Disclosure

of things evolutionists don't want you to know

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How Life Began

Now there is "evidence" it all happened at once in a "chemical big bang."

Michael Marshall, author of *The Genesis Quest*, tells us how life began in a recent *New Scientist* article.

> Many ideas have been proposed to explain how it began. Most are based on the assumption that cells are too complex to have formed all at once, so life must have started with just one component that survived and somehow created the others around it. When put into practice in the lab, however, these ideas don't produce anything particularly lifelike. It is, some researchers are starting to realise, like trying to build a car by making a chassis and hoping wheels and an engine will spontaneously appear.
>
> The alternative – that life emerged fully formed – seems even more unlikely. Yet perhaps astoundingly, two lines of evidence are converging to suggest that this is exactly what happened. It turns out that all the key molecules of life can form from the same simple carbon-based chemistry. What's more, they easily combine to make startlingly lifelike "protocells". As well as explaining how life began, this "everything-first" idea of life's origins also has implications for where it got started – and the most likely locations for extraterrestrial life, too. [1]

Marshall's Premise

Cells are too complex to have formed all at once by accident. Despite this obvious truth, Marshall says this must have happened because attempts to verify the only other alternative (a step-by-step process) failed, due to a concept called "irreducible complexity." Marshall doesn't use that term (probably because it is a basic tenet of Intelligent Design); but he acknowledges that the first living cell needed a membrane, metabolism, and reproduction.

Marshall knows that, since the 1950s, evolutionists have tried to imagine a step-by-step process by which the first living cell could have originated. All those innumerable attempts have failed.

Those failures have forced Marshall to believe "key molecules of life can form" and "easily combine to make startlingly lifelike protocells". That belief glosses over the difference between "startlingly lifelike" and "living." There are some startlingly lifelike portraits in some art galleries—but they aren't alive. Furthermore, "easily" is questionable. Is it really that easy to make those chemicals combine? If it is that easy, why doesn't it happen spontaneously often?

Fossil Evidence

Does Marshall have any fossil evidence to support his claim? No, he doesn't.

> The problem with understanding the origin of life is that we don't know what the first life was like. The oldest accepted fossils are 3.5 billion years old, but they don't help much. They are found in ancient rock formations in Western Australia known as stromatolites and are single-celled microorganisms like modern bacteria. These are relatively complex: even the simplest modern bacteria have more than 100 genes. The first organisms must have been simpler. Viruses have fewer genes, but can reproduce only by infecting cells and taking

[1] Michael Marshall, *New Scientist*, 5 August 2020, "A radical new theory rewrites the story of how life on Earth began", https://www.newscientist.com/article/mg24732940-800-a-radical-new-theory-rewrites-the-story-of-how-life-on-earth-began/

them over, so can't have come first. [2]

There is no fossil evidence that indicates what the first life form must have looked like. Science Against Evolution doesn't accept the claim that stromatolites are 3.5 billion years old; and the stromatolites might not actually be fossils of single-celled microorganisms—but that's beside the point. What matters is that evolutionists believe stromatolites are fossils of the earliest microorganisms, and they think the stromatolites would have had at least 100 genes. That leads evolutionists to believe they must have evolved from an unknown ancestor with just a few genes, for which there are no fossils. Viruses do have fewer genes than bacteria, but since viruses have to invade a living cell to survive, there must have been cells before viruses.

Fundamental Life Processes

Marshall believes that life depends upon three basic processes.

> With physical evidence lacking, origin-of-life researchers begin by asking two questions. What are the fundamental processes underpinning life? And what chemicals do these processes use? Here, there are answers.
>
> Life can be boiled down to three core systems. First, it has structural integrity: that means each cell has an outer membrane holding it together. Second, life has metabolism, a set of chemical reactions that obtain energy from its surroundings. Finally, life can reproduce using genes, which contain instructions for building cells and are passed on to offspring. [3]

Marshall wrote that there are three necessary characteristics of life. First, it has to have something like skin (a membrane) to hold it all together. Second, it has to have some way of capturing and using energy (metabolism). Third, it has to be able to produce offspring.

Beginning in 1997, the Origin of Life Foundation began offering a million dollar prize to anyone who could propose a plausible explanation for the origin of life. We wrote about it fifteen years ago. [4] It is worth following the links in the footnotes to read those articles. In 2013, the contest ended without a winner. [5] Because the contest is over, the links to the contest in our past articles no longer function. Fortunately, we had the foresight to download the Foundation's definition of life. Their description of life consisted of Marshall's three characteristics, plus six more. Here are the nine fundamental functions that life performs, according to the Origin of Life Foundation:

> By sustained, free-living "life," the Foundation means any system which from its own inherent set of biological instructions can perform all nine of the following functions:
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> 1. Delineate itself from its environment through the production and maintenance of a membrane equivalent, most probably a rudimentary or quasi-active-transport membrane necessary for selective absorption of nutrients, excretion of wastes, and overcoming osmotic and toxic gradients,
> 2. Write, store, and pass along into progeny prescriptive information (instruction) needed for organization; provide instructions for energy derivation and for needed metabolite production and function; symbolically encode and communicate functional message through a transmission channel to a receiver/decoder/destination/effector mechanism; integrate past, present and future time into its biological prescriptive information (instruction) content,
> 3. Bring to pass the above recipe instructions into the production or acquisition of actual catalysts, coenzymes, cofactors, etc.; physically orchestrate the biochemical processes/pathways of metabolic reality; manufacture and maintain physical cellular architecture; establish and operate a semiotic system using "signal molecules",
> 4. Capture, transduce, store, and call up energy for utilization (work),
> 5. Actively self-replicate and eventually reproduce, not just passively polymerize or crystallize; pass along the apparatus and "know-how" for homeostatic metabolism and reproduction into progeny,
> 6. Self-monitor and repair its constantly deteriorating physical matrix of bioinstruction retention/transmission, and of architecture,
> 7. Develop and grow from immaturity to reproductive maturity,
> 8. Productively react to environmental stimuli. Respond in an efficacious manner that is supportive of survival, development, growth, and reproduction, and
> 9. Possess relative genetic stability, yet sufficient diversity to allow for adaptation and potential evolution.
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> All classes of archaea, bacteria, and every other known free-living organism, meet all nine of the above criteria. Eliminate any one of the above nine requirements, and it remains to be demonstrated whether that system could remain "alive."

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[2] *ibid.*
[3] *ibid.*
[4] *Disclosure*, August, 2005, "Looking For Life", http://www.scienceagainstevolution.info/v9i11f.htm and, September, 2005, "One Million Dollars!", http://www.scienceagainstevolution.info/v9i12f.htm
[5] *Disclosure*, February, 2014, "A Tale of Two Prizes", http://www.scienceagainstevolution.info/v18i5f.htm

Some of those characteristics overlap, so one could argue that there aren't really nine distinct characteristics. Someone might argue that Point 7 (growth) is really included in Point 5 (reproduction). A cell can't reproduce without growing.

Point 8, reaction to the environment, is also a common characteristic of life. Even plants, which have no central nervous system, turn toward the sun, and their seeds detect the conditions which cause them to sprout. The first living cell would have had to have been able to sense the presence of energy in order to acquire and use that energy, so perhaps one could include reaction as part of metabolism.

Point 6, healing, might be questionable. Some animals can lose an appendage, and it will grow back. If you cut your finger, it will heal. Even a tree will grow new bark over a small cut. Would the first living cell have a need to heal itself? Probably not.

We don't want to argue about exactly how many different functions living cells must perform. We just want you to ponder what goes on inside a living cell. Certainly a membrane, metabolism, and reproduction are necessary characteristics of life, and there might be more.

Irreducible Complexity

Irreducible Complexity is a term coined by Michael Behe. [6] In 1993, he used the example of a mousetrap to illustrate the idea that there is a limit to how much one can simplify a process before it will no longer function. (That's 7 years after we used the example of fire, which requires heat, fuel, and oxygen. Take away any one of the three, and the fire goes out. Just sayin'. ☺)

Marshall's idea is based on the idea that the irreducible complexity of life consists of a membrane, metabolism, and reproduction. If the first living cell did not have a membrane to hold it together, it would fall apart. If it didn't have some way to acquire and use energy, it would die. If it didn't reproduce, it could not have evolved into all the different kinds of life on Earth today.

Marshall knows that a cell with a membrane could not acquire metabolism and reproduction in later generations. The first living cell needed all three characteristics right from the start.

The Gene or the Protein?

Evolutionist have a chicken-or-egg problem right down at the cellular level.

> Life's three core processes are intertwined. Genes carry instructions for making proteins, which means proteins only exist because of genes. But proteins are also essential for maintaining and copying genes, so genes only exist because of proteins. And proteins – made by genes – are crucial for constructing the lipids for membranes. Any hypothesis explaining life's origin must take account of this. Yet, if we suppose that genes, metabolism and membranes were unlikely to have arisen simultaneously, that means one of them must have come first and "invented" the others. [7]

You need genes to make proteins, but genes are made out of proteins. If you can't have proteins without genes, and can't have genes without proteins, both must have originated ~~miraculously~~ (sorry, I mean, "fortunately") at the same time.

Marshall thinks that proteins, with functioning genes that cause metabolism and reproduction, must have formed by heating amino acids.

> In the 1950s, biochemist Sidney Fox discovered that heating amino acids made them link up into chains. In other words, they formed proteins, albeit with a random sequence of amino acids rather than one determined by a genetic code. Fox called them "proteinoids" and found that they could form spheres, which resembled cells, and catalyse chemical reactions. However, the proteinoids never got much further. Some researchers still hunt for lifelike behaviour in simple proteins, but the idea that proteins started life on their own has now been largely rejected. [8]

Of course, the right amino acids had to be present in the first place for them to get warm enough to form proteins. In the 1950s, Stanley Miller was doing his famous experiments which (at first) seemed to suggest the formation of the right amino acids could happen naturally. [9] [10] Like most modern evolutionists, Marshall admits the experiments by Miller and Fox went nowhere and have been "largely rejected."

Sequential Failures

Because the Miller/Fox experiments failed,

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[6] http://www.ideacenter.org/contentmgr/showdetails.php/id/840

[7] Michael Marshall, *New Scientist*, 5 August 2020, "A radical new theory rewrites the story of how life on Earth began", https://www.newscientist.com/article/mg24732940-800-a-radical-new-theory-rewrites-the-story-of-how-life-on-earth-began/

[8] *ibid.*

[9] *Disclosure*, October 1997, "Education Behind The Times", http://scienceagainstevolution.info/v2i1e.htm

[10] *Disclosure*, June 2007, "Stanley Miller's Final Word", http://scienceagainstevolution.info/v11i9n.htm

evolutionists came up with a theory that RNA somehow evolved first, and later evolved into DNA. This is the "RNA world" hypothesis.

> More recently, much research has focused on an idea called the RNA world. … However, biochemists have spent decades struggling to get RNA to self-assemble or copy itself in the lab, and now concede that it needs a lot of help to do either. [11]

That failed, so the "membranes came first" theory was proposed.

> Perhaps, then, membranes came first. David Deamer at the University of California, Santa Cruz, has championed this option. In the 1970s, his team discovered that lipids found in cell membranes could be made when two simple chemicals, cyanamide and glycerol, were mixed with water and heated to 65°C. … Nevertheless, he now accepts that this isn't enough, because lipids can't carry genes or form enzymes. [12]

That failure led to a ridiculously less plausible conclusion.

> The shortcomings of these simple models of life's origin have led Deamer and others to explore the seemingly less plausible alternative that all three systems emerged together in a highly simplified form. [13]

They turned to a fairy tale to provide the answer!

> "All the cellular subsystems could have arisen simultaneously through common chemistry," he [John Sutherland at the MRC Laboratory of Molecular Biology in Cambridge, UK] concluded. The key is what Sutherland calls "Goldilocks chemistry": a mixture with enough variety for complex reactions to occur, but not so much that it becomes a jumbled mess.
>
> "Life's key molecules can form together thanks to 'Goldilocks' chemistry." [14]

We used the fairy tale argument first! In 1996, we put an ad in our local Swap Sheet which said, "EVERYONE KNOWS LIFE HAPPENS. Pinocchio and Frosty are documented cases." That really made one local evolutionist mad because he could not cite any documented cases of inanimate matter coming to life. He got even angrier when I pointed out that the Blue Fairy, and an old silk hat, provided supernatural power. Therefore, Pinocchio and Frosty didn't really count as "natural" examples!

We were joking about Pinocchio and Frosty—but Marshall is serious about Goldilocks! He really believes there is "a mixture with enough variety for complex reactions to occur, but not so much that it becomes a jumbled mess." Nobody knows what that mixture is, but "remarkable strides" are being made to discover the mixture.

> Jack Szostak at Harvard Medical School has taken remarkable strides toward revealing how this might have happened. Beginning in 2003, his team built model cells [protocells] with outer layers of fatty acids surrounding an internal space that could host RNA. … The one system still missing from these protocells is metabolism. This is particularly challenging because it means creating entire sequences of chemical reactions. In modern organisms, these are controlled by battalions of protein enzymes, which can't have existed when life began. [15]

A battalion is a group of nebulous size, usually consisting of 300 to 1000 soldiers—but I suspect Szostak was speaking figuratively, not literally. ☺ No matter the exact number, lots of enzymes are needed for metabolism.

For 17 years, Szostak has been doing experiments, trying to force lipids to form a living protocell. We admit we don't know how many times he has failed. We do, however, know exactly how many times he has succeeded: zero.

His experiments have shown why it can't happen. His experiments have shown that, not only do the right chemicals have to be present to begin with, "entire sequences of chemical reactions" which "are controlled by battalions of protein enzymes" are necessary. These enzymes "can't have existed when life began."

Nobody has ever replicated the specific conditions necessary for the origin of life. Despite that, Sutherland and Di Mauro claim to know what they are.

> If the everything-first idea of life's origins is correct, then genesis occurred under specific conditions. Most of Sutherland's and Di Mauro's chemical reactions depend on ultraviolet light and some key steps require drying. This implies that, to get started, life needed a solid mineral surface ideally including a clay such as montmorillonite, sunlight with a fair bit of ultraviolet radiation, and enough warmth to periodically evaporate water. That

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[11] Michael Marshall, *New Scientist*, 5 August 2020, "A radical new theory rewrites the story of how life on Earth began", https://www.newscientist.com/article/mg24732940-800-a-radical-new-theory-rewrites-the-story-of-how-life-on-earth-began/

[12] *ibid.*

[13] *ibid.*

[14] *ibid.*

[15] *ibid.*

> seems to rule out the popular idea that it originated on chemical-rich hydrothermal vents in the deep sea. Instead, the everything-first researchers believe life began in chemical-rich pools on land. Sutherland has developed a scenario involving streams of water running down a meteorite impact crater. Deamer favours geothermal ponds in volcanic settings and is focusing research on these. For instance, he has shown that lipids can form protocells in the water of these ponds, but not in seawater. [16]

The idea that life began in shallow, chemical-rich pools is philosophical—not scientific. The fact that someone can intentionally cause lipids to form protocells is not the same as observing lipids spontaneously forming protocells. Even if the protocells did form spontaneously, they would still lack the battalion of enzymes necessary for metabolism. Nor would they be able to reproduce themselves.

> Of course, all this depends on the everything-first idea proving correct. Szostak's protocells and the new biochemical insights have won over many researchers, but some pieces of the puzzle are still missing. Perhaps the most persuasive argument is that the simpler ideas don't work. As is the case with many things in life, the beginning was probably more complicated than we had thought. [17]

All of the puzzle pieces are still missing. They don't have any proof that any part of their outrageously complicated hypothetical scenario for the origin is correct. The only reason for believing their explanation is correct is "the simpler ideas don't work." That's not a scientific argument.

Email

Unnatural Influence

Are COVID-19 vaccines unnatural?

Last month's *Evolution in the News* column (about the desire to make extinction extinct) posed a tongue-in-cheek question in order to stimulate some critical thinking. If extinction is the way evolution replaces inferior species with better ones, why should we want to save endangered species? Although it was a whimsical rhetorical question, Al answered it.

> The idea behind saving endangered species is that if human activity is a factor in the decline of a species, it's an unnatural influence on evolution.

That leads to more questions. Is human activity unnatural? If so, what makes it unnatural? Is it natural if a beaver builds a dam, but unnatural if a human builds one?

Regardless of whether humans are natural or not, is it wrong for humans to influence evolution? Man has been using artificial selection for years to produce new varieties of corn, dogs, tomatoes, horses, and lots of other things. Is that immoral? Does it upset the balance of nature? What about using genetic engineering instead of traditional breeding to combine genes to produce radically new species?

These are political questions—not scientific ones. Science deals with what is. Politics deals with what people should think and do.

COVID-19 Science

Politicians are trying to make the COVID-19 virus extinct by controlling society. The morally relevant question is, "If a virus becomes rare, should it be put on the endangered species list and protected?" ☺ From an evolutionary perspective, COVID-19 has "redeeming social value" because it thins the herd by removing weak and feeble individuals. What if politicians embrace evolution and decide to let COVID-19 produce a "master race?"

Because children have been erroneously taught for decades that the theory of evolution is scientific, they don't know what science is. Science is a way to discover the truth about how the world operates, using observation and experimentation. Instead, children have been taught science is the opinion of intellectually superior people who know what is best for you.

Because people don't know what science really is, politicians have been able to disguise political agendas as science. COVID-19 is the obvious example. Does closing churches, schools, and public gatherings prevent the spread of COVID-19 throughout the population? There's no scientific proof one way or the other (yet). A few years from now, it may be possible to analyze the data to see how the disease actually spread, and evaluate the actual effects of various techniques and treatments; but, currently, there is no science. There are just politicians pretending to use science to justify restricting freedom and gaining control of society.

What if "science" shows the best way to control the disease is to kill everyone who tests positive for it? That's the evolutionary ("scientific") solution! ☺

[16] *ibid.*
[17] *ibid.*

by Lothar Janetzko

Evolution Under the Microscope

https://evolutionunderthemicroscope.com/home.html

Why yet another website about evolution?

This month we are looking at a website recommended by a reader of our website. The site has the title, “Evolution under the microscope”, and asks the question, “Why yet another website about evolution?”

The website is organized by providing a Go To tab with a hover dropdown menu with links to the following topics: 1) Home; 2) Evolution; 3) New genes; 4) Eyes; 5) Homology; 6) Fossils; 7) Origin of life; and 8) Reviews. Using this Go To tab makes it easy to find your way around the site.

On the Home page you find the answer to the question, “Why another website about evolution?” The author of the website, David Swift, wrote a book, *Evolution under the microscope*, over 10 years ago and now wants to bring it up to date presenting recent developments. He feels using a website makes it easier to provide updated information on an ongoing basis.

The Home page also provides a summary of all the information you can explore on this site plus an About Me link where the author provides some background information about his school and university training. Here you learn that the focus of his book was on the biochemical case against evolution and why he formerly believed that the fossil record and homology provided supporting evidence for evolution.

The Evolution page presents the theory of evolution (in a nutshell). Here you can read about descent with modification, variation within species, competition and natural selection, adaptation, and speciation. Additional links cover the topics of Micro- and Macroevolution, Neo-Darwinism, and Variations by corrupting genes.

The New Genes page begins with an introduction to the topic of the biochemical reasons against genes evolving and then discusses in detail proteins. Beside the main New Genes page additional pages discuss: 1) The odds against new proteins; 2) Proteins need to fold; 3) Replication of DNA; and 4) DNA polymerase.

The Eyes page discusses eyes and their evolution. Classical ideas and how Darwin and natural selection view this highly specialized organ is presented, followed by a discussion of genes and molecular biology. Separate pages discuss embryonic eye development and the time required for an eye to evolve.

Space does not permit me to provide details about some of the other pages available on this website so just use the website navigation system to find topics of interest. I believe the book author has created a great website to present the material from his book and has made it easy to understand why he believes that "the more we discover about biology, the stronger becomes the case against (macro)evolution." Also, you will find many informative illustrations on many pages of this website.