Disclosure

of things evolutionists don't want you to know

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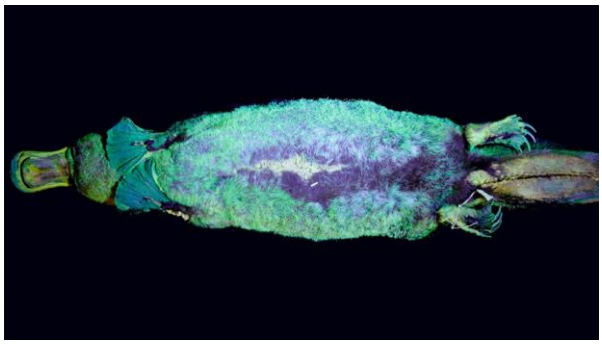
The Neon Platypus

The platypus is a Christmas present to creationists.

When it was discovered, the platypus was hard to classify because of its strange collection of characteristics. If evolution were true, it would have inherited those characteristics from a more primitive ancestor. Since it would have had to have inherited its strange features from so many different kinds of animals, its ancestry puzzled evolutionists. Now, on top of everything else, it glows in the dark like a florescent rock.



> Between the electricity-sensing bill, venomous heel spurs and egg laying, the platypus was already one of the strangest mammals alive today (*SN: 5/8/08*). Now, researchers have found that this Australian oddity has another unexpected feature: It fluoresces under ultraviolet light. [1]

Such a fantastically complicated animal requires a fantastically complicated evolutionary myth to explain its origin—and the evolutionists have come up with one.

Looks can be Deceiving

Traditionally, biologists classified animals based on appearance. Evolutionists believe horses and zebras have a close common ancestor because they look so much alike. The platypus doesn't look much like anything else because it looks like everything else.

> Bird-like bill. Flipper-like limbs. Flat, beaver-like tail: with its mash-up of traits, the platypus may be one of the strangest mammals on Earth today. [2]

Three Kinds of Mammals

All mammals have mammary glands which produce milk to feed their young. That's the definition of a mammal. There are three kinds of mammals.

Nearly all mammals (dogs, cats, horses, pigs, bears, whales, people, *et cetera*) are eutherians. Their babies develop inside a uterus. When they are born, their mothers miraculously start producing milk, and the babies instinctively know to suck it from their mother's teats until they have matured enough to eat solid food.

A few mammals are marsupials. The best known are the kangaroos in Australia and opossums in America. One might say their babies are born prematurely because, once delivered from the womb, they somehow know to crawl into their mother's pouch, where they drink their mother's milk and continue to mature.

The rarest kind of mammals is the monotreme. The platypus and four species of echidnas

[1] Christie Wilcox, *Science News*, 6 November 2020, "A blue-green glow adds to platypuses' long list of bizarre features", https://www.sciencenews.org/article/platypus-glow-blue-green-ultraviolet-light-fluorescent-fur

[2] American Museum of Natural History, 12 January, 2018, "Its Electric Sixth Sense", https://www.amnh.org/explore/news-blogs/news-posts/to-hunt-the-platypus-uses-its-electric-sixth-sense

(commonly called "spiny anteaters") are they only known monotremes. Monotremes lay eggs (like birds or reptiles) in which the embryos develop until they hatch, and drink their mother's milk.

Evolutionists believe that all mammals evolved from a common ancestor because they all nourish their babies with milk secreted from mammary glands, which is such a remarkable biological innovation that it could only have evolved once. They struggle to figure out which came first (eutherians, marsupials, or monotremes), and how the other two kinds of mammals evolved from the first kind of mammal.

It should go without saying that there is a good reason why they don't really know which came first and which evolved later. The good reason is that it didn't happen. The notion that they all descended from a common ancestor is a myth—but you can't tell an evolutionist that! They stubbornly make up fantastic stories and try to find a story consistent with the biological facts.

We suggest you watch a 6-minute YouTube video titled, "Why Echidnas Are Evolutionary Misfits" [3] to see an evolutionist try to make the evolution of echidnas seem plausible. It's too hard to quote from so many parts of the video, so please, just watch it yourself.

Milk and Eggs

We can, however, quote from a peer-reviewed article in *Nature* about the DNA analysis of the platypus, which tries to explain the origin of milk and its relationship to eggs.

> Lactation is an ancient reproductive trait whose origin predates the origin of mammals. It has been proposed that early lactation evolved as a water source to protect porous parchment-shelled eggs from desiccation during incubation or as a protection against microbial infection. Parchment-shelled egg-laying monotremes also exhibit a more ancestral glandular mammary patch or areola without a nipple that may still possess roles in egg protection. However, in common with all mammals, the milk of monotremes has evolved beyond primitive egg protection into a true milk that is a rich secretion containing sugars, lipids and milk proteins with nutritional, anti-microbial and bioactive functions. [4]

You may have heard the ridiculous assertion by evolutionists that mammary glands evolved from sweat glands. We had a lot of fun debunking that foolishness 18 years ago in our "Sweating Milk" essay. [5] The quote above is the modern version of that fairy tale.

"Lactation is an ancient reproductive trait whose origin predates the origin of mammals." On the surface, that's self-contradictory. Lactation is the production of milk from mammary glands. Mammary glands are only found in mammals, by definition. Milk could not have been produced by animals that had not yet evolved glands which produce milk.

The origin of mammary glands has been "proposed." That means, nobody knows how it happened. Their explanation is nothing more than precision guesswork. ☺

In their imaginary scenario, the platypus laid eggs with shells as thin as parchment paper. Like a bird sitting on eggs in a nest, the platypus sat on the egg she had laid in a depression she had dug in the ground. To keep the egg moist, she would sweat on the egg. Somehow, through some unknown process, her sweat glands produced a different, nutritional, disease-fighting liquid to feed her young (perhaps by osmosis through the shell, and/or after it hatched). It's just a ridiculous story without any proof to back it up.

Electroreception

The platypus has another characteristic unusual for a mammal: electroreception.

> Along with echidnas, this semi-aquatic animal is one of only five mammalian species that lays eggs. These monotremes, as egg-laying mammals are known, share another characteristic. They have a so-called sixth sense: electroreception. [6]

The American Museum of Natural History explains,

> Swimming in the rivers and streams of its native Australia after dusk, the platypus closes its eyes, nose, and ears when it dives in search of dinner—bottom-dwelling invertebrates such as insect larvae, crustaceans, worms, and mollusks.
>
> To find these meals in the mud, it relies on its bill instead. This super-sensory organ is packed with three distinct receptor cells that help the platypus detect movements and subtle

[3] https://www.youtube.com/watch?v=4YB6mVWadKQ

[4] Warren, W., Hillier, L. *et al.*, *Nature*, 8 May 2008, "Genome analysis of the platypus reveals unique signatures of evolution", pp. 175–183, https://www.nature.com/articles/nature06936

[5] *Disclosure*, January 2002, "Sweating Milk", http://scienceagainstevolution.info/v6i4e.htm

[6] American Museum of Natural History, 12 January, 2018, "Its Electric Sixth Sense", https://www.amnh.org/explore/news-blogs/news-posts/to-hunt-the-platypus-uses-its-electric-sixth-sense

electric fields produced by its prey. [7]

This isn't quite as strange as it sounds at first. Some mammals use their sense of smell to hunt. They have olfactory sensors in their noses which detect airborne chemicals. These sensors send electrical signals to the brain. The monotremes just bypass the olfactory sensors and send electrical signals straight to the brain.

When we put it that way, it sounds simple; but it isn't. Later in this article, we will see that the DNA analysis of olfactory sensing poses a problem for evolutionists.

> The platypus may not be the only monotreme with electroreception, but its sensory structures are the most complex.
>
> About 40,000 specialized electroreceptor skin cells are arranged in stripes on the top and underside of its bill. Echidna species have anywhere from 2,000 to as few as 400, as is the case with the short-billed echidna. This species, which is found in dry habitats, has what researchers think is "no more than a remnant of this sensory system." [8]

Why do researchers think that? It is because it is more logical to think that the echidnas with only 400 sensors devolved from ones with 2,000. Losing functionality is easier than gaining functionality. Random mutations are much more likely to cause functionality to be lost than to be gained.

Despite that, evolutionists usually believe that more complex creatures evolved from less complex ones because they have to in order to explain where the functionality came from. Where did the first 400 sensors come from? Evolutionists have to believe they evolved from other cells, and gained functionality those previous cells did not have. If 400 sensors are enough for an echidna, why did the platypus evolve 40,000? That seems like overkill.

Furthermore, how did the platypus know how to interpret the electrical signals those 40,000 cells produce? The evolutionists don't really have an answer for that, other than that those platypuses that happened to guess that the signals could lead them to food survived, and the rest went extinct.

Venom

The platypus is venomous, unlike other mammals. Of course, there are venomous snakes and insects, which don't have a close common ancestor to the platypus. Therefore, the platypus, snakes, and insects could not have inherited their poison from a common ancestor. It would have had to have evolved independently at least three different times.

> The platypus is one of the few living mammals to produce venom. The venom is made in venom glands [crural glands] that are connected to hollow spurs on their hind legs. [9]
>
> The crural gland produces a venom secretion containing at least nineteen peptides; superadded by non-nitrogenous components. Those peptides that have been sequenced and identified fall into three categories: defensin-like peptides (OvDLPs), C-type natriuretic peptides (OvCNPs), and nerve growth factor (OvNGF). The OvDLPs are related to, though distinct from, those involved in reptilian venom production. This appears to be an example of convergent evolution of venom genes from existing immune system genes (defensins). A unique feature of the venom is the presence of a D-amino acid. This is the only known such example in mammalian systems. [10]

Platypus venom is an accidental combination of at least nineteen peptides. It wasn't inherited from a common ancestor it shares with snakes because it is a different kind of venom.

"Convergent evolution" is the evolutionists' go-to-explanation that they go to whenever they can't explain something. The idea is that survival in a particular environment poses a problem, and unrelated species sometimes stumble on the same solution to that problem because they need that solution to survive.

Venom solves two problems at once. It is the solution to the problem of needing defense against predators, and it is the solution to the problem of needing to kill something it needs to eat. Evolutionists believe the platypus, and several kinds of snakes, stumbled upon entirely different ways to produce venom.

> **Snake venom** is a highly modified saliva containing zootoxins that facilitate the immobilization and digestion of prey, and defense against threats. It is injected by unique fangs during a bite, and some species are also able to spit their venom.
>
> The glands that secrete the zootoxins are a modification of the parotid salivary glands found in other vertebrates, and are usually situated on each side of the head, below and behind the eye, and encapsulated in a muscular sheath. The glands have large alveoli in which the synthesized venom is stored before being conveyed by a duct to the base of channeled or

[7] *ibid.*
[8] *ibid.*
[9] https://en.wikipedia.org/wiki/Platypus_venom
[10] https://en.wikipedia.org/wiki/Platypus_venom#Venom

tubular fangs through which it is ejected.

Venoms contain more than 20 different compounds, mostly proteins and polypeptides. [11]

Snake venom is an accidental combination of at least twenty proteins and polypeptides. The venom is produced by the parotid salivary glands, not the crural gland as it is in the platypus.

Evolutionists are forced to believe that a fortunate combination of nineteen or twenty organic molecules independently arose in two different glands to produce two different kinds of venom in unrelated species.

Oh—but we forgot insects!

> Venomous arthropods include spiders, which use fangs — part of their chelicerae — to inject venom; and centipedes, which use forcipules — modified legs — to deliver venom; along with scorpions and stinging insects, which inject venom with a sting.
>
> In insects such as bees and wasps, the stinger is a modified egg-laying device — the ovipositor. [12]

Evolutionists believe everything is an accidentally useful modification of an existing characteristic—not an entirely new characteristic designed for a purpose. Since they believe in luck so much, they should spend all their money on lottery tickets. ☺

Florescence

The platypus made headlines last month because of the surprising discovery that it is fluorescent, which is why we wrote this essay to begin with. Actually, glow-in-the-dark animals are not as unusual as you might think.

> It is suspected by some scientists that GFPs [Green Florescent Proteins] and GFP-like proteins began as electron donors activated by light. These electrons were then used for reactions requiring light energy. Functions of fluorescent proteins, such as protection from the sun, conversion of light into different wavelengths, or for signaling are thought to have evolved secondarily.
>
> The incidence of fluorescence across the tree of life is widespread, and has been studied most extensively in cnidarians and fish. The phenomenon appears to have evolved multiple times in multiple taxa such as in the anguilliformes (eels), gobioidei (gobies and cardinalfishes), and tetradontiformes (triggerfishes), along with the other taxa discussed later in the article. [13]

Let's separate the science from the speculation. The scientific facts are that florescence is caused by GFPs, which absorb light, store the energy from that light, and then release the energy as electrical energy or a different color of light. Many species have these proteins. Because they were first noticed in sea creatures, they have been studied most in sea creatures. Recently, florescence has been discovered in some animals with fur (such as the platypus).

The speculation has to do with how and why GFPs came into existence. Evolutionists think GFPs are molecules which just happened to turn light into electricity, like an accidental solar cell. Initially, mindless, purposeless evolution used GFPs to absorb light (preventing sunburn). Later, evolution used GFPs for signaling (like fireflies blinking to attract a mate). Because there are so many different species which don't have a close common florescent ancestor, florescence must have evolved very many times accidentally. Since it must have evolved many times, it must be easy for GFPs to evolve. Strangely, nobody has actually observed this seemingly simple evolutionary process to occur in nature, nor have they replicated the evolution of GFPs in the laboratory. We wonder, why not? ☺

Glowing sea creatures have been known for a long time, which is why they have been studied for a long time. It is only recently that somebody happened to shine an ultraviolet light on a mammal and noticed it glowed.

> Platypuses' dense, waterproof fur absorbs ultraviolet light and emits a blue-green glow, mammologist Paula Spaeth Anich and colleagues discovered somewhat serendipitously. A chance sighting of a fluorescent flying squirrel in the wild had led the researchers to the mammal collection at the Field Museum in Chicago. After examining the museum's preserved squirrel skins and finding that fluorescence occurred in at least three flying squirrel species, the team decided to examine pelts from marsupials too, as those were the only mammals previously known to possess fluorescent fur. And it just so happened that the drawer of monotremes — an early branch of mammals that, today, is represented only by platypuses (*Ornithorhynchus anatinus*) and echidnas — was the next one over from marsupials.
>
> "We were curious," says Anich, of Northland College in Ashland, Wis. "So, we pulled the monotreme drawer, and we shined

[11] https://en.wikipedia.org/wiki/Snake_venom

[12] https://en.wikipedia.org/wiki/Venom#Arthropods

[13] https://en.wikipedia.org/wiki/Fluorescence

> our [ultraviolet] light on the platypuses. And they were incredibly, vividly fluorescent green and blue."
>
> To make sure the glow wasn't something unusual about the Field Museum's pelts, the team also examined a platypus specimen at the University of Nebraska State Museum in Lincoln. Sure enough, it also glowed, the researchers report online October 15 in *Mammalia*.
>
> Anich is confident that the glow isn't an artifact of preservation, because several of the examined squirrel species and the echidna pelts didn't fluoresce. It's also likely that the living animals glow like their pelts, she says, as that's been the case for all other known fluorescent mammals. [14]

Evolutionists believe flying squirrels, wombats, and platypuses don't have a close common ancestor. This is reflected in their biological classifications. They aren't just in different genera or families. They are in different orders. Squirrels are in the eutherian taxonomic order Rodentia (rodents, which bear fully-developed young). Wombats are in the taxonomic order Marsupialia (which carry their young in a pouch). Platypuses are in the taxonomic order Monotremata (which lay eggs). You have to go all the way up to the class level to find a common ancestor.

Evolutionists believe the four echidna species are the animals which have the closest common ancestor to the platypus; but they don't glow like the platypus does! Kangaroos are marsupials just like wombats; but wombats glow and kangaroos don't. Flying squirrels glow in the dark, but aeronautically-challenged squirrels don't.

But wait! There are even more kinds of animals that glow in the dark.

> Many animals — from marine species like fish to corals and land creatures like penguins and parrots — have a hidden skill: gleaming blue, green or red under certain kinds of light (*SN: 11/17/17*). But when it comes to amphibians, experts knew of only one salamander and three frogs that fluoresced — until now.
>
> Jennifer Lamb and Matthew Davis, biologists at St. Cloud State University in Minnesota, shone blue or ultraviolet light on 32 species of amphibians, including salamanders, frogs and the wormlike caecilian, at varying life stages. To their surprise, all lit up, turning brilliant shades ranging from green to yellow, the researchers report February 27[, 2020,] in *Scientific Reports*. [15]

Evolutionists believe that biological taxonomy reflects the mythical tree of life. Amphibians and mammals aren't even in the same order. They are different classes! The nearest supposed common ancestor is at the phylum level.

The point is, there are lots of distantly related species that are florescent; but most of the species closely related to florescent species are not. The florescent species did not inherit their glowing characteristic from a common ancestor. The facts are more consistent with the notion that florescence is a design feature that certain species have, rather than descent from a common ancestor.

If florescence evolved in an ancestor, its descendants should all glow (unless a birth defect caused them to lose that characteristic). Since they don't all glow, evolutionists are forced to believe that florescence is a trait that often gets lost when a new species evolves, and easily evolves again later. There is no scientific proof that actually happens. They believe it by faith.

What Does the DNA Say?

Traditionally, species were classified by comparisons of observable characteristics. Now that we have the ability to decode the DNA molecule, evolutionists often use comparisons of DNA to see which species are the most similar. The DNA analysis usually reaches different conclusions than the traditional comparison of distinct characteristics of fossils or living creatures, as we have documented in 60 previous articles. [16]

The platypus genome (its DNA) was published in 2008. Here is the abstract of that analysis:

> **Abstract**
>
> We present a draft genome sequence of the platypus, *Ornithorhynchus anatinus*. This monotreme exhibits a fascinating combination of reptilian and mammalian characters. For example, platypuses have a coat of fur adapted to an aquatic lifestyle; platypus females lactate, yet lay eggs; and males are equipped with venom similar to that of reptiles. Analysis of the first monotreme genome aligned these features with genetic innovations. We find that reptile

[14] Christie Wilcox, *Science News*, 6 November 2020, "A blue-green glow adds to platypuses' long list of bizarre features", https://www.sciencenews.org/article/platypus-glow-blue-green-ultraviolet-light-fluorescent-fur

[15] Erin Garcia de Jesus, *Science News*, 27 February 2020, "Glowing frogs and salamanders may be surprisingly common", https://www.sciencenews.org/article/glowing-frogs-salamanders-may-be-surprisingly-common

[16] http://scienceagainstevolution.info/topics-dna.htm

and platypus venom proteins have been co-opted independently from the same gene families; milk protein genes are conserved despite platypuses laying eggs; and immune gene family expansions are directly related to platypus biology. Expansions of protein, non-protein-coding RNA and microRNA families, as well as repeat elements, are identified. Sequencing of this genome now provides a valuable resource for deep mammalian comparative analyses, as well as for monotreme biology and conservation. [17]

Later in the report, it is clear that when they said, "equipped with venom similar to that of reptiles" they meant, "like reptiles, they are equipped with venom," not "the venom they have is like the venom of reptiles." That's why they say the proteins were co-opted independently.

Our award for "Best Double-talk in a Scientific Publication" goes to this sentence which appears later in that report.

> The anatomy of the monotreme reproductive system reflects its reptilian origins, but shows features typical of mammals, as well as unique specialized characteristics. [18]

In other words, the reproductive system of the platypus is like a reptile's system—except for the parts that are common to mammals, or the parts absolutely unique to the platypus.

Sexxxxx (with 5 X's)

The analysis of the platypus genome included an analysis of its sex chromosomes. Since monotremes are so different from other mammals, it should come as no surprise that their sex chromosomes are different.

You know that people with two X chromosomes are female, and people with one X and one Y chromosome are male (unless you are a politically correct science-denier). Platypuses are different from mammals like us.

> Platypuses have multiple sex chromosomes with some homology to the bird Z chromosome. Males have five X and five Y chromosomes, which form a chain at meiosis and segregate into 5X and 5Y sperm. Sex determination and sex chromosome dosage compensation remain unclear. [19]

Let's try to explain that.

If someone has two X chromosomes, she is female, and if he has one X and one Y chromosome he is male. That's generally true for mammals—but not some other species. Two identical chromosomes don't always produce females. Birds are the opposite. Roosters have identical chromosomes. Hens have one of each. As it turns out, there are lots of different sex determinations which we described in detail in a previous newsletter. We are unabashedly proud of that essay,[20] and hope you will follow the link in the footnote to read it. For now, let's just say that there are so many different ways to have sex that it is mind-boggling, and evolutionists have no way to explain how sex evolved. With 5 X and 5 Y chromosomes, platypuses are exceptions to the rule that female mammals have two X chromosomes, and male mammals have one X and one Y.

Dosage compensation is one of those aspects of sexual reproduction that is hard to explain.

> Dosage compensation is a process that balances expression of sex-linked and autosomal genes in the heterogametic sex. For example, one X chromosome in XX female mammals is randomly inactivated in every cell, and gene transcription levels from the X chromosome of XO or XY male Drosophila is elevated to approximately equal the output of two sex chromosomes in XX females.[21]

If that sounds confusing, it's because it is. That's why the authors of the *Nature* article said, "Sex determination and sex chromosome dosage compensation remain unclear." Don't worry about it.

> Platypus chromosomes provide clues to the relationship between mammal and reptile chromosomes, and to the origins of mammal sex chromosomes and dosage compensation. Our analysis provides further insight with the following findings: the 52 platypus chromosomes show no correlation between the position of orthologous genes on the small platypus chromosomes and chicken microchromosomes; for the unique 5X chromosomes of platypus we reveal considerable sequence alignment similarity to chicken Z and no orthologous gene alignments to human X, implying that the platypus X chromosome evolved directly from a bird-like ancestral reptilian system; and the genes on the five platypus X chromosomes appear to be partially dosage compensated (Supplementary

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[17] Warren, W., Hillier, L. *et al.*, *Nature*, 8 May 2008, "Genome analysis of the platypus reveals unique signatures of evolution", pp. 175–183, https://www.nature.com/articles/nature06936

[18] *ibid.*

[19] *ibid.*

[20] *Disclosure*, February 2003, "Birds and Bees", http://scienceagainstevolution.info/v7i5f.htm

[21] https://www.nature.com/subjects/dosage-compensation

Fig. 5), perhaps parallel to the incomplete dosage compensation recently described in birds. [22]

Comparing genomes of different animals is like comparing two newspaper reports about the same football game. The names of players, and what they did, should appear in both reports, but might not appear in exactly the same sequence. It might require reordering the sentences (or words) to compare the two reports. Sometimes genes in different species don't appear in the same order on the DNA molecule as they do in other species, so they have to be shuffled by researchers before they can be compared. The technical term for that shuffling is "alignment." But, just like moving words around in a report might change the meaning of the report, the same genes appearing in different places on the genome might change the effect they have.

Since evolutionists start with the unquestioned assumption that evolution occurs by random duplication and shuffling of genes, or loss of genes, or random changes to genes, they spend a lot of time trying to align genes to see what changed. It never occurs to them that the reason two genomes are different is not because one (or both) changed. They never consider the possibility that the two similar genomes might have entirely different origins, and just happened to be similar in many respects. That's why evolutionists' papers are filled with statements like this one:

> We identified miRNA families that were shared between platypus and eutherians [that is, placental mammals, not marsupials or monotremes] but not chicken (40 families), or between platypus and chicken but not eutherians (8 families), suggesting that for some miRNAs only the seed region may have been selectively conserved (Fig. 2a).[23]

Parts that are the same are assumed to have been "conserved" from a common ancestor. Parts that are different weren't conserved.

The 2008 report on the platypus genome compared genes associated with the sense of smell to determine which genes were conserved across species.

Something Smells Fishy

The DNA analysis of genes associated with the sense of smell (olfactory receptor genes) indicates something rotten in the platypus. It is shown in the figure below. It might seem confusing at first, but should be easily understood after we explain what it shows.

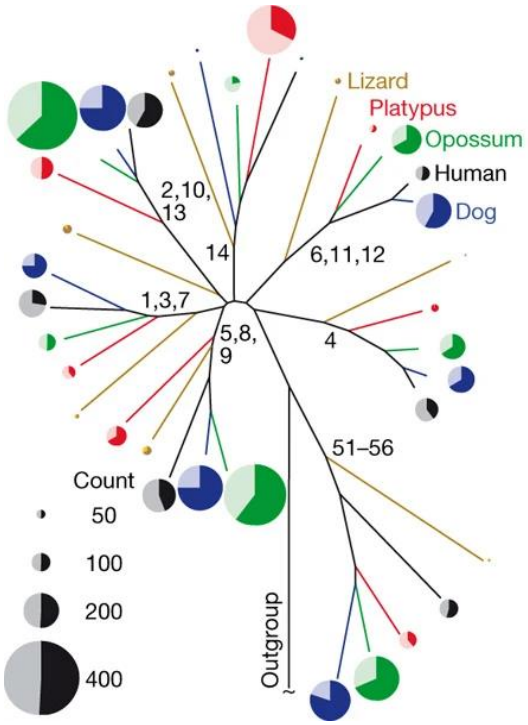
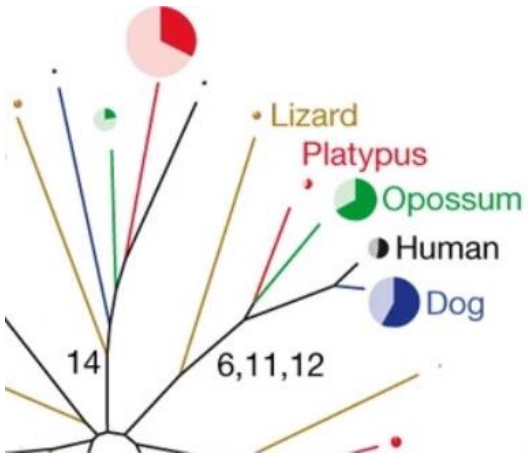


Figure 3: The platypus chemosensory receptor gene repertoire.

The platypus genome contains only few olfactory receptor genes from olfactory receptor families that are greatly expanded among therians (three other mammals and a reptile shown), but many genes in olfactory receptor family 14. These schematic phylogenetic trees show relative family sizes and pseudogene contents of different gene families (enumerated beside internal branches) in platypus. Pie charts illustrate the proportions of intact genes (heavily shaded) versus disrupted pseudogenes (lightly shaded). [24]

Let's just look at the top right corner in detail to explain what the figure shows.



[22] Warren, W., Hillier, L. *et al.*, *Nature*, 8 May 2008, "Genome analysis of the platypus reveals unique signatures of evolution", pp. 175–183, https://www.nature.com/articles/nature06936

[23] *ibid.*

[24] *ibid.*

The big red pie at the top shows that the platypus has lots of genes in olfactory receptor family 14. The tiny red pie chart shows the platypus has very few genes in olfactory receptor families 6, 11, and 12. Dogs (noted for their keen sense of smell) have many genes in olfactory receptor families 6, 11, and 12 (indicated by the big blue pie chart) and hardly any in family 14 (the tiny blue dot). Knowing how to read the figure, you can see from the entire figure that the tiny yellow pie charts show that lizards (which don't have a great sense of smell) don't have very many olfactory receptor genes of any kind. Of course, lizards aren't mammals, so one might not expect them to have similar genes.

The legend (in both senses of the word) says, "Pie charts illustrate the proportions of intact genes (heavily shaded) versus disrupted pseudogenes (lightly shaded)." The evolutionary myth is based on the assumption that an ancestor had intact genes (which have been "conserved") but descendants have genes which have been "disrupted" by mutations. The amount of disruption is determined by aligning and comparing similar genes and noting the number of differences. This presupposes evolution is true. That is, it assumes that there was an ancestral gene, and the differences are due to additions or subtractions to that gene. It ignores the possibility that the genes were different to begin with.

Most of the pie charts show that only about ¼ to ¾ of the mammalian olfactory genes are still intact. Despite all this disruption, mammals have retained their sense of smell.

Merry Christmas

If you believe flying reindeer pull Santa's sleigh, then you should have no trouble believing in evolution. But if you just take the time to unwrap the platypus, it should become clear to you that all the pretty evolutionary wrapping paper deserves to be thrown in the trash, along with the theory of evolution.

If evolution were true, the platypus would have a close common ancestor with other species (snakes and insects) that produce venom. It doesn't.

If evolution were true, the closest relatives to the platypus (echidnas) would fluoresce. They don't.

If evolution were true, the platypus would have sex chromosomes similar to other mammals. It doesn't.

The more you look, the more evidence you find against the theory of evolution.

Email

Time and Spelling

It's a World-wide Web

Jeffrey made this comment about our last newsletter.

> "Civilisations" is the British spelling. A real, patriotic American would use the spelling "civilizations." On my honour. ☺
> Excellence again. Thank you.

The smiley face (and the fact that he used the British spelling of honor) indicates that he is kidding—but it is something we take seriously. Forms of the word "civilize" appeared eight times in our last newsletter. The three times we quoted a British source, we kept the British spelling. The other five times we used the American spelling when making comments about the article.

We are no longer the little group that met in a library in the Mojave Desert on the fourth Friday of every month 25 years ago. We evolved into an organization that has published over 700 articles on our Internet website. We get email from all over the world, including readers whose first language is not English.

We keep that international audience in mind. We try not to use uniquely American expressions, and try to avoid obscure words which non-native speakers might not understand. When we do have to use those words, we try to define them in a way that doesn't appear to be condescending. We realize that when we use simplified explanations, haters might claim that we don't understand all the technical implications of the term—but we are willing to take that chance to make it easier for readers who aren't as familiar with English as their native tongues.

We apologize to those readers who like to see forty thousand written as 40.000 rather than 40,000. The American Museum of Natural History used a comma, and we did, too.

In this issue, our Australian readers are probably more familiar than our American readers are with the platypus, and not as familiar with opossums (commonly referred to as possums).

The newsletter, which appears on "the third Tuesday" is actually posted publicly about 6 AM Pacific time on Monday because it is already Tuesday in New Zealand and Australia (where we have some readers).

We try to be as foreign friendly as possible.

by Lothar Janetzko

CREATION EVOLUTION HEADLINES

https://crev.info/2020/11/readings-in-the-philosophy-of-science

Readings in the Philosophy of Science

For this month's website review we are looking at an article found on a website we previously reviewed for our *Disclosure* newsletter in September 2019. As you can tell from the link, the article was recently published in November of 2020 and deals with the topic of what science can and cannot do, and the biases that affect it.

The main page for the article provides links that allow you to Sign in / Join, show Your Profile, get information About and share your thoughts with Contact. Additional links allow you to search, SUBSCRIBE, DONATE and select a pulldown MENU of many different topics.

The article begins by stating that "Educated people need to get over the simplistic picture of science as a guarantor of truth and the opposite of religion." If you follow the recent news, you know that the mainstream media is constantly pushing the idea that science has all the answers to solving the world's problems concerning the current pandemic, climate change and a host of other issues.

The article then presents essays and book reviews that the author believes can help readers to better understand the proper role of science.

The first item discussed is a book review by Joseph Swift published in *Science* called Moving beyond the paradigm. The author states that Swift provides a "remarkably fair review of Paul Feyerabend's 1975 treatise, *Against Method*." In this book Feyerabend, challenges the assumption that the "scientific method" produces reliable conclusions and can "actually perpetuate myths and inhibit truth from being found." You can read the problems Feyerabend believes Galileo faced in the 17th century regarding the Earth orbiting the Sun.

The next item discussed is another book review. The reviewer is Jan G. Michel and in “Imaginary demons and scientific discoveries” (*Science*) he discusses the 2020 book Bedeviled: A Shadow History of Demons in Science written by Jimena Canales. Canales maintains, "demons are 'neither just psychological delusions or simplistic heuristic fictions nor simply midwives who help scientists deliver knowledge'". The author believes that Canales is incorrect in arguing that "the notion of a **(scientific) demon** should be regarded as **akin to other, more established philosophical notions or tools, 'such as concepts, numbers, classes, and categories**'".

The final item discussed is the article “Philosophical thoughts for the future” (Phys.org) by David Bradley discussing an article by Austrian scientist Franz Moser. The website author believes that this review is an example of philosophy done poorly. The views presented by Bradley and Moser receive the classification of STUPID EVOLUTION QUOTE OF THE WEEK. Moser believes our minds are merely a manifestation of the electrochemistry of our brains. The implications of this idea are presented in some detail.

You can get additional insight into the various books and article reviews by selecting the (*Science*) and (*Phys.org*) links provided on the main page of website reviewed this month.