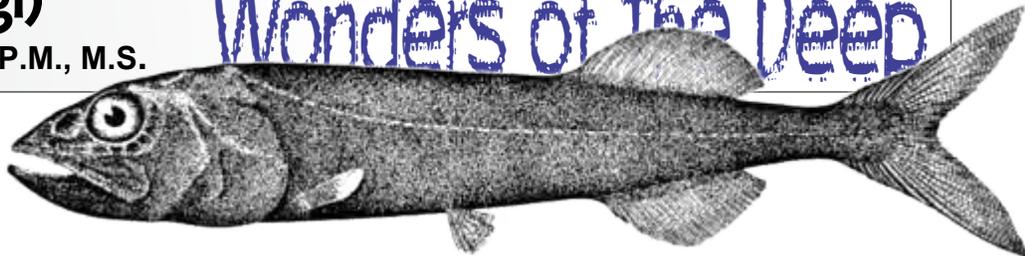


image of the light source over a larger number of receptors and enhancing the quality of the visual image.

The random chance of evolution has difficulty enough explaining the complex chemical reactions that produce bioluminescent light in the deep sea, not to mention the stepwise development of this highly-specialized visual structure in so many fishes. Now consider the fact that the exact same structure occurs in other, non-related species such as peregrine falcons, chameleons and jumping spiders, and evolution is dead in the water.

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Tucker, V.A. 2000. The deep fovea, sideways vision

and spiral flight paths in raptors. *J. Exp. Biol.* 203:3745–54.

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*Figure caption:* Softskin smooth-head, *Rouleina attrita*. From plate 14 of *Oceanic Ichthyology* by G. Brown Goode and Tarleton H. Bean, published 1896. *R. attrita* (Osmeriformes: Alepocephalidae) is a deep-water fish, about 48 cm in length, which may be found at depths of 450–2300 meters ([www.discoverlife.org/mp/20q?search=Rouleina+attrita](http://www.discoverlife.org/mp/20q?search=Rouleina+attrita)). It is cited as an “excellent example” of a fish having ganglion cells which “are tightly organized into well-developed foveae and areae centrales...” (Warrant, 2000).