Communique'

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**January 2023**

Happy New Year! We hope and pray you and yours had a Merry Christmas and a Happy New Year!

At our monthly meetings we are in the midst of showing a three-part series of films on **“Incredible Creatures that defy Evolution.”** We invite you to join us the evening of January 10th as we see volume 2 of this classic creation series. In line with this series, all of our articles take a look at God’s creations and His designs within them showing as He told us in Romans 1:20 that the evidence for His existence is all around us.

We have articles on **Epigenetic Designs in Holly**; the **Intelligently Designed Systems in our Bodies**; an **Analysis of the Human Pharynx**.

Our **Genesis Commentary** section this month details the **Treaty at Beersheba** in **Genesis 21:22-34**. As always, we have a full rundown of all creation education opportunities coming up in our area. This includes information about the FEAST Science Workshops which SABBSA is providing for the 19th consecutive year! We pray you find something in these pages to encourage and enlighten you and to magnify the Creator!

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**Epigenetic design and CET in Holly**

Did you know that if holly (Ilex aquifolium) finds its leaves are being nibbled by deer, it switches genes on to make them spiky when they regrow? So on taller holly trees, the upper leaves (which are out of reach) have smooth edges, while the lower leaves are prickly. Cool info and photo from u/dirtybird971 on Reddit.

This is a fantastic example of the continuous environmental tracking systems built into every living thing to help them adapt to their environments. Such epigenetic designs in nature fly in the face of evolutionary theory, but give evidence as God has told us that all you have to do is look around you and find evidence of His existence. But those who willingly ignore this evidence are without excuse!

**Your Intelligently Designed Body Is a System of Systems**

Excerpted from **Your Designed Body**, the new book by engineer Steve Laufmann and physician Howard Glicksman, Discovery Institute.

To be alive, every cell in your body needs solutions to a complicated set of problems — containment, gates, controls, framing, transport, energy, information, and reproduction. Zooming out from a single cell, the human body as a whole is made up of around thirty trillion cells (a figure that varies widely with an individual’s size). It needs to solve all the same kinds of problems that a cell does, plus quite a few more. And it needs new ways to solve old problems, ways completely different from how the same problems were solved at the cellular level.

For example, a single-celled organism is like a microscopic island of life. The cell gets what it needs and gets rid of what it doesn’t need from its surrounding environment. In contrast, a large multi-cellular organism (like you) is more like a continent with a deep and dark interior. Most of the cells reside deep in the interior with no direct access to the body’s surrounding environment. For a multicellular organism, then, harvesting the raw materials its cells need and getting rid of toxic by-products becomes a major logistical problem.

Several hundred such problems must be solved for a complex body to be alive. And many of the solutions to these basic problems generate new problems that must also be solved, or that constrain other solutions in critical ways. The result is that for a complex body to be alive, thousands of deeply interconnected problems must be solved, and many of them solved at all times, or life will fail.

Additionally, many of the problems the body faces are much more complex than those solved in any individual cell. For example, while it takes impressive engineering for cells to sense their environment (a process not well understood), sensing poses a considerably greater engineering challenge for a human body, since it involves much more sophisticated forms of sensing — like vision, hearing, taste, smell, and the fine-touch sensing in your hands.

The bottom line is that, as hard as it is for a cell to maintain life, it’s much harder for an organism with a complex body plan like yours.

**Hard Problems Take Clever Solutions**

Together, the many thousands of problems the body must solve for survival and reproduction require many thousands of ingenious solutions. Most of these solutions need special-purpose equipment across all levels of the body plan, from specifically adapted molecular machinery (like hemoglobin molecules) to specialized cells (like red blood cells) to tissues (like bone marrow) to whole body systems (like the cardiovascular system). This may involve hundreds of thousands of parts, replicated in millions of places.

Solutions to this class of problems always exhibit four interesting characteristics:

1. Specialization

It takes the right parts to make a working whole. Each part must perform a function with respect to the larger system. Each part must be made of the right materials, fine-tuned to precise tolerances, and equipped with suitable interfaces with the other parts. This is a design principle known as separation of concerns. Virtually every designed object in human experience is based on this design strategy. And this appears to be equally true in biological systems, including virtually every capability in the human body.

2. Organization

The parts must be in the right places, arranged and interconnected to enable the function of the whole. Each part must work with the other parts in an integrated way. The parts are often made of different materials, where a material is chosen for how its particular properties support the specific needs of that particular part and how it must function in light of the whole. This is a design principle known as the rule of composition. It counterbalances the separation of concerns principle. Separation of concerns breaks large problems into subproblems that are (slightly) easier to solve, while the rule of composition puts the solutions to the subproblems (the parts) together such that the function of the whole is achieved.

3. Integration

The parts must have exactly those interfaces that enable the parts to work together. With bones, this obviously involves their shapes, especially at their connection and articulation points (the joints). For other body systems this can involve structural support, alignment, shock absorption, gating and transport systems, electrical signaling, chemical signaling, exchange of complex information, and integrated logic.

4. Coordination

The parts must be coordinated such that each performs its respective function or functions at the right time. This usually requires one or more control systems, either active or passive, and usually some form of sensing and communication between the parts and the controls. This property is achieved by orchestration or choreography, which differ in the ways the controls are achieved, the former by a more centralized approach and the latter by a more distributed approach. In an old Chevy pickup, this function for the engine is achieved by a camshaft. In ATP Synthase, this is also achieved by a camshaft.

In designing a complex system, all four of the above factors must be considered across the whole when designing each of the parts.

When a system has all the right parts, in all the right places, made of the right materials, with the right specifications, doing their respective functions, at all the right times, to achieve an overall, system-level function that none of the parts can do on its own, you have what is known as a coherent system. Coherence, in this sense, is a functional requirement for all non-trivial systems. Moreover, in life the systems are never standalone — there are always interdependencies between and among the various component systems and parts. The human body is composed of coherent, interdependent systems.

Of course, each part in a larger system may be a system itself, composed of specialized parts, which may also be systems composed of specialized parts, and so on, forming a hierarchy of design. As with most human-designed artifacts, living systems consist of layers of systems and subsystems — a system of systems. This is exemplified in the human body. See the figure below.

**The Scope of the Body’s Solutions**

It takes a lot of work to keep a sawmill running. Logs need to be obtained, sorted, and brought in. Cut lumber needs to be taken away for further processing. The motors need electricity. The saw blades need to be changed out and sharpened. The workers need coffee. Lots of coffee. All these require various systems within the larger system.

Similarly, to keep your cells alive and working properly, your body requires eleven major organ systems1 to distribute, dispose, defend, generate energy, and perform other crucial tasks. The systems and their roles:

Image: Hierarchical layers of the human body, by Steve Laufmann.

The respiratory system takes in the oxygen (O2) your cells need and gets rid of excess carbon dioxide (CO2).

The gastrointestinal (digestive) system takes in the water, sugar, fat, protein, salt, vitamins, and minerals your cells need.

The renal/urinary system rids your body of excess nitrogen (ammonia, urea) and helps maintain your blood pressure and control your body’s water and salt content.

The cardiovascular system pumps blood throughout your body to provide “just in time” delivery of supplies to every organ no matter what you’re doing. It’s also critical for managing temperature, dissipating excess heat, and distributing chemical signals throughout the body.

The integumentary system (skin) protects your body from the outside world while helping control your temperature through sweating. It continually replenishes itself from the inside out and is remarkably good at repairing itself when it gets cut or scraped.

The skeletal system (bones) provides support and protection for many of your vital organs (like your brain, spinal cord, lungs, and heart) and is the framework for the muscles. Its structures, organization, and proportions enable an amazing range of movement and activity.

The motor system (muscles) allows the body to move around, stay balanced, and handle things. It’s capable of a wide range of strength demands yet possesses extraordinarily fine controls.

The nervous system (nerves and brain) allows the body to sense your surroundings, maintain your body’s vital functions, and control your activities. It also allows you to be awake and aware — to think, communicate, imagine, and create.

The immune/lymphatic system protects you from invading pathogens.

The endocrine system sends out hormones to regulate things like your metabolism and growth.

The reproductive system, male and female, enables new human life.

Each of these is a specialized subsystem in the body. The body needs all of them, organized properly, and coordinated to remarkably fine tolerances. In turn, each of these subsystems is a complete system, itself composed of many specialized subsystems and parts, organized in specific ways, and precisely coordinated.

**Editor’s Note -** This evidence for a designer and incredibly intelligent creator is self-evident as God proclaimed in Romans 1:20. Additionally, this evidence verifies what was said in **Psalms 139:13-14 when it said, “For You formed my inward parts; You covered me in my mother’s womb. I will praise You, for I am fearfully and wonderfully made; Marvelous are Your works, And that my soul knows very well.**

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**The Supposed Bad Design of the Human Pharynx**

Excerpted and adapted from **Your Designed Body**, the new book by engineer Steve Laufmann and physician Howard Glicksman with the Discovery Institute.

In our book, Your Designed Body, we apply a five-part test for evaluating ostensible instances of bad design. This test can help determine whether we’re looking at a bad design, or simply a bad argument. Let’s consider the example of the human pharynx. Is it poorly engineered?

The figure below shows that the pharynx is the common entry for both the respiratory and gastrointestinal tracts. Whatever is ingested can potentially go down the airway and cause obstruction, which can result in death by choking.

The anatomical relationship of the nose, mouth, and throat showing that the pharynx is a shared pathway for air to enter the respiratory system and for liquids and solids to enter the gastrointestinal system.

Some insist that the pharynx is therefore miserably designed, something no wise designer would engineer, but that evolution, with its trial-and-error messiness, very well might. “The biggest danger in the human throat’s design is choking,” writes Nathan Lents. “If we had separate openings for air and food, this would never happen. Swallowing is a good example of the limits of Darwinian evolution. The human throat is simply too complex for a random mutation — the basic mechanism of evolution — to undo its fundamental defects. We have to resign ourselves to the absurdity of taking in air and food through the same pipe.”1

Abby Hafer, in her pointedly titled book, The Not-So-Intelligent Designer: Why Evolution Explains the Human Body and Intelligent Design Does Not, sounds a similar note. “A better designed system would keep the tubes for air and food separate to avoid unnecessary fatalities,” she writes. “If we were designed why did the Designer do this job so badly? Or is it that the Creator likes other animals better? There are creatures in which the air passages and food passages are entirely separate. The whale’s respiratory system is separate from its digestive system. This means that a whale, unlike a human, can’t choke on its food by inhaling it. If the Creator could do that for the whales, I don’t know why he couldn’t do it for us?”2

These arguments are riddled with problems. To see why, we need to take a closer look at the human pharynx.

**How It Works**

In addition to the structures identified in the figure above, fifty different pairs of muscles, connected by six different nerves, are needed to swallow. After food in the mouth has been formed into a small ball (bolus), the tongue voluntarily moves it to the pharynx, which automatically triggers the involuntary swallow reflex.

As the bolus enters, the pharynx sends sensory information to the swallow center in the brainstem, which immediately turns off respiration so that air is not breathed in during swallowing. This prevents the lungs from drawing food into the airway. The brainstem also sends precisely ordered signals telling the various muscles to contract and move the bolus downward into the esophagus, bypassing the airway. This takes about a second.

As swallowing begins, several muscles contract to move the bolus into the pharynx, while moving the back of the palate and the upper pharynx close together to close off the path to the nose.

Next comes the tricky part. The bolus has been blocked from going up into the nose, and muscular contraction is hurtling it down towards the airway and the esophagus. Three separate actions take place to protect the airway. First, muscles contract to close the larynx, which is the gateway to the lungs. Second, other muscles move the larynx up and forward (which you can feel in the front of your neck while swallowing) to hide it under the floor of the mouth and the base of the tongue while being protected by the epiglottis. Third, this action, combined with other muscular activity, opens the upper esophagus to allow the bolus to enter.3

The timing and coordination are remarkable. The swallow center must send the right signals via the right nerves to the right muscles, with the exact right split-second timing. Since all this is triggered by the bolus entering the pharynx, the signals from throat to brainstem and back to the many muscles involved (with their reaction times) must be fast enough to prevent choking.

While critics seem to miss the amazing design of this system, it should give the reader pause. Somehow, swallowing happens, usually without incident, a thousand times a day.

Where did the information come from that specifies the size, shape, position, and range of movement of the pharynx, each of its nearby structures, and the fifty pairs of muscles involved in swallowing? How could such a system come about gradually, by accident?

Where did the information come from to make the swallow center in the brainstem and the logic it uses to control safe swallowing? Where is the repository for the information needed to orchestrate the precisely ordered, well-coordinated contraction sequence of fifty pairs of muscles?

**Scoring the Pharynx-Is-Poorly-Designed Argument**

With that primer on the pharynx and the swallowing system of which it’s a part, let’s now score the argument that the pharynx is badly designed and therefore not intentionally designed.

1. Not Understanding the Design of the Pharynx

The pharynx affords us the dual abilities to breathe and swallow food and water, but it does much more. It affords the ability for speech, language, and tonal activities like lyrical speech and singing. The percussion and acoustic shaping of the tongue, teeth, throat, oral and nasal cavities, and most of the other parts of the pharynx, are absolutely required for the nuanced communication that’s essential to the human experience. So, the pharynx has at least three major functional design objectives. If you were asked to design a system with these capabilities, how would you approach it? How would your design make the trade-offs needed to do all this with a single system? If you used separate systems, as advocated by the critics above, how would you achieve the right kinds of functions, and how would this affect how these functions are packaged into the body as a whole? The critics ignore these questions, apparently because they haven’t bothered to understand the design of the system, as a system — either its core objectives or the orchestration of its many parts.

2. Not Considering Trade-Offs when Criticizing the Pharynx

Clearly, the pharynx’s main three functions cause design conflicts that must be solved. We could use two or maybe even three separate systems to achieve these vastly different goals. However, since all three functions need similar components, two or possibly three copies of many of these structures would be necessary. If, as the critics recommend, we were structured to use the mouth only for swallowing food and water, and not for breathing, thereby precluding speech and language as we know it, the nasal passageways would need to be much larger to bring in enough oxygen during high levels of activity.

To keep all three functions, duplication of parts may be an option. We’d need two mouths, one for eating and another for breathing and speaking, and we’d need two large pipes, one for air and the other for food. We’d need two tongues, one for manipulating food in the eating mouth, and another for speaking in the breathing/speaking mouth. For making the hard-consonant sounds in speech, we’d need something like teeth in the breathing/speaking mouth, but we’d also need teeth for chopping up food in the eating mouth. For making complex tonal sounds, the nasal cavities would need to be attached to the breathing/speaking mouth. But we’d also need the nose’s smell sensors in the eating mouth in order to fully experience the taste of our food. We could go on, but you get the idea.

In the end, the anatomical changes for either scenario, precluding or preserving speech and language as we know it, would require a complete reconfiguration of the head and neck and possibly also some parts of the lungs and stomach in the body’s core. At a minimum, an increase in the size of the nasal passageways would require the head and face to be much wider. But to house duplicate systems, the volume of the head and neck would need to roughly double, and depending on the positioning of the two mouths, the passageways to the lungs and stomach would likely need to be rearranged too.

Maybe if our bodies were shaped more like a whale, this would work better, but of course this might make it harder to climb mountains. Or even to turn our heads quickly.

Building these different functions into a single set of components, with the programming and orchestration to make them work properly, is another example of elegant invention. The obvious trade-off is that it’s possible to choke, never mind how well-designed the system that’s in place to avoid this problem. Of course, the critics also neglect to consider whether it would be easier or harder to choke in a system with two mouths, as the risk of this happening would be their relative positions to each other.

The marvel is that the system combines these three separate functions in such a compact space, and the whole works so well at all three of its core functions.

3. Not Acknowledging Pharynx Degradation over Time

How and why do humans die from choking? One common cause of swallowing problems is neuromuscular injury or degeneration related to aging or disease. Since swallowing requires precisely orchestrated contractions of many different muscles, any condition that compromises nerve or muscle function can lead to difficulties in swallowing. Common conditions include stroke, Parkinson’s disease, and multiple sclerosis (MS), each of which puts the person at risk for aspirating food into their lungs and choking to death. These represent about half of the annual deaths by choking. One could argue that the body’s inability to fight off Parkinson’s or MS is also a design flaw, but these are also instances of degradation. Complex systems always degrade over time and generations, so it’s unrealistic to think this should never happen to the human body if it were well designed.

Another common cause of choking is user abuse. When a healthy adult takes in too large a piece of food, or doesn’t chew sufficiently, or a child takes in a foreign object like a small toy, these objects can get stuck in the airway and choking results. One could insist that the design should have been foolproof against such abuses, but this merely takes us back to the question of trade-offs.

To even hope to make the system abuse-proof, the three functions of the pharynx would have to be divided out into two or three separate systems, and we’ve already seen all the problems that attend that strategy. Moreover, no matter how carefully an engineer designs a product, it’s always at risk of being misused and, due to wear and tear, its functional capacity lessening over time.

4. Jumping from Poor Design of the Pharynx to No Intentional Design

Even if we were to grant for the sake of argument that the pharynx is a case of shoddy engineering, it wouldn’t follow from this alone that it wasn’t intentionally designed (as the Yugo car and Tacoma Narrows bridge aptly illustrate). The evolutionists who reach this unsound conclusion perhaps get there by embracing the false premise that poorly designed things must be unintentionally designed things, and combining it with the equally mistaken view that the pharynx is a botched design. But perhaps the error is a bit subtler.

In logic, one of the formal fallacies is known as affirming the consequent. That logical fallacy runs like this:

Major Premise: If A is true, then B is true.

Minor Premise: B is true.

Conclusion: Therefore, A is true.

That’s an invalid syllogism. For it to be valid, the major premise would need to be “If B is true, then A is true.” As it is, the conclusion simply doesn’t follow. This is affirming the consequent, or put more generally, it’s a non sequitur. This may be how the evolutionists above have reached their invalid conclusion, thus:

Major Premise: If A (something came about without intention), then B (it is poorly constructed).

Minor Premise: B is the case: the human pharynx is poorly constructed.

Conclusion: A is true: the pharynx came about without intention.

Even if we granted both premises, the conclusion wouldn’t follow, since it’s an invalid syllogism guilty of affirming the consequent. It’s not clear that this is exactly how evolutionists are reasoning, but it well may be close to the mark based on their statements.

But wait, there’s more. Professor Lents asserts that “if we had separate openings for air and food, [choking] would never happen.” But in any system that requires breathing air into the body, the opening for the air can become blocked — no matter where you put it on the body or how it’s configured. How will these critics’ “improved” system prevent choking from ever happening?

Even a design that is truly suboptimal in one respect cannot demonstrate that it’s a poor design, since the “suboptimal” feature may simply be the natural outcome of a perfectly reasonable design trade-off. (And as noted, even if a suboptimal feature were a true design blunder, this would not be sufficient warrant to claim that it wasn’t intentionally designed.)

Another error in reasoning: “The human throat is simply too complex for a random mutation — the basic mechanism of evolution — to undo its fundamental defects,”4 Lents insists. But if the human throat is too complex for a random mutation to undo a “design defect,” how could random mutations have built such a complex feature in the first place? And if it works and the species thrives, can it be called a defect?

Or recall this argument from Hafer: “If the Creator could [separate the respiratory from the digestive systems] for the whales, I don’t know why he couldn’t do it for us?”5 Being capable of doing something doesn’t make it a good idea. We could design an iPhone with tires, but this may not be helpful to that device’s purpose. Whales are also able to live their whole lives in the ocean. Why couldn’t the Creator give humans that ability, too? It would certainly cut down on skateboard injuries and fatal traffic accidents. Maybe it just wasn’t the plan.

While the above are likely intended as arguments to poor design, in the end they come across as logical “rubbish,” to borrow a phrase from our British colleagues.

5. Aesthetic Considerations in Evaluating the Pharynx

The two critics above, at least in the quotations above, do not level aesthetic objections against the design of the pharynx. The irony is that if the designer of the human body had taken their advice and used the vastly clunkier and less elegant approach of creating two or three separate systems for breathing, eating/drinking, and communicating in order to minimize choking, the anti-design critics might have lodged an aesthetic argument against such a choice, namely that no properly ingenious “tidy-minded engineer” would have failed to elegantly combine the three primary functions into a single clever system.

Engineers know this game — damned if you do and damned if you don’t, with critics ignoring the question of trade-offs. Engineers develop thicker skins as a natural coping mechanism. (Which, come to think of it, is another clever adaptive design feature of the human body!)

**Ingenious Design**

Most people swallow a thousand times a day without incident, all the while breathing in enough air, swallowing enough food and water, verbally communicating with nuance, and sometimes even singing. Thus, the rare possibility of choking to death provides little actual evidence of incompetent design. Rather, the human pharynx is more accurately viewed as a clever, elegant solution to a complicated set of competing design objectives, with justifiable choices regarding design trade-offs, within rigid constraints. Further, the solution is profoundly well packaged and even provides a way to equalize the air pressure in the middle ear. This is ingenious design.

**Editor’s Note – Again we see that we are “fearfully and wonderfully made!” This article hearkens us back to the arguments by Richard Dawkins and others that the amazingly complex human eye is poorly designed as its rods and cones are backward inverted in design. Never mind that this inverted design allows the rods and cones to be bathed in blood from inside without blood vessels in front of them obstructing their view of light as would be the case if they weren’t inverted. Also, don’t miss the fact that this same inverted design is the one used in hawks and eagles who have amazing eyesight fitted for their lifestyle and survival.**

**Further, when we examine the invertebrates in nature which have their eye design verted as Dawkins suggests would be more logical, efficient and better, we find they invariably have poorer vision than ourselves and the avians, such as is the case with squids.**

**Costa Rica Creation Tour**

To anyone who might be interested in joining AOI’s 2023 Costa Rica Creation Tour, March 5 – 14. For full information and a day-by-day list of activities and hotels go to: <https://www.discovercreation.org/camps-tours/costa-rica-creation-adventure/>

This is a small and personal tour so pray it will fill with just the right mix of participants. Some may want to stay longer to join our university, schools, and church creation outreach afterwards.



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**Genesis Commentary**

**The Treaty at Beersheba**

**22**At that time Abimelek and Phicol the commander of his forces said to Abraham, “God is with you in everything you do. **23**Now swear to me here before God that you will not deal falsely with me or my children or my descendants. Show to me and the country where you now reside as a foreigner the same kindness I have shown to you.”

Abimelech… spoke to Abraham: This was probably not the same Abimelech of Genesis 20. Abimelech was the title of a ruler among the Canaanites, not a specific name. Phichol- Name signifies “mouth of all,” i.e., all-commanding. Probably an official title and not his name.

**24**Abraham said, “I swear it.”

**25**Then Abraham complained to Abimelek about a well of water that Abimelek’s servants had seized. **26**But Abimelek said, “I don’t know who has done this. You did not tell me, and I heard about it only today.”

**27**So Abraham brought sheep and cattle and gave them to Abimelek, and the two men made a treaty. **28**Abraham set apart seven ewe lambs from the flock, **29**and Abimelek asked Abraham, “What is the meaning of these seven ewe lambs you have set apart by themselves?”

**30**He replied, “Accept these seven lambs from my hand as a witness that I dug this well.”

**31**So that place was called Beersheba (“Beersheba” can mean “well of seven” and/or “well of the oath”.), because the two men swore an oath there.

**32**After the treaty had been made at Beersheba, Abimelek and Phicol the commander of his forces returned to the land of the Philistines. **33**Abraham planted a tamarisk tree in Beersheba, and there he called on the name of the Lord, the Eternal God. **34**And Abraham stayed in the land of the Philistines for a long time.

Beersheba as “the well of the seven.” The latter meaning may have some allusion to the seven lambs by which Abraham secured the possession of the well. (Genesis 21:29.) The Heb. word for taking an oath comes from the same root which signifies seven. The reason is, an oath was confirmed by seven witnesses. Herodotus says that the Arabians chose some seven things for the confirmation of the oath. They sware both of them; Heb., were sworn. In Heb., “swearing” is always represented by the passive form of speech, conveying the idea that one is adjured by another, or has an oath imposed upon him by another.

Genesis 21:32. Thus they made a covenant.] “Cut a covenant,” according to the usual Heb. expression. Hence, probably, animals were slain, and the covenant thus ratified by the parties passing between the divided portions.

ABRAHAM THE FRIEND OF MAN

This treaty between Abimelech and Abraham brings out that kindness and goodwill towards men for which the Patriarch was as remarkable as for his piety towards God. He was to be known afterwards as the “Friend of God,” and no one can be such without being also the friend of man.

He yields readily to the request for his friendship. There were lower, as well as higher motives which led Abimelech to seek the friendship of Abraham. He was a heathen Philistine king, having little knowledge of the true God, and very imperfect conceptions of human duty. We cannot suppose that he desired the friendship of Abraham purely on the highest grounds. His motives were a mixture of good and evil.

Beersheba will become the focal point for numerous biblical events through history-

· Abraham’s son Isaac dug this well again, and he built an altar in Beersheba (Genesis 26:23–33).

· Abraham’s grandson Jacob stopped in Beersheba as he left the promised land (Genesis 28:10–15, 46:1–7).

· When Israel took possession of the promised land, Beersheba became the territory of the tribe of Simeon and Judah (Joshua 15:28, 19:2).

· Samuel’s sons were judges in Beersheba (I Samuel 8:2).

· King Saul fortified Beersheba in his battles against the Amalekites (I Samuel 14:48, 15:2–9).

· The prophet Elijah found refuge at Beersheba when Jezebel ordered him killed (I Kings 19:3).

· The prophet Amos mentioned Beersheba in regard to idolatry (Amos 5:5 and 8:14).

 The phrase from Dan to Beersheba would later become a proverbial phrase describing the entire land of Israel, from north (Dan) to south (Beersheba). This is seen in passages such as Judges 20:1, 1 Samuel 3:20, 2 Samuel 3:10, 1 Kings 4:25, and many others.

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**Prayer Needs and Praises!**

**- Pray for spiritual healing in our nation.**

**- Pray for SABBSA’s Public Seminars**

**- Pray for our Radio Ministry**

**- Pray for our effectiveness of monthly meetings and speakers**

**- Pray for how we can get the gospel out better**

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**Coming to SABBSA on the second Tuesday of each month at Faith Lutheran Church in 2022**

January 2023 – **Incredible Creatures that defy Evolution - Part II**

February – **Incredible Creatures that defy Evolution - Part III**

March – **Biology and Animals that defy Evolution – Scott Lane**

April – **Discovery and Design – Bruce Malone, Search for the Truth Ministries**

May – **Lucy Unveiled - Biology and Missing Links**

June – **Genetics and the Bible**

July – **Dinosaurs and the Bible**

August – **The Discovery of Genesis in Chinese**

September – **Supposed Contradictions in the Bible?**

October – **“The Rocks Cry Out" #7 – “Science is a Tool”**

November – **“The Rocks Cry Out" #8 – “Grand Canyon”**

December – **“The Rocks Cry Out” #9 – “Explosive Evidence for Creation”**

**SABBSA on KSLR**

Please join the **San Antonio Bible Based Science Association** “on the air” each Saturday afternoon with “**Believing the Bible!”** Join us **Saturday afternoons at 1:45 pm on radio station KSLR 630 AM in San Antonio and airing for 13-million people across the U.S. in thirteen major markets and internationally in 120 countries on WWCR.**

Here is our schedule of upcoming program topics

1/7 **Transhumanism**
1/14 **Canceling Eve**
1/21 **Global Warming 1 - Dominion**
1/28 **Global Warming 2 - The Hoax**
2/4 **Stone, Bronze & Iron Ages in the Bible**

2/11 **8 Dumb things an Atheist must Believe**
2/18 **Global Warming 3**
2/25 **Global Warming 4**
3/4 **Day 1 - God Invents Science**
3/11 **Days 2 and 3 of Creation**
3/18 **Creationist Dr. Carl Williams**
3/25 **Creation in the Church, Rev. Jerry Cannup**
4/1 **Life is Not Accidental**

If you cannot tune in on Saturday afternoons or would like to sample our program or hear previous shows, they are available on podcast on the KSLR website (kslr.com). Click on the link below to go to the KSLR podcast page and scroll down till you find "**Believing the Bible**."

 ["Believing the Bible" - SABBSA on KSLR Radio](https://am630theword.com/radioshow/local)

**Cartoon Corner**

Thanks to Answers in Genesis who provides many of these cartoons each month for our newsletter and our presentations. Please think about donating to them in gratitude for this and all the ministries they give us.

**FEAST Science Workshops**

SABBSA will be resuming "**The Rocks Cry Out**" creation curriculum for the 2023 FEAST Science Workshops. Each program is slated to occur the fourth Wednesday of the scheduled months at 10 am at FEAST. We thank the good crowd of parents and children who attended our first two presentation in 2022.

The 2023 schedule is shown below.

January 25, 2023 – **Explosive Evidence for Creation** (Mt. St. Helens provides a model to understand rapid geological change happening during the flood of Noah)

February 22, 2023 – **Science Starts with Creation** (Consensus does not determine truth and not all scientists believe in evolution)

March 2023 – **Brilliant: Made in the Image of God**(Ancient cultures reveal rapid development of intelligence by God, not slow evolution of mankind)

April 2023 – **A Matter of Time** (The vast majority of dating methods reveal a recent creation)

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**Around Texas**

**Houston:**
The **Greater Houston Creation Association** (**GHCA**) normally meet at Houston's First Baptist Church at 7 pm every first Thursday, in Room 143. Their meetings can be streamed live! For more information, go to [www.ghcaonline.com](http://r20.rs6.net/tn.jsp?llr=bztaencab&et=1103662222545&s=545&e=001xF-6WOYzM5Yyre44Ea_qUjH5EOT_fFIGjrfpfa5h-rD53IlUVbz3Vc0Dp47_VEwW3iQQ6F1b6K0EtKc_vUxYKpzN_8V2upXFbsOScvUeD92nJdUTjDIFeg==).

**Glen Rose:**
Dr. Carl Baugh gives a “***Director’s Lecture Series***” on the first Saturday of each month at the Creation Evidence Museum just outside Glen Rose, TX. This museum is also a great and beneficial way to spend any day. Presentations are at 11 am and 2 pm. For more information, go to [www.creationevidence.org](http://www.creationevidence.org/)

**Dallas:**

The Museum of Earth History uses the highest quality research replicas of dinosaurs, mammals, and authentic historical artifacts to not only lay out for the visitor a clear and easily understood connection between Genesis and Revelation, but will do so in an entertaining and intellectually challenging way. Open M-F 9 to 6. <http://visitcreation.org/item/museum-of-earth-history-dallas-tx/>

**ICR in Dallas:**

Of course, the **ICR Discovery Center for Science and Earth History** is the foremost creation history museum in the Southwest. They are open from 10am to 5 pm Mondays through Saturdays. For more information on this exceptional facility go to <https://discoverycenter.icr.org/>

**Dallas-Ft Worth:**
The Metroplex Institute of Origin Science (MIOS) meets at the Dr. Pepper Starcenter, 12700 N. Stemmons Fwy, Farmers Branch, TX, usually at 7:30 pm on the first Tuesday of each month. <http://dfw-mios.com/>

**Abilene:**

The Discovery Center is a creation museum/emporium that exists primarily to provide scientific and historic evidence for the truthfulness of God’s word, especially as it relates to the creation/evolution issue. It also features some fascinating “Titanic Disaster” exhibits. <https://evidences.org/>

**Lubbock Area (Crosbyton):**
All year: Consider a visit to the Mt. Blanco Fossil Museum, directed by Joe Taylor. The Museum is worth the visit if you live near or are traveling through the Panhandle near Lubbock. If you call ahead and time permitting, Joe has been known to give personal tours, especially to groups. For more information, visit [http://www.mtblanco.com/](http://r20.rs6.net/tn.jsp?llr=bztaencab&et=1103662222545&s=545&e=001xF-6WOYzM5bqqt6T1G_CwJWJosrOSIhLAagtnP0Z504J-gEROEBe22S3gq720x6ofjFVqK-AfJcsjrsuQyRtoepYiAQVVUFC-cF56fLwwBJ0SQ-44KlLmw==).

**Greater San Antonio area:** Listen to **Answers with Ken Ham** online at the address below. <http://www.answersingenesis.org/media/audio/answers-daily> To hear creation audio programs from the **Institute for Creation Research**, listen online at this address. <http://www.icr.org/radio/>Also, tune in KHCB FM 88.5 (San Marcos) or KKER FM 88.7 (Kerrville) for **Back** **to Genesis** at 8:57 AM Mon-Fri, then **Science, Scripture and Salvation** at 1:30 AM, 8:00 AM and 4:30 PM on Saturdays.

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**Last Month at SABBSA**

**Incredible Creatures that defy Evolution - Part I**

HAVE YOU EVER WONDERED...

Are there really creatures that produce fire to defend themselves?
How does a giraffe get a drink without causing lethal blood pressure to his brain?
How can geckos walk upside down, even on glass, and not fall?

Creatures and biological systems examined in this program: - Bombardier Beetle - Giraffe - Woodpecker - Australian Incubator Bird - The Chicken Egg - Platypus - Black & Yellow Garden Spider - Gecko & Chuckwalla Lizards - Human Eye & Ear Drum

This film is a creation classic which we enjoyed thoroughly and marveled at God’s ingenuity in nature! If you missed our December meeting, you can view this film on **YouTube** by using this link <https://www.youtube.com/watch?v=uMl6YcLZ7V0&t=11s>

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**Next SABBSA Meeting:**

**Tuesday, January 10, 2022, at 7 pm**

**Coming to SABBSA in January**

**Incredible Creatures that defy Evolution – Volume 2**

Have you ever wondered...

\* Are there really creatures that produce fire to defend themselves
\* How certain birds can navigate over thousands of miles of ocean and never get lost?
\* How fireflies and glowworms can create pure light that generates no heat?
\* How great whales can dive to the bottom of the ocean without the pressure causing them to implode?
\* How some creatures can be cut in half and still regenerate themselves? Even grow a new head?
\* What incredible flying insect became the inspiration for the design of the helicopter?

The Incredible Creatures That Defy Evolution Series enters the fascinating world of animals to reveal sophisticated and complex designs that shake the traditional foundations of evolutionary theory.

This series features Dr. Jobe Martin, who for the past 30 years has been exploring evolution vs. creation. His findings have been fascinating students around the world as he lectures on these remarkable animal designs that cannot be explained by traditional evolution.

Please join us in January for creation science and biblical apologetics teaching you will find nowhere else in Bexar County. Begin the New Year with a breathtaking film showing the wonders of God's creations! After the program, we will have our annual business meeting, dues contributions for membership and officer elections as we do each January.

We meet at **Faith Lutheran Church** just **south of the corner of Jones Maltsberger and Thousand Oaks**. The address is 14819 Jones Maltsberger Rd., San Antonio, Texas 78247.