

# Pathogenic Energy Harvesting & Siphoning

ALL PATHOGENS ARE ENERGY HARVESTING &  
SIPHONING AGENTS



Loosh is a hyperdimensional energy given off by the human soul when traumatized. Pathogens parasitically feed on it. Think of it as their *simulacrum of kundalini*, or, their fake imitation of the all-encompassing power that lives within each human being.



Loosh is a term applied to energy produced by human beings and animals that other entities use to feed from. It is also used to refer to the energy that is produced by suffering that entities feed upon.

In a predator-prey struggle, energy is produced which is also called “energy farming.”

The greater the suffering, the more life force is spewed from our bodies, and the tastier the energy meal.

## **Forces of Nature**

In the vast expanse of the cosmos, from the swirling galaxies to the fundamental particles that comprise all matter, a unifying thread weaves through the fabric of existence: energy. The concept of energy is central to our understanding of the universe, spanning the macroscopic astronomical scales to the microscopic biological quantum realms. It is the currency of the cosmos, the medium through which stars shine, life thrives, and atoms interact. From the celestial bodies to the intimate dance of subatomic particles, every process, every movement, and every transformation is an expression of energy in its myriad forms.

At the grandest scale, colossal forces are at play in the lifecycle of stars, the dynamics of galaxies, and the inexorable expansion of the universe itself, all governed by the exchange and conversion of energy. Within the celestial cauldrons of the stars, nuclear fusion converts matter into radiant energy, lighting up the heavens and seeding the universe with the elemental building blocks of matter. Conversely, on the biological microcosmic level, the interactions between particles are powered by the same fundamental forces, manipulated through exchanges of energy that take place in the heart of every cell and atom.

In exploring the macro to the micro, as above so below, everything is intrinsically linked by this universal principle. Every interaction, from the magnetic and electrical forces that anchor planets in their orbits to the chemical bonds that underpin the richness of life, can be distilled down to a dance of energy. The vibrancy of the universe, with all its complexity and diversity, is thus a grand symphony orchestrated by the flow and transformation of energy. Consider the magnitude and majesty of this omnipresent force — energy, the very essence of all that is.



To begin understanding how energy is transferred from the macro (outside) to the microbiological (inside) we'll focus on the following genes and their mechanisms:

- **Clathrin (The Triskelion Golden Fibonacci Spiral)**
- **PIEZO (The Force)**
- **RHO GTPases (Quantum Toroidal Vortex)**
- **Actin (Electromagnetic Spectrum)**
- **Microtubules (Consciousness)**

Let's begin!

### **What is Clathrin?**

Clathrin forms a **triskelion shape** composed of three clathrin heavy chains and three light chains. When the triskelia interact they form a polyhedral lattice that surrounds the vesicle. The protein's name refers to this lattice structure, deriving from Latin clathri meaning lattice.



A clathrin cage with a single triskelion highlighted in blue

Coat-proteins, like clathrin, are used to build small vesicles in order to **transport molecules within cells.**





DOT Logo

Even the United States Department of Transportation has their logo as a triskelion symbol.

Through Clathrin, the endocytosis and exocytosis of vesicles **allows cells to communicate, to transfer nutrients, to import signaling receptors, to mediate an immune response after sampling the extracellular world, and to clean up the cell debris left by tissue inflammation.**

The endocytic pathway can be **hijacked by viruses and other pathogens** in order to gain entry to the cell during infection. [R]

Triskelions are receivers and transmitters of energy. Pathogens hijack this energy!

According to Wikipedia, following the links provided on [clathrin](#), [triskelions](#) form a spiral design can that is based on interlocking [Archimedean spirals](#). Archimedean spirals are related to the [Golden Spiral](#), or **Fibonacci sequence**.

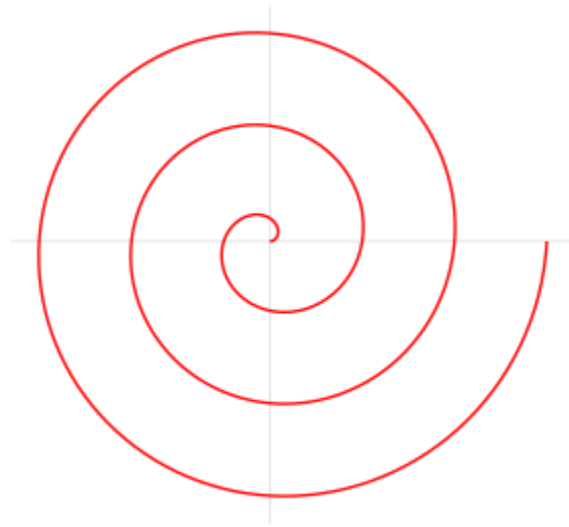




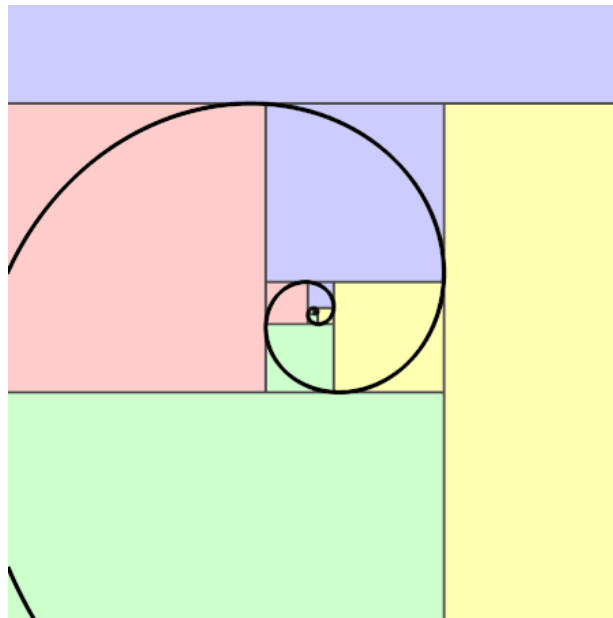
## Triskelion



5,000 year-old triskelion on an orthostat at Newgrange



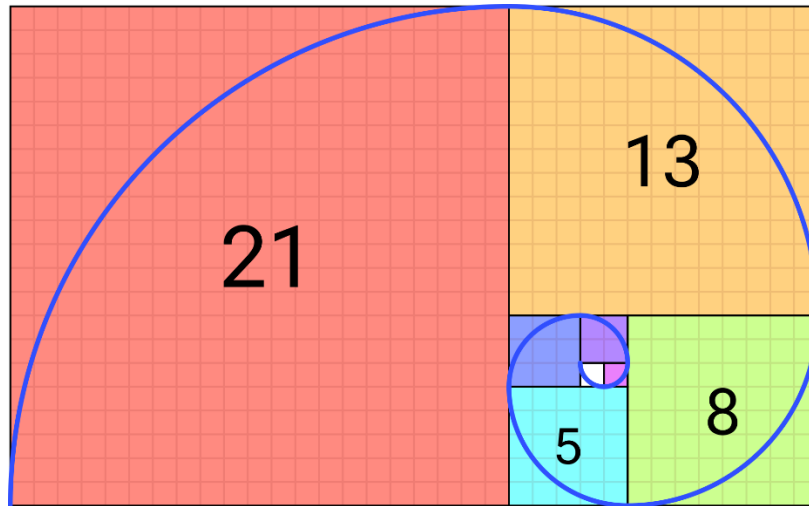
Archimedean spiral



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Golden Spiral



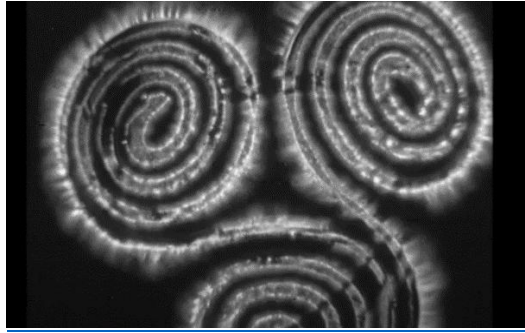
The Fibonacci Spiral

The triskelion creates a bioelectric and biomagnetic energy flow based on mathematics and sacred geometry. This is the “**Spiral of Life**”.



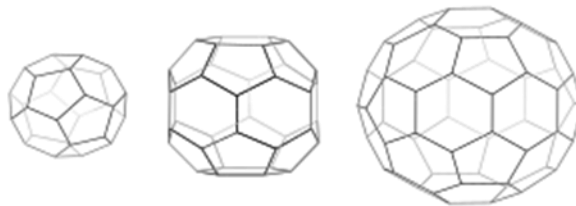
Watch the energetic movement within a triskelion in this [video](#)





(Triskelion Energy Movement)

The Clathrin Triskelion Lattice goes on to form a “**uckyball**” also called a **Fullerene**.

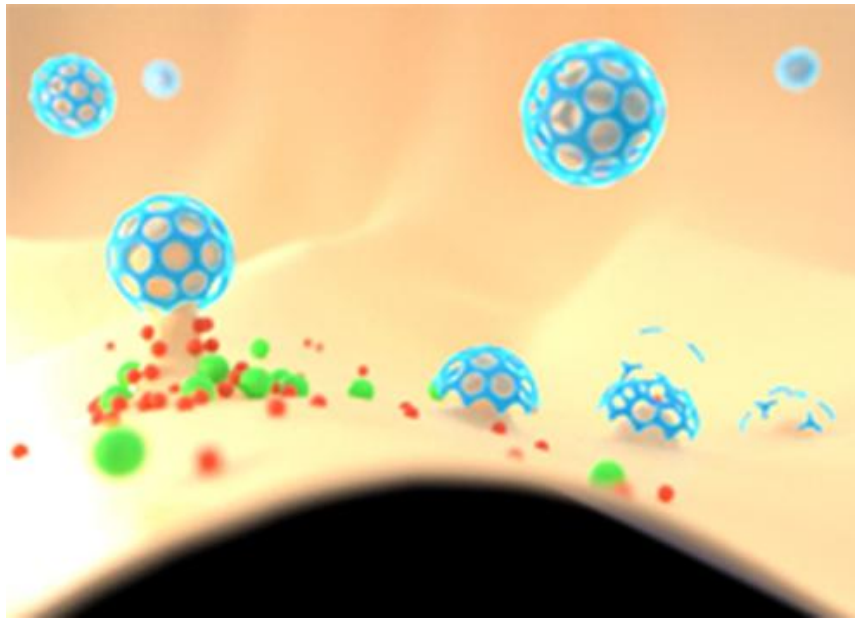


Leonardo da Vinci's insights predicted the discovery of the buckyball, a pure carbon molecule with a unique structure.





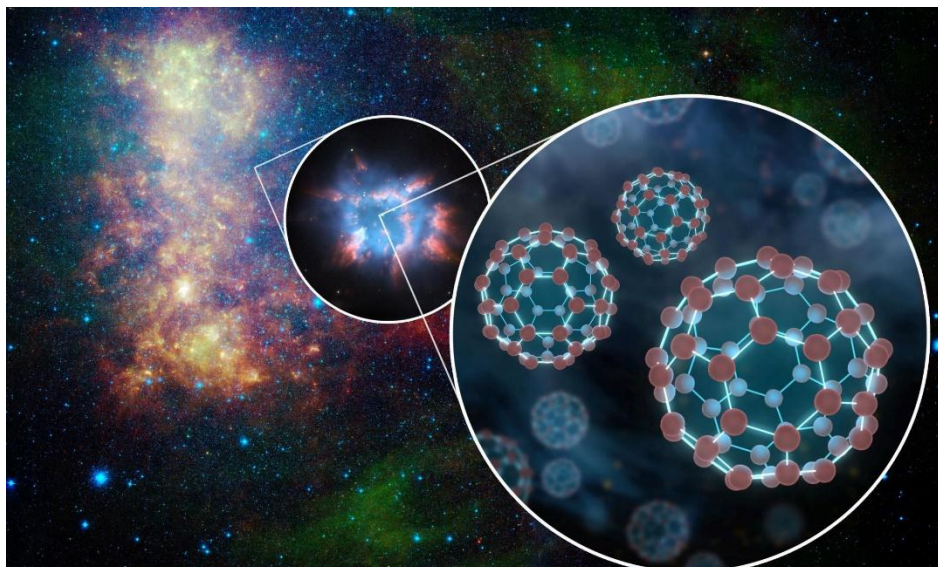
Buckminsterfullerene (C60)



Clathrin

And, yes these buckyballs are also found in space. They are called “Water Buckyballs.”





## Hubble Finds Tiny “Electric Soccer Balls” in Space

### “Water Buckyball” Terahertz Vibrations in Physics, Chemistry, Biology, and Cosmology

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#### Abstract

Pentagonal dodecahedral water clusters – “water buckyballs” - and arrays thereof are shown from first-principles electronic-structure calculations to possess unique terahertz-frequency vibrational modes in the 1-6 THz range, corresponding to O–O–O “bending”, “squashing”, and “twisting” “surface” distortions of the clusters. The cluster LUMOs are huge “Rydberg” “S”, “P”, “D”, and “F”-like molecular orbitals that accept an extra electron via optical excitation, ionization, or electron-donation from interacting atoms or molecules. Dynamic Jahn-Teller coupling of these “hydrated-electron” orbitals to the THz vibrations promotes such water clusters as oxygenates for destroying particulate matter in hydrocarbon fuel combustion, as candidates for reducing the large contribution of water vapor to atmospheric global warming, as the focus for harvesting methane from water clathrates, and as vibronically active “structured water” essential to biomolecular function such as protein folding. In biological “microtubules”, confined water-cluster THz vibrations may induce their “quantum coherence”, communicated by Jahn-Teller phonons via coupling of the THz electromagnetic field to the water clusters’ large electric dipole moments. Also discussed are the roles of networked water buckyball clathrates in the structure and possible high- $T_c$  superconductivity of hydrated-electron supercooled water. Lastly, astrophysical water buckyballs may constitute thermalizing “cosmic dust”, contribute to the cosmic background radiation, be a candidate for “Rydberg baryonic dark matter”, and absorb the virtual photons of vacuum fluctuations above their cutoff THz vibrational frequency, leaving only the low-frequency virtual photons to be gravitationally active, thus possibly explaining the small magnitude of dark energy.

#### Introduction

Scientific interest in water nanoclusters has been motivated by their possible roles in biology [1,2] atmospheric science [3,4], and astrophysics [5], as well as by their relevance to the structure and properties of liquid water [6]. In a recent letter by this author and collaborators [7], it has been suggested that because of their large electric dipole moments, protonated water clusters such as  $(\text{H}_2\text{O})_n\text{H}^+$  shown in Fig. 1 may contribute significantly to the observed strong THz emission from water vapor under optical stimulation. Experiment and theory agree that not only can such water clusters be produced, but they also occur optimally in certain numbers (so-called “magic numbers”) and configurations of water molecules [3,8-10]. Prominent among the magic-number water clusters that have been identified are ones having the “buckyball-like” pentagonal dodecahedral structure [9,10] shown in Fig. 2a. These clusters have a closed, ideally icosahedral symmetry formed by 20 hydrogen-bonded water molecules, with their oxygen atoms at the vertices of 12 concatenated pentagons and with 10 free exterior hydrogen atoms, as illustrated for  $(\text{H}_2\text{O})_{21}\text{H}^+$  and  $(\text{H}_2\text{O})_{20}$  clusters in Figs. 1d and 3a, respectively.

#### Electronic Structure and THz Vibrations

Fig. 1 shows the computed density-functional ground-state molecular-orbital energies and vibrational modes of the  $(\text{H}_2\text{O})_{21}\text{H}^+$  or  $(\text{H}_2\text{O})_{20}\text{H}_2\text{O}^+$  cluster, which from molecular-dynamics simulations are qualitatively unchanged at temperatures well above 100 degC, where the cluster remains remarkably intact. Of particular importance are the “squashing” and “twisting” vibrational modes of the otherwise ideal pentagonal dodecahedral cluster shown in Fig. 2a. Density-functional calculations for the electrically neutral pentagonal dodecahedral water cluster,  $(\text{H}_2\text{O})_{20}$ , and arrays thereof shown in Fig. 3 have also been performed, yielding the vibrational modes displayed in Fig. 4. These results are very similar to those for  $(\text{H}_2\text{O})_{21}\text{H}^+$  in Fig. 1. Common to the water clusters studied are: (1) lowest unoccupied (LUMO) energy levels like those shown in Fig. 1a, which correspond to the huge “Rydberg” “S”, “P”, “D”, and “F”-like cluster “surface” orbital wavefunctions shown in Fig. 1b; and (2) bands of vibrational modes between 1 and

## Water Buckyball Terahertz Vibrations in Physics, Chemistry, Biology, and Cosmology

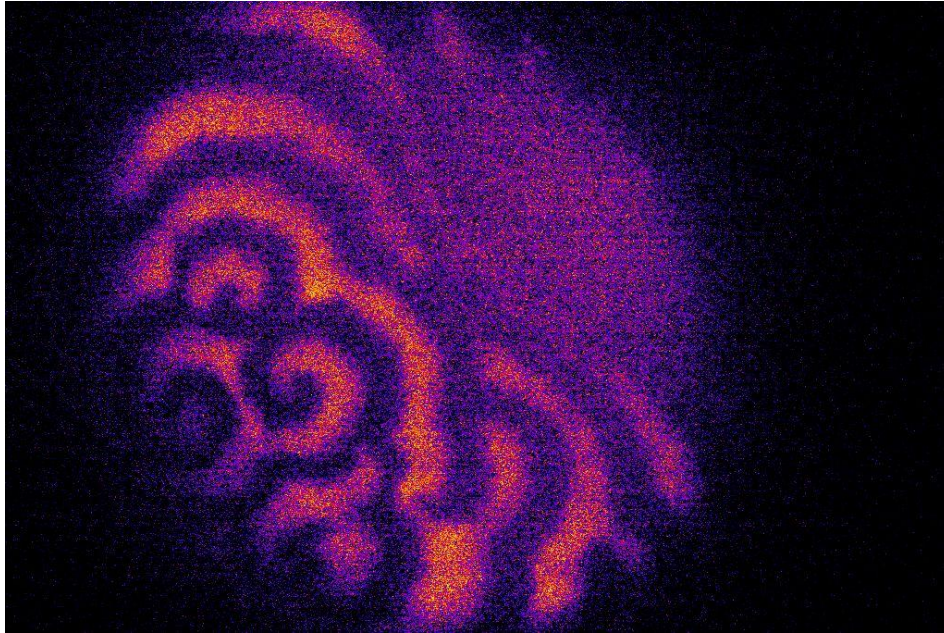
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The reason I tell this most sacred information is because it's literally how the universe works from the macro to the micro. Even on a cellular level!

It would seem that the universe organizes itself in spiral waves and buckyballs.

According to MIT, **The growth of an organism rides on a pattern of waves.** [\[R\]](#)



MIT scientists have taken a detailed look at the pattern of these waves. The behavior of these swirling waves, the researchers realized, is similar to the waves generated in other, seemingly unrelated systems, such as the **vortices in quantum fluids**, the **circulations in the atmosphere and oceans**, and the **electrical signals that propagate through the heart and brain**.

In their study, the team focused on the active form of “**Rho-GTP and the pattern of waves produced**”, which looks striking similar to a **Triskelion pattern**. From their videos, the team observed that waves seemed to oscillate outward as tiny, **hurricane-like spirals**.

“When you look, it’s essentially the same as **vortices in a fluid, or waves in the brain, or systems on a larger scale**,” Dunkel says. “**It’s the same universal phenomenon, just scaled down to the level of a cell**.”

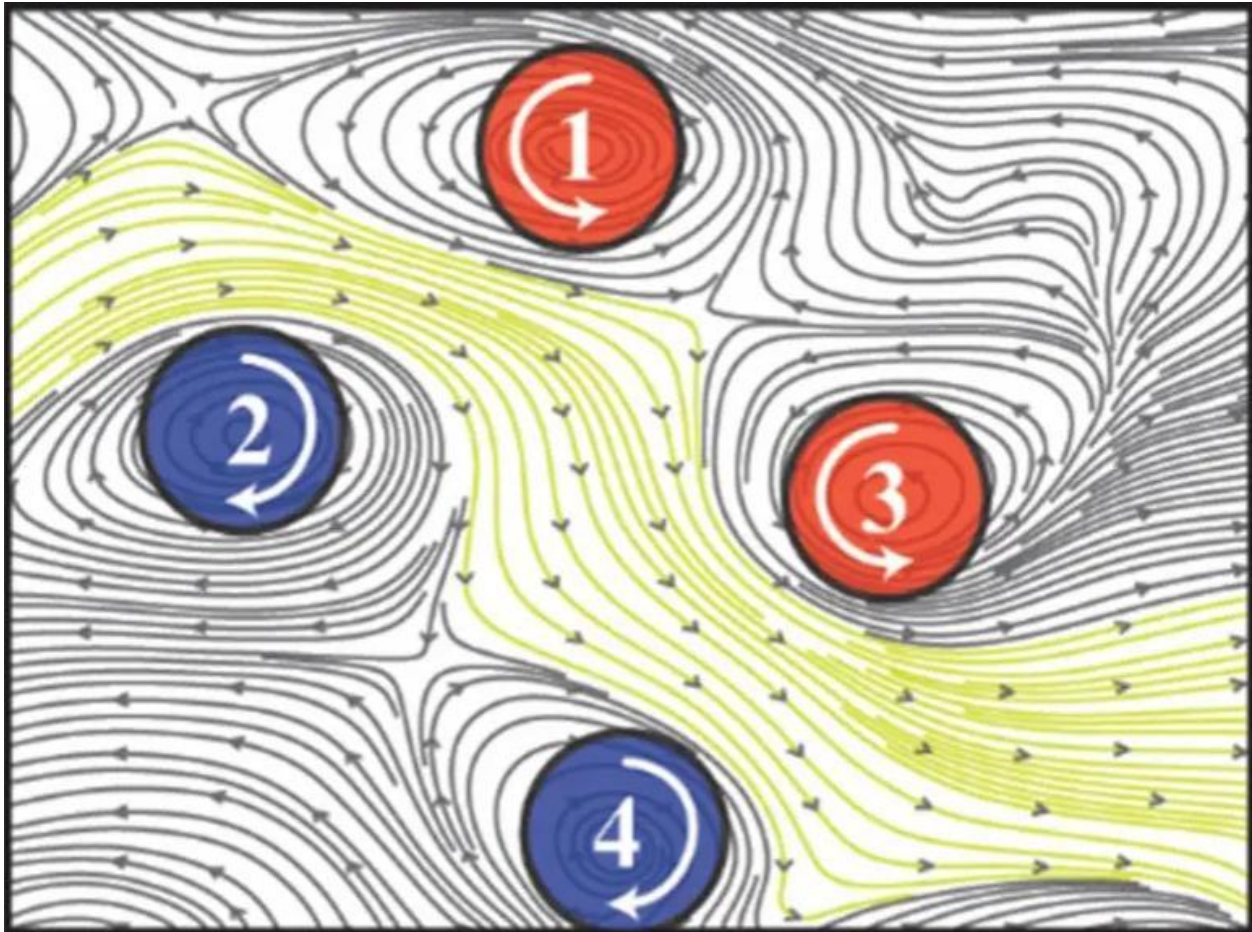
The study shows ripples across a newly fertilized egg are similar to other systems, from ocean and atmospheric circulations to quantum fluids.

Yes, the **embryonic fluid is quantum fluid!**

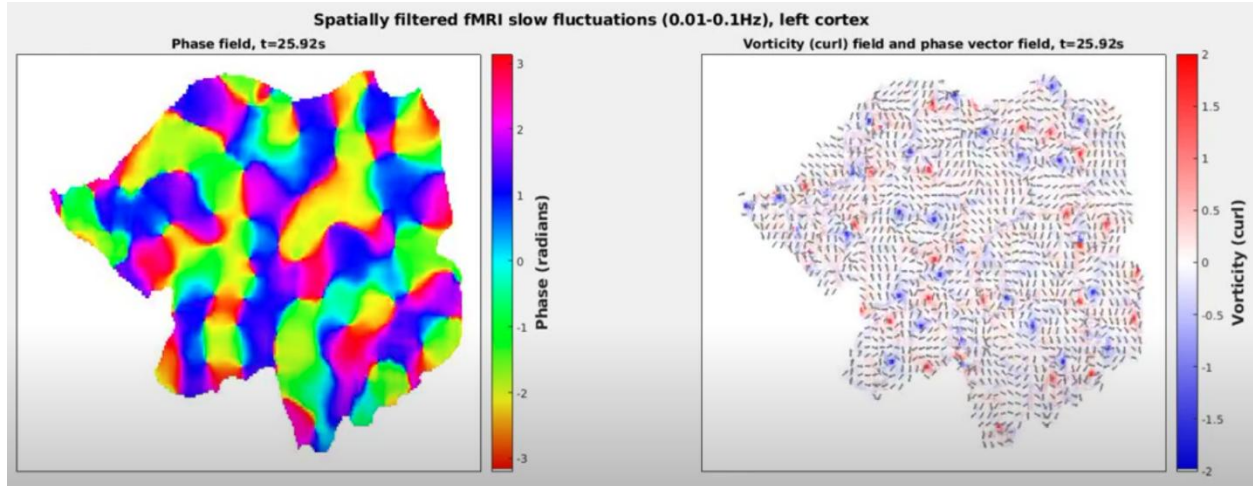


Is there more evidence of these triskelion like spiral patterns found in the body similar to that found in nature such as hurricanes and galaxies? Yes!

In a [recent scientific discovery](#), researchers observed brain signals that appear as swirling **spiral patterns on the cortex**, which are believed to play a crucial role in organizing brain activity and cognitive processing, coordinating the flow of information between different brain networks during both resting and cognitive states; essentially acting as a way to manage complex brain dynamics across different regions.







Brain Spirals Traveling Across the Cortex ([Video](#))

"Spirals in the brain" refers to a recent scientific discovery where researchers have observed brain signals that appear as swirling spiral patterns on the cortex.

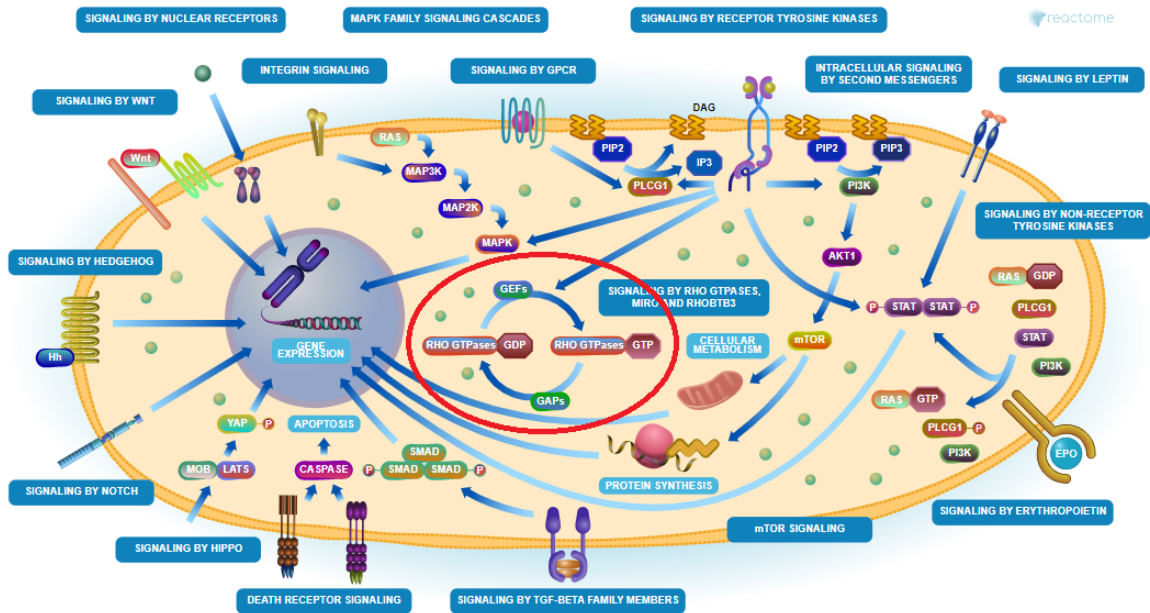
Exactly like **The Golden Spiral of Life!** And, it ALL starts with a **TRISKELION** to create the **toroidal vortex spin**.

The MIT study above scientist studied the “**Rho-GTPase and the pattern of waves produced**”.

RHO-GTPase is associated with what is called “**ROCK**” signaling.

**ROCK signaling sits in the center of signal transduction**



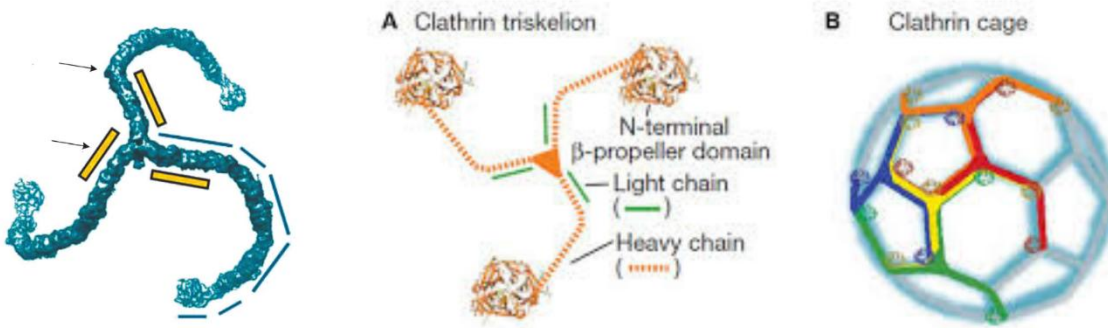


<https://reactome.org/PathwayBrowser/#/R-HSA-162582>

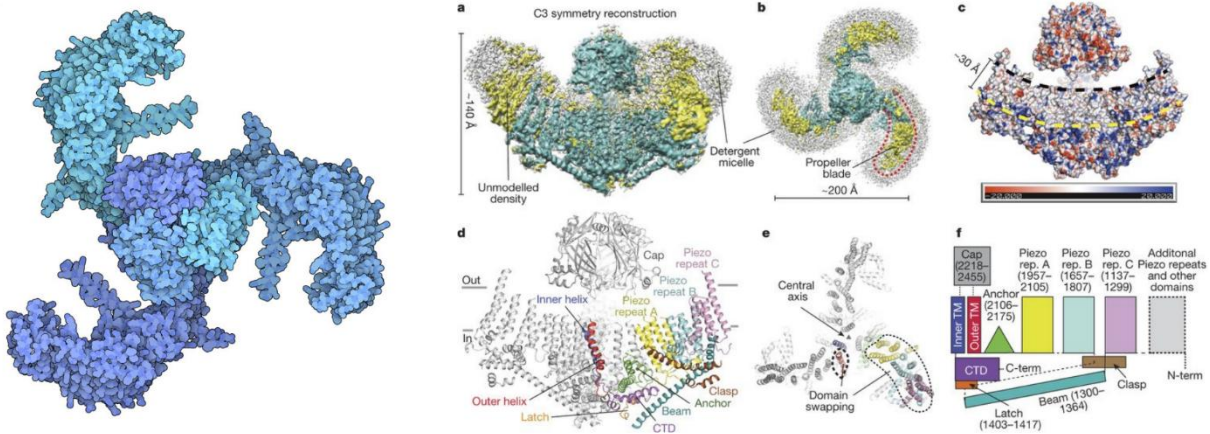
The basis for signal transduction is the transformation of a certain stimulus into a biochemical signal. Or, how **mechanical forces are transmitted into biological signals**, otherwise known as **mechanotransduction**, or **piezoelectricity**.



# Clathrin



# Piezo



The **PIEZO** protein shares the **EXACT** geometry as **Clathrin**. The **PIEZO** protein transmits Piezoelectricity, which, is the electric charge that accumulates in biological matter such as **bone**, **DNA** and various **proteins**. [R]

The **PIEZO** genes are mechanically-activated ion channels that **link mechanical forces to biological signals**. In other words, electrical and magnetic forces from the outside converted internally.

They are the actual **PROPELLERS** that move energy from the zero point energy field, or “aether,” into biological matter.

Energy flows through the **PIEZO** genes to transmit signals into your DNA, bones, and proteins.

Interestingly, compounds named to modulate **PIEZO** are: [R]


- DOOKU1



- YODA1
- Jedi1/2

**Drugs & Compounds for PIEZO1 Gene**

**Subsections:** [Drugs](#) / [Compounds](#)

 **Buy Research Products:** [Drug products](#)

**(2) Drugs for PIEZO1 Gene - From [IUPHAR](#)**

**Filter:**  (2 results)

	Name	Status
<a href="#">+</a>	DOOKU1 <sup>74</sup>	
<a href="#">+</a>	YODA1 <sup>74</sup>	

**(2) Additional Compounds for PIEZO1 Gene - From: [IUPHAR](#)**

**Filter:**  (2 results)

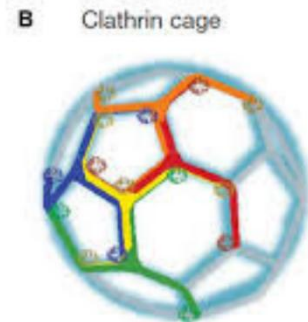
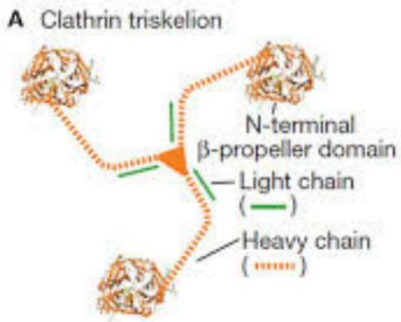
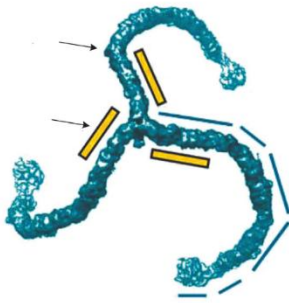
Name	Synonyms
Jedi1 <sup>74</sup>	
Jedi2 <sup>74</sup>	Jedi 2 <a href="#">See all 2 »</a>

May “**The FORCE**” be with you! Ha!

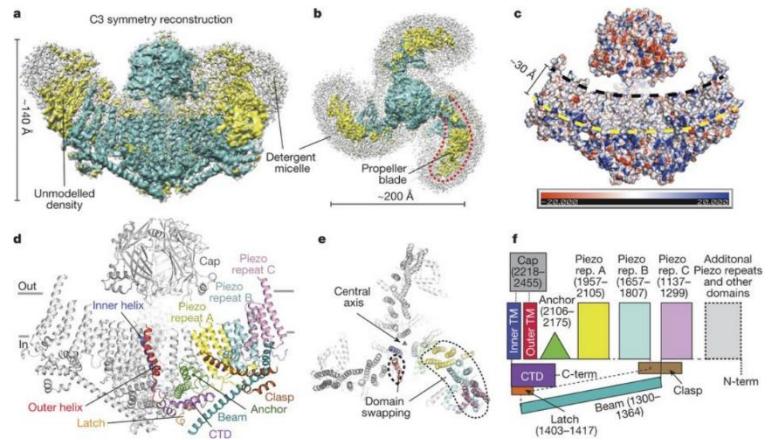
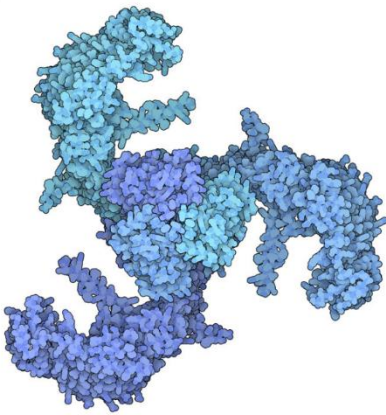
Piezo proteins transmit signals through Clathrin. Like a lock and key mechanism because Piezo and Clathrin proteins share the same geometry. This allows for the least amount of resistance for the energy to flow freely. Like lining up an electrical charge.



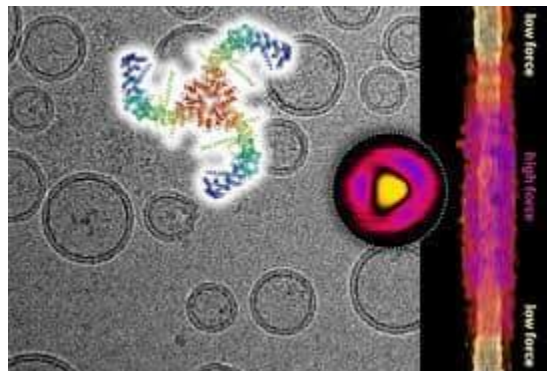
# Clathrin



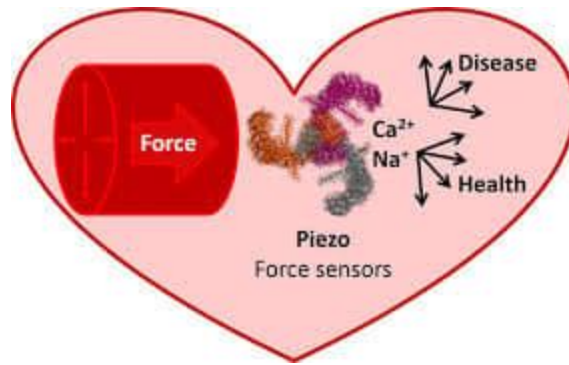
# Piezo



## Piezo & Clathrin



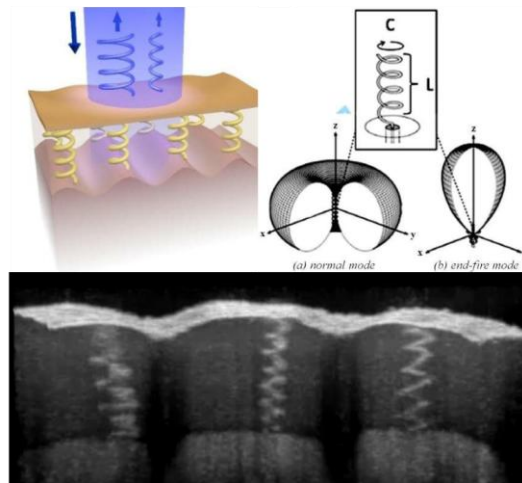




This all points to how we “**receive**” signals from the “**aether**” into our “**biofields**” which then gets transmitted internally.

**Mechanotransduction**, the process by which cells **convert mechanical forces into biochemical signals**.

Even the **spiral dipole antennas** found on our skin speak to how this occurrence takes place.



[Human sweat ducts as helical antennas in the sub-THz frequency range](#)

Again, ALL PATHOGENS HIJACK THESE SIGNALS AND SIPHON ENERGY FROM IT!

## **RHO GTPase (ROCK) Signaling**

When we look at the meaning and **etymology of RHO** itself we can see even further evidence of this fact.

## **RHO meaning in Mathematics and Science [R]**

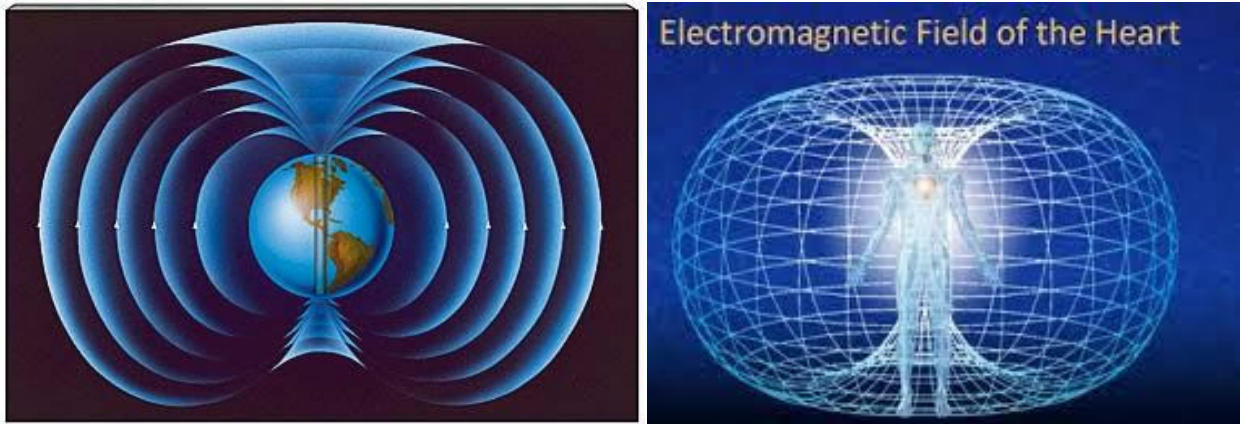


In the physical sciences to represent:

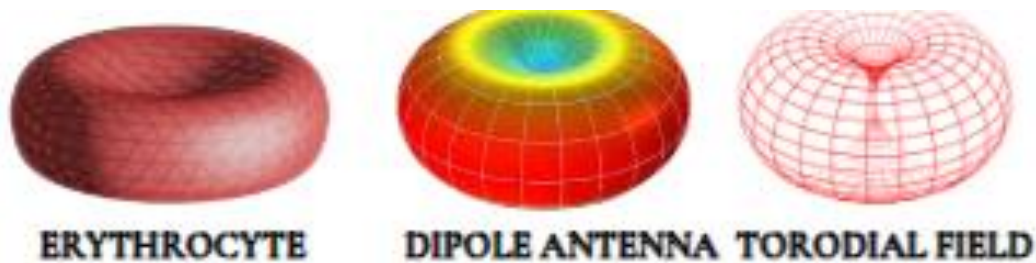
- Densities: mass density, air density or **charge density** ( $\rho$ )
- General **quantum states**

In mathematics to represent:

- A length coordinate in **polar, cylindrical, spherical, and toroidal** coordinate systems, and **toroidal and poloidal coordinates of the Earth's magnetic field**.



So RHO represents the **vortex toroidal spin**, or the **quantum state** from the Macro to the Micro. As above so below!



Furthermore, RHO is also related to the **Chi Rho**.

### **Chi Rho**

The letter rho overlaid with chi forms the **Chi Rho symbol**, used to represent **Jesus Christ**. [[R](#)]



**Chi:** A **life force** in traditional Chinese philosophy, culture, medicine, etc, related (but not limited) to **breath** and **circulation**. [[R](#)]



The Chi-Rho symbol

Rho GTPase plays a significant role in regulating clathrin-mediated endocytosis (CME) by controlling the actin cytoskeleton dynamics necessary for vesicle formation and movement during the endocytic process; essentially, Rho GTPases influence the process of clathrin-coated vesicles budding from the cell membrane by modulating actin dynamics at the site of endocytosis.

Here's a simplified explanation of how Rho GTPase and clathrin work together:

#### **Actin regulation:**

- **What Happens:** Rho GTPases are like the controllers of how actin, a type of protein that supports cell structure, forms and moves. This is important for the clathrin-coated pits (small indented areas) on the cell's surface to assemble correctly and move as they should.

#### **Effector proteins:**

- **What Happens:** Once Rho GTPases are turned on, they work with other proteins to directly manage how actin behaves. This is key for the process known as clathrin-mediated endocytosis, where the cell absorbs substances by wrapping them in a clathrin coat.

#### **Cell signaling:**

- **What Happens:** Different types of Rho GTPases (like RhoA, Rac1, or Cdc42) can start different cell signaling paths. This means they can have various effects on how the cell engulfs substances through clathrin-mediated endocytosis.



## How Rho GTPase interacts with clathrin during endocytosis:

### Vesicle budding:

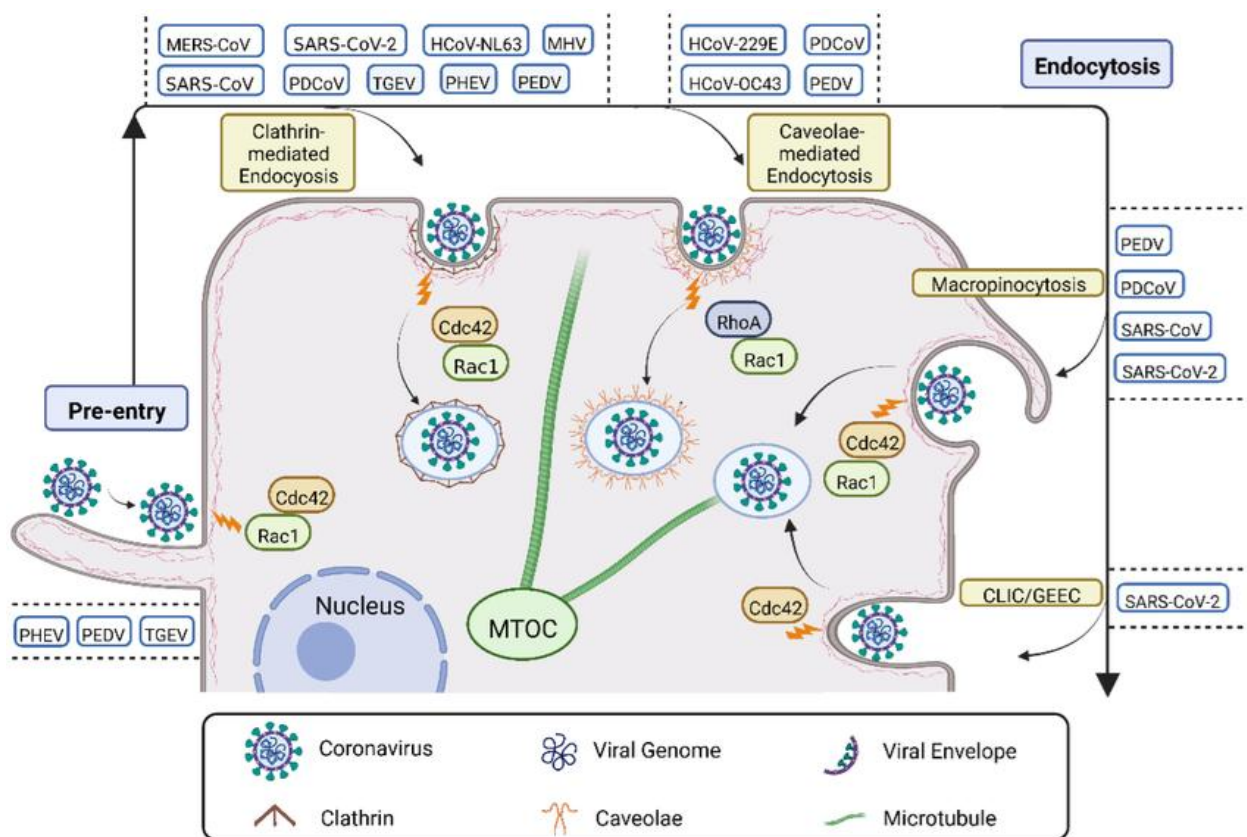
- **What Happens:** Rho GTPases play a role in the early steps of endocytosis by helping to form clathrin-coated pits on the cell's surface. This is essential for the cell to start taking in substances.

### Vesicle movement:

- **After the vesicle forms:** Once a vesicle (a small sac) pinches off from the cell surface with its cargo inside, Rho GTPase helps it move to the right place inside the cell. They do this by managing the actin that acts like roads for the vesicles to travel on.

### Membrane dynamics:

- **What Happens:** Rho GTPases can also change how flexible or dynamic the cell membrane is. This affects how well the clathrin coat can form around substances the cell wants to absorb and how easily this coat can be removed once the substance is inside.





In simpler terms, Rho GTPases are like the managers directing how cells change shape and move parts of their membrane to take in new substances, and clathrin is part of the packaging material used in this complex process. And.

All pathogens use this process to siphon and hijack cellular machinery.

### **From Fiction to Cell Biology: The Intricate Dance of Rho GTPases, Actin, and the Marvels of Tight Junctions**

When considering "Rho GTPase, Actin, and Clathrin" together, the key takeaway is that Rho GTPases play a crucial role in **regulating the actin cytoskeleton**, which is essential for the process of clathrin-mediated endocytosis, where clathrin protein coats vesicles to bring molecules into the cell; essentially, Rho GTPases control the actin dynamics **needed for vesicle formation and movement** during endocytosis.

Interestingly, from the popular television series the **MARVEL's S.H.I.E.L.D. headquarters is also named the 'Triskelion,'** which highlights the intriguing parallels between narratives in science fiction and the underlying principles observed in cell biology, particularly in the architecture and functionality of **tight junction proteins**.





I don't think it was by chance their headquarters was named Triskelion.

## From Fiction to Cell Biology: The Triskelion & Tricellulin

In the **MARVEL** Cinematic Universe, the headquarters is literally called the **Triskelion**.

This brings us to a fascinating fact that we have what's called **MARVEL domain proteins**, particularly the gene called **Tricellulin (MARVELD2)**, associated with the formation and function of tight junctions in epithelial cells. [[R](#)]

**MARVELD2** Gene - MARVEL Domain Containing 2  
 Protein Coding (Updated: Dec 25, 2024 : GC05P069415 ⓘ ; GIFts: 50 ⓘ) ⓘ ⓘ

Jump to section	Aliases Paralogs	Disorders Pathways	Domains Products	Drugs Proteins	Expression Publications
Research	Antibodies	Assays	Proteins	Inhib. RNA	CRISPR
Products	Clones	Primers			

Proteins Primary Antibodies ELISAs  
 Antibody Arrays Activity Assays

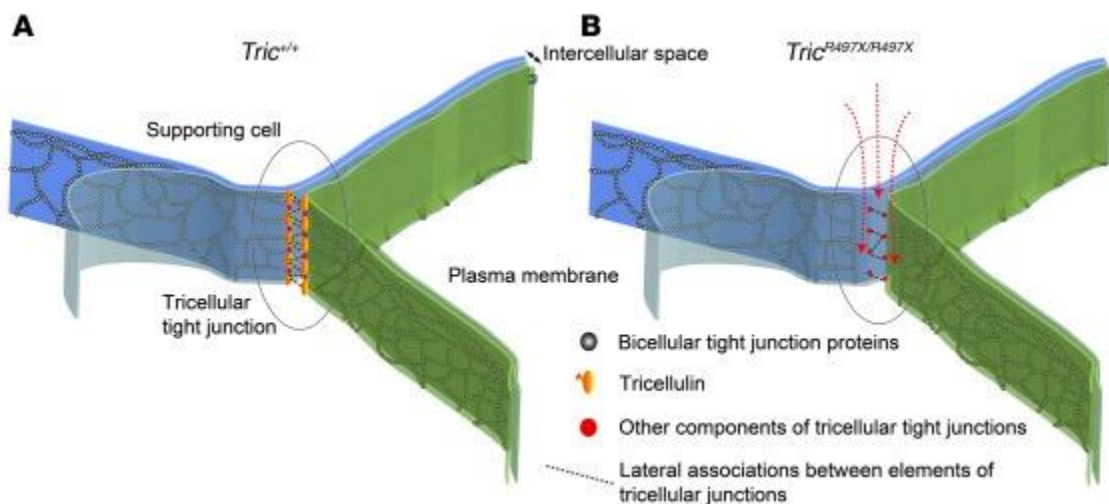
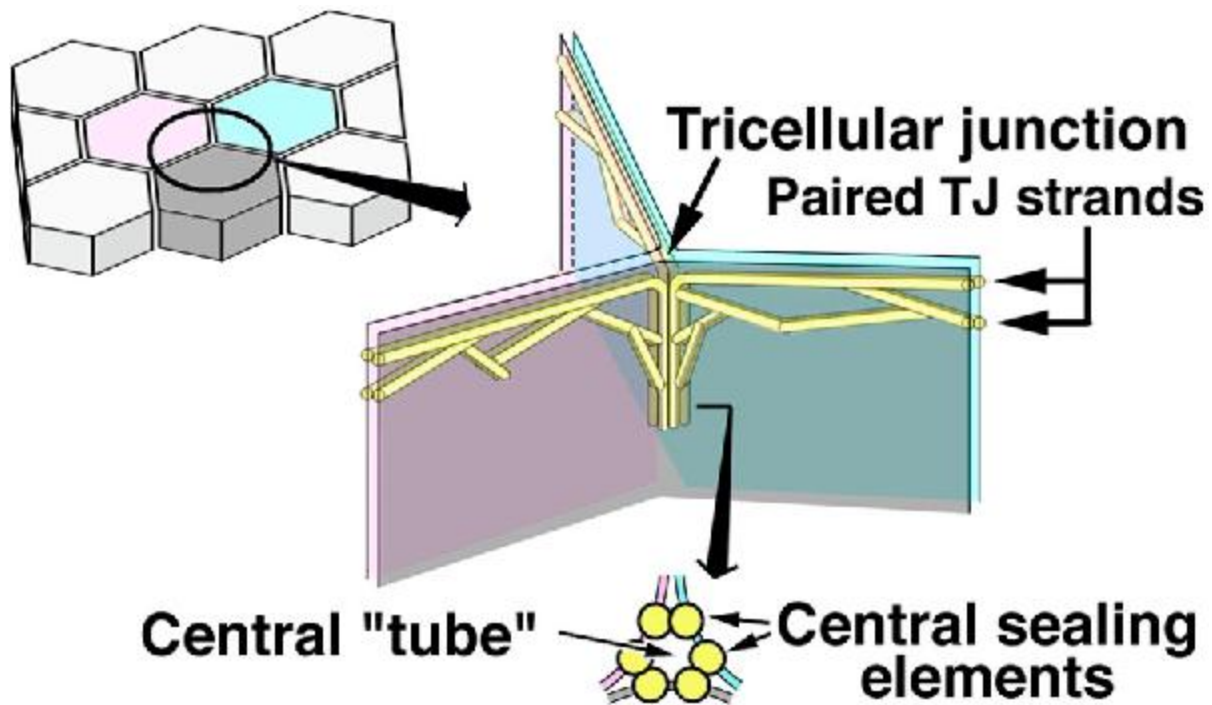
Proteins Antibodies Assays Genes  
 shRNA Primers CRISPR  
 Lentiviral Particles

**Aliases for MARVELD2 Gene**

**Aliases for MARVELD2 Gene**  
 GeneCards Symbol: **MARVELD2** <sup>2</sup> ⓘ  
 MARVEL Domain Containing 2 <sup>2 3 5</sup>  
 TRIC <sup>2 3 4 5</sup>  
**Tricellulin** <sup>2 3 4</sup>  
 MARVEL (Membrane-Associating) Domain Containing 2 <sup>2 3</sup>  
 MARVEL Domain-Containing Protein 2 <sup>3 4</sup>

FLJ30532 <sup>2 5</sup>  
 MRVLC2 <sup>3 5</sup>  
 DFNB49 <sup>3 5</sup>  
 Deafness, Autosomal Recessive 49 <sup>2</sup>  
 MARVD2 <sup>3</sup>





## The MARVEL Domain and Tricellulin

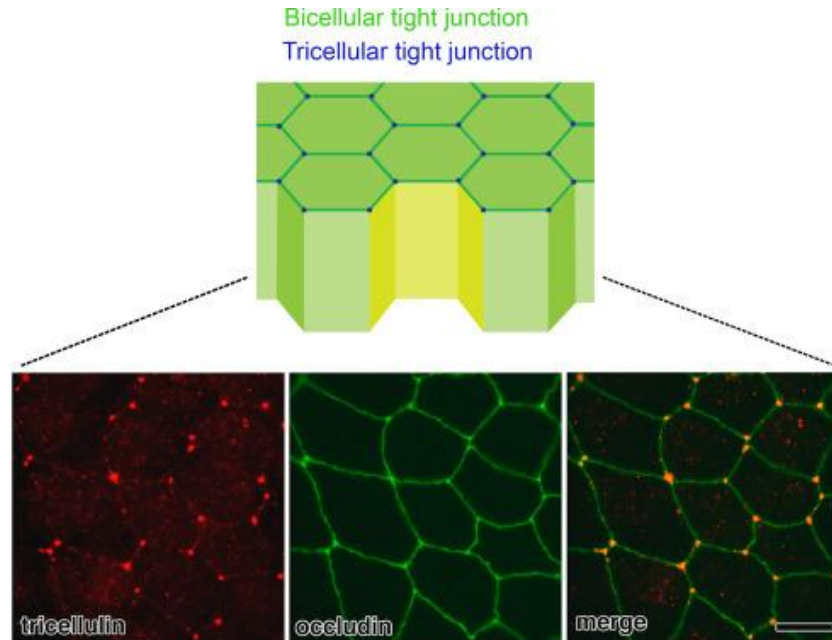
Phonetically, Triskelion and Tricellulin sound similar!

Tricellulin is a component of tight junctions, *the space between the spaces*, which are crucial for maintaining the selective permeability barrier of epithelial cell layers.

Intriguingly, the protein's structure, functionality, and even the name itself can be likened to a **clathrin triskelion**, a symbol featuring **three spiraled arms**,



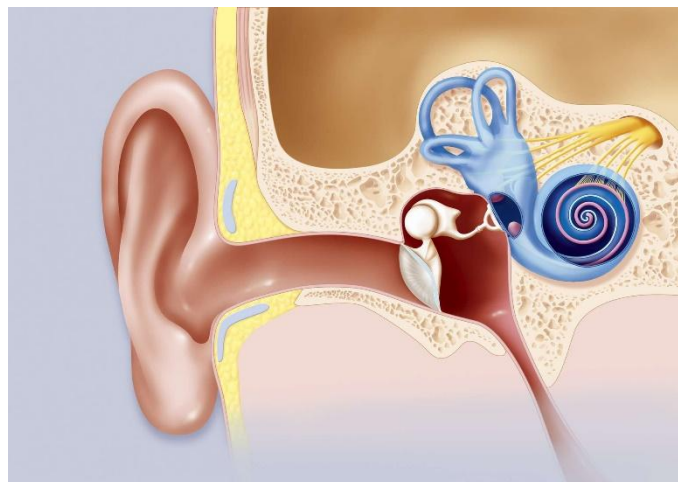
reflecting its role in interconnecting cells through tight junctions. This structural motif underlies the ability of Tricellulin to mediate cell adhesion and **communication**, serving as a **gatekeeper** for paracellular transport, the movement of substances through the intercellular spaces between cells.



Tricellulin NET

Tricellulin is a tight junction protein that plays a role in the formation of tight junctions (TJs) at the point **where three cells meet**.

Tricellulin helps establish epithelial barriers such as those in the **Spiral Organ of Corti**, where these barriers are required for normal hearing.

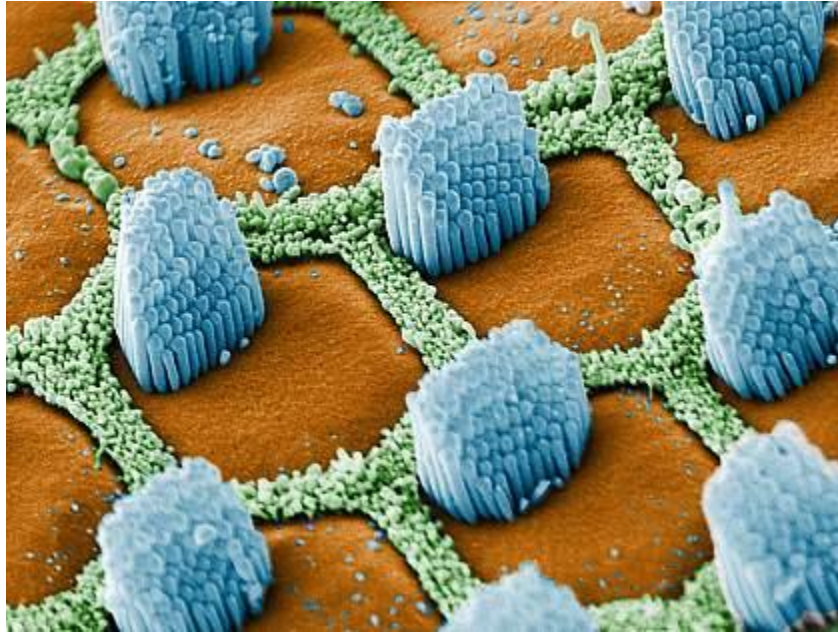


Spiral Organ of Corti

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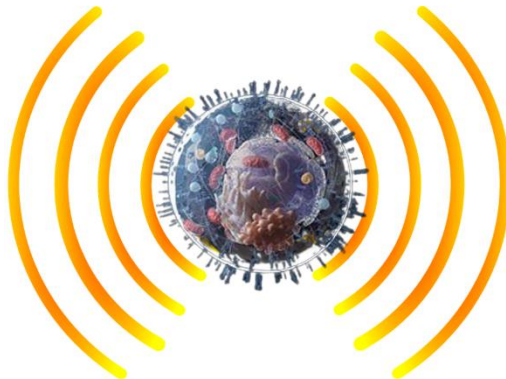
Tricellulin is required for normal hearing via its role in the separation of the endolymphatic and perilymphatic spaces of the organ of Corti in the inner ear, and for normal survival of hair cells (**cilia/cellular antennas**) in the **organ of Corti**.



Cilia's Net

Cilia in the ear are tiny hair-like projections on hair cells that help with hearing, balance, and earwax removal.

Cilia are essentially our **cellular antennas**.



When sound waves hit the eardrum, they vibrate the cilia in the cochlea (spiral organ). The cilia send **electrical impulses to the brain** through the auditory nerve.

Cilia are controlled by the motor protein called **Dynein**.



Dyneins are a family of cytoskeletal motor proteins that **move along microtubules** in cells. **They convert the chemical energy stored in ATP to mechanical work.** Dynein transports various cellular cargos, provides forces and displacements important in mitosis, and **drives the beat of eukaryotic cilia and flagella**. All of these functions rely on dynein's ability to move towards the minus-end of the microtubules, known as retrograde transport; thus, they are called "minus-end directed motors".

The word dynein comes from the Ancient Greek word *dŭnāmis* which means "force" and the suffix "-in". The name was chosen to reference the unit of force, the **dyne**. [[R](#), [R](#)]

**The “FORCE” is WITHIN! YOU ARE ABLE!**

## Ancient Greek [\[ edit \]](#)

---

### Etymology [\[ edit \]](#)

From *δŭνᾱμαι* (*dŭnāmai*, “I am able”).

### Pronunciation [\[ edit \]](#)

- IPA<sup>(key)</sup>: /dý.na.mis/ → /'ðy.na.mis/ → /'ði.na.mis/

### Noun [\[ edit \]](#)

*δŭνᾱμις* • (*dŭnāmis*) *f* (genitive *δŭνᾱμεως*); *third declension*

1. power, might, strength
2. ability, skill
3. power, authority, influence
4. force of war
5. magic, magically potent substance or object, magic powers
6. manifestation of divine power: [miracle](#)
7. faculty, capacity
8. worth, value
9. The force of a word: [meaning](#)
10. (*mathematics*) [square root](#)
11. (*mathematics*) [power](#)



Keep in mind that Piezo, Clathrin, and Tricellulin all share a **3 armed geometric shape**, which allows for **spiraled vortex energy** to be sent and received unencumbered by other geometric angles. Such as the signals flowing through the Spiral Organ of Corti which vibrates the Cilia/Antenna.

This ensures that energy goes where energy flows.

### **RHO Molecular Switches & Tight Junctions**

Rho GTPases play a crucial role in regulating the assembly, structure, and function of tight junctions (TJs) by controlling the dynamics of the actin cytoskeleton that is directly linked to the TJ protein complex, essentially acting as **molecular switches** that determine the permeability of epithelial barriers by regulating the tightness of cell-cell junctions; when activated, Rho GTPases trigger signaling pathways leading to the contraction of the apical actomyosin filaments, which are essential for maintaining the integrity of TJs. [\[R\]](#)

### **Targeting Tight Junction Protein ZO-1 helps to influence Tricellulin.**

Tight Junction Protein **ZO-1** encodes a member of the membrane-associated guanylate kinase (**MAGUK**) family of proteins, and acts as a tight junction adaptor protein that also regulates adherens junctions. Tight junctions **regulate the movement of ions (energy)** and macromolecules between endothelial and epithelial cells.

### **The Sweet Benefits of **Mannitol**: From Biblical Manna to Modern Marvel**

Mannitol, a naturally occurring sugar alcohol, has been treasured for its unique properties and health benefits since antiquity. Interestingly, the name "mannitol" traces back to a historical and somewhat serendipitous discovery linked to the flowering ash, *Fraxinus ornus*, also known as the manna ash. This tree's name and the compound derived from it reference the biblical "**manna**," the miraculous food provided to the Israelites in the desert. The connection lies not only in the nutritional value but also in the manner of its collection.

### **Origins and Historical Significance**

The story of mannitol begins with the **manna ash** (*Fraxinus ornus*), a tree first celebrated for its sugary extract, which was eerily reminiscent of the biblical "**manna**." This extract, once known simply as "manna," was gathered from the tree's sap, conjuring images of the divine provision described in religious texts.



The practice dates back to late medieval times (around 1400 AD), highlighting humans' longstanding quest for sweet sustenance.

### **The Tree That Sweetens: Fraxinus ornus**

The manna ash spans a bridge between the culinary and medicinal worlds. Apart from its historical significance, Fraxinus ornus is recognized for its bountiful benefits.

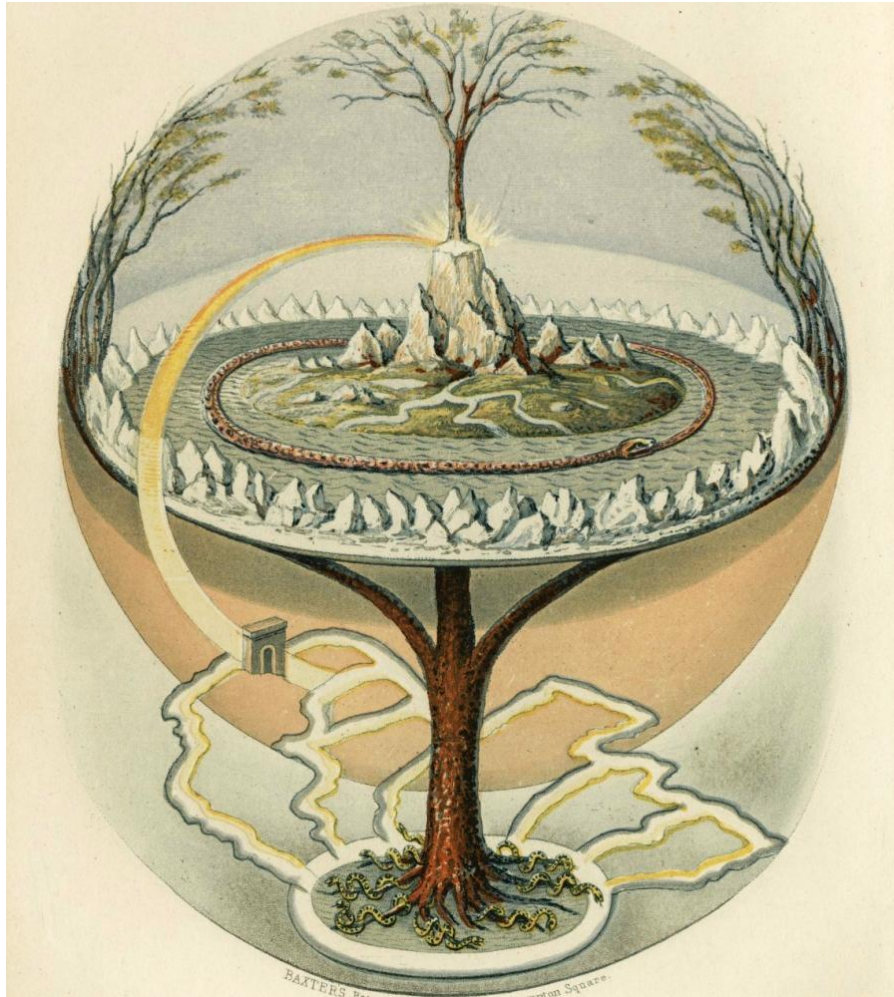
The sugary extract obtained from the bark is not only nutritious but has been explored for therapeutic potential, including respiratory and digestive health benefits.

The word Fraxinus means "**Ash**"

Ash trees are significant in many mythologies, including Norse, British, and Greek. They are associated with healing.

**Yggdrasil:** The Norse tree of life, Yggdrasil is a giant ash tree that connects the nine worlds of the Norse cosmos. The tree's branches reach the heavens, its roots extend to the underworld, and its canopy shelters all the worlds.





Yggdrasil

## **GRB2 (Protein Ash): The Yggdrasil of Cellular Communication**



**GRB2 Gene - Growt...**  
Protein Coding (Updated: Dec 25, 2024)

The protein encoded by this gene binds the epidermal growth factor receptor and contains one SH2 domain and two SH3 domains. Its two SH3 domains direct complex formation with proline-rich regions of other proteins, and its SH2 domain binds tyrosine phosphorylated sequences. This gene is similar to the Sem5 gene of *C.elegans*, which is involved in the signal transduction pathway.... [See more...](#)

**Aliases for GRB2 Gene**

**Aliases for GRB2 Gene**  
GeneCards Symbol: **GRB2** <sup>2</sup> <sup>?</sup>  
Growth Factor Receptor Bound Protein 2 <sup>2</sup> <sup>3</sup> <sup>5</sup>  
Growth Factor Receptor-Bound Protein 2 <sup>2</sup> <sup>3</sup> <sup>4</sup>  
NCKAP2 <sup>2</sup> <sup>3</sup> <sup>5</sup>  
SH2/SH3 Adapter GRB2 <sup>3</sup> <sup>4</sup>  
**Protein Ash** <sup>3</sup> <sup>4</sup>  
**ASH** <sup>3</sup> <sup>4</sup>  
Epidermal Growth Factor Receptor-Binding Protein GRB2 <sup>3</sup>  
Epididymis Secretory Sperm Binding Protein <sup>3</sup>  
Growth Factor Receptor-Bound Protein 3 <sup>3</sup>

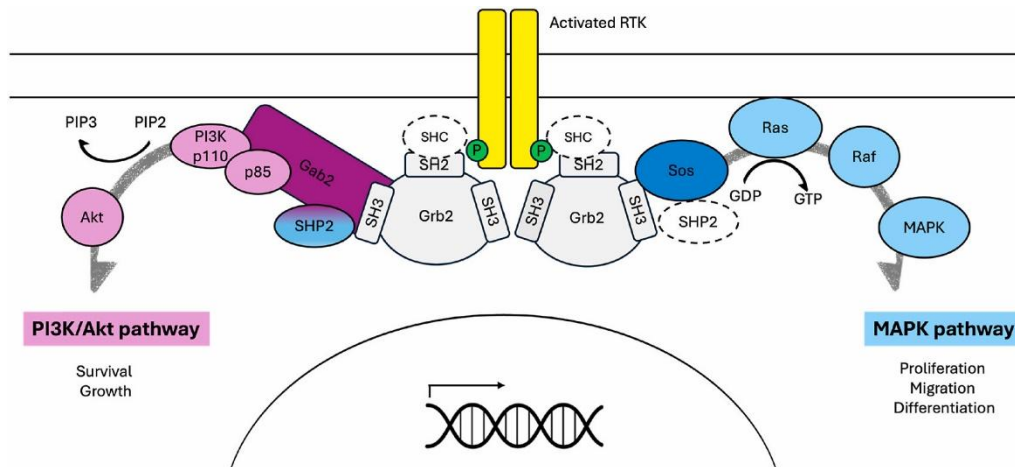
Imagine the cell as a vast world, with its surface like the canopy of a great tree reaching towards the sky, and its interior like the roots extending deep into the earth. In Norse mythology, the tree Yggdrasil connects the heavens above with the world below, linking realms and ensuring balance.

Similarly, GRB2, also called **Protein Ash**, acts as a **bridge or connector** in the cell, transmitting signals from the "heavens" (the cell surface) to the "earth" (the deeper parts of the cell).

### How GRB2 Works: The Signal Bridge

At the surface of the cell, receptors (like branches of Yggdrasil) detect signals from growth factors or hormones—these are like messages from the sky. Once these signals are received, GRB2 steps in as a messenger, connecting the surface receptors to the pathways below.





GRB2 does this by using its specialized "hooks" (called SH2 and SH3 domains):

1. The SH2 domain grabs onto phosphorylated proteins on the cell surface, where the signals start.
2. The SH3 domains hold onto other proteins inside the cell, like SOS (a protein that activates Ras), which sends the signal further down into the cell's roots.

Through this connection, GRB2 ensures that the message travels smoothly, activating important pathways like the PI3K-Akt signaling pathway and Ras/MAPK pathway, which controls growth, repair, and survival.

These signaling pathways not only play pivotal roles in cellular processes such as growth, survival, and differentiation but also assist viruses in hijacking host cellular machinery to favor their replication and spread, displaying the **dual-edged nature of these pathways in the context of viral infections**.

### GRB2's Role in Health: Keeping the Tree of Life Balanced

Just as Yggdrasil must remain healthy to sustain the worlds it connects, GRB2 must function properly to keep the cell in balance.

**Growth and Repair:** GRB2 ensures that cells grow and divide when needed, like encouraging new leaves on the tree or repairing damaged roots.

**Immune Responses:** GRB2 helps immune cells communicate effectively, ensuring the body can respond to threats.

**Energy and Metabolism:** GRB2 is part of insulin signaling, helping the cell use glucose effectively, much like nourishing the roots of Yggdrasil.



## When the Tree Becomes Unbalanced

If GRB2 is overactive or disrupted, it's like a storm damaging Yggdrasil's branches or roots:

- **Cancer:** Overactive GRB2 signaling can lead to uncontrolled growth, like a tree growing wildly without order.
- **Immune Disorders:** Miscommunication through GRB2 can cause immune cells to attack the body or fail to respond to infections.
- **Diabetes:** Problems with GRB2 in insulin signaling can starve the roots of energy, disrupting the cell's balance.

## Nurturing GRB2: A Path to Healing

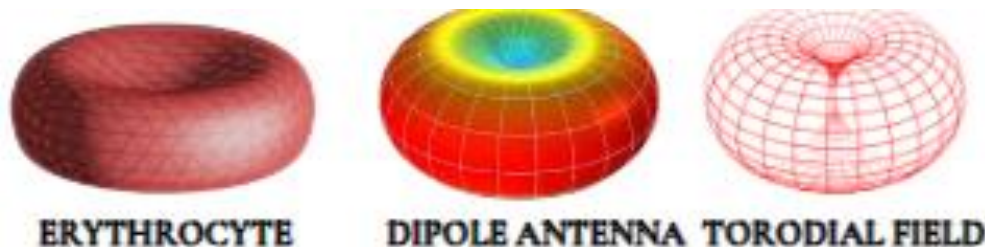
By targeting GRB2 interactions with natural compounds, we may be able to target infectious disease, cancer, autoimmune diseases, and metabolic disorders.

In essence, GRB2 is the Yggdrasil of the cell, ensuring that **signals from above are connected to the actions below**. Its proper function sustains the balance of life within the cell, making it a vital part of health and well-being.

## Beta Spectrin, Actin, and Tricellulin: Forming a "NET"

The association of Beta Spectrin with actin filaments at tight junctions through its connection with the Tricellulin gene highlights a complex network, or "**NET**", of interactions ensuring cellular integrity and function.

Beta Spectrin, an actin cytoskeletal protein, stabilizes cell membranes and contributes to the **maintenance of cell shape**, especially red blood cells called **erythrocytes** responsible for carrying oxygen from the lungs to the body's tissues.



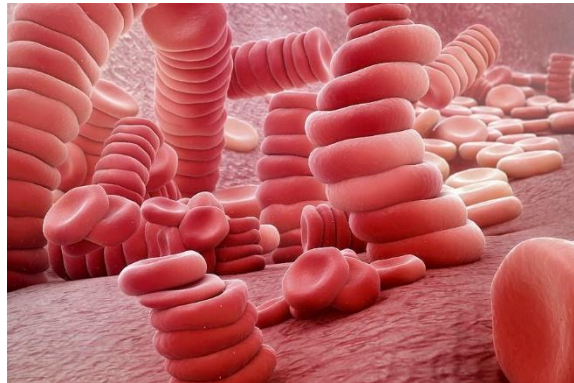


If Beta Spectrin malfunctions it leads to Spherocytosis, a blood disorder where red blood cells (RBCs) are abnormally shaped, resembling spheres instead of the usual biconcave disk shape.

In addition, the contribution of PIEZO proteins to this is of equal importance as malfunctions of the PIEZO proteins leads to **erythrocyte dehydration**, or cellular dehydration, and **changes in cell shape**.

Electromagnetic Frequency Waves (EMF) induce cell permeability in red blood cells (RBCs). [[R](#)]

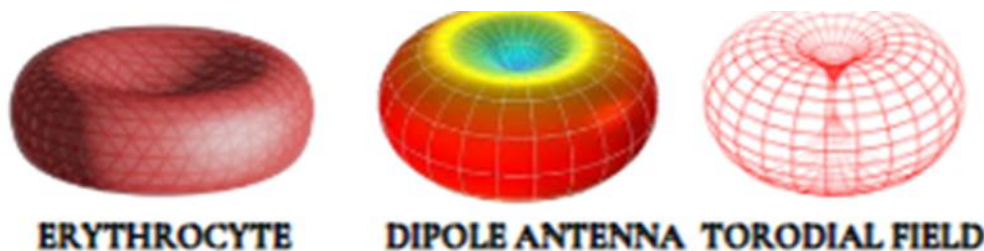
Research indicates that exposure to certain EMF frequencies can alter the structure and function of erythrocytes, leading to changes like **increased aggregation (Rouleaux formation)**, a process where red blood cells (RBCs) stack together in chains, similar to a stack of coins, leading to decreased blood flow or stasis.



Rouleaux formation

Therefore, **5G can cause Spherocytosis associated with Beta Spectrin and erythrocyte dehydration associated with PIEZO proteins!**

Both dipole antennas and toroidal fields are similar to erythrocytes in nature and have biconcave disk shapes. This helps maintain the equilibrium required for opposing electrical and magnetic forces.

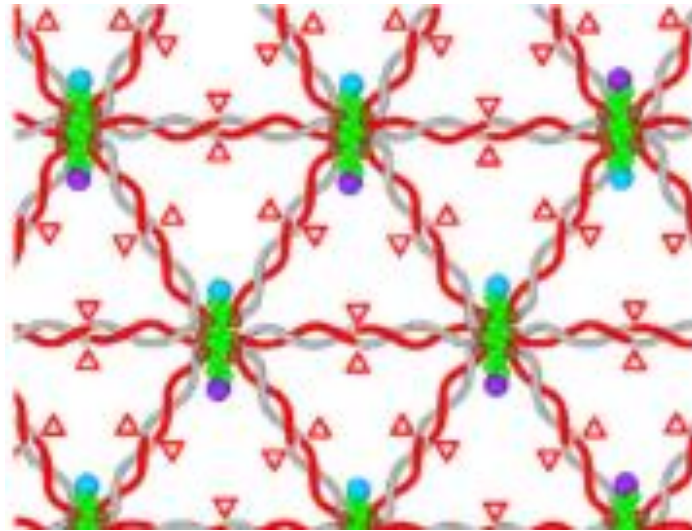




**Hence when the “NET” that is formed around the red blood cell (erythrocyte) breaks down the dipole antenna, or toroidal field, is disrupted leaving gaps for energy harvesting and siphoning!**

This is especially important when we begin to talk about **microtubules** and the recent discoveries in relation to **beta spectrin and consciousness**. Which, we'll cover later.

Beta Spectrin is critical for the mechanical support of membranes and tight junctions, illustrating an integrated framework for cellular cohesion.



Spectrin “Net”

This “**net**” formation is exactly how the aether functions as well on a macro. Both Tricellulin and Spectrin proteins function in this capacity on a micro level.

In fact, many theories speculate that **Jesus** spent his **missing years in Egypt**. If that's the case, he may have studied at the school of The Egyptian “**Neters**.”





See: [Neters of Egypt 1 Introducing Cosmic Laws](#) (Video)

Whatever the case may be, it's very clear that the fabric of space time and the universe itself follow a cosmic order of divine nature. As above so below encompassed by this mysterious Net.

These "Neters" studied this divine order with how things work throughout the universe in terms of energy, frequency, and vibration.

Consider the word "**Ether-Net**" as an example.



Ethernet

Consequently, Spectrin proteins help form a "net" literally inside you.

Just a coincidence I'm sure!

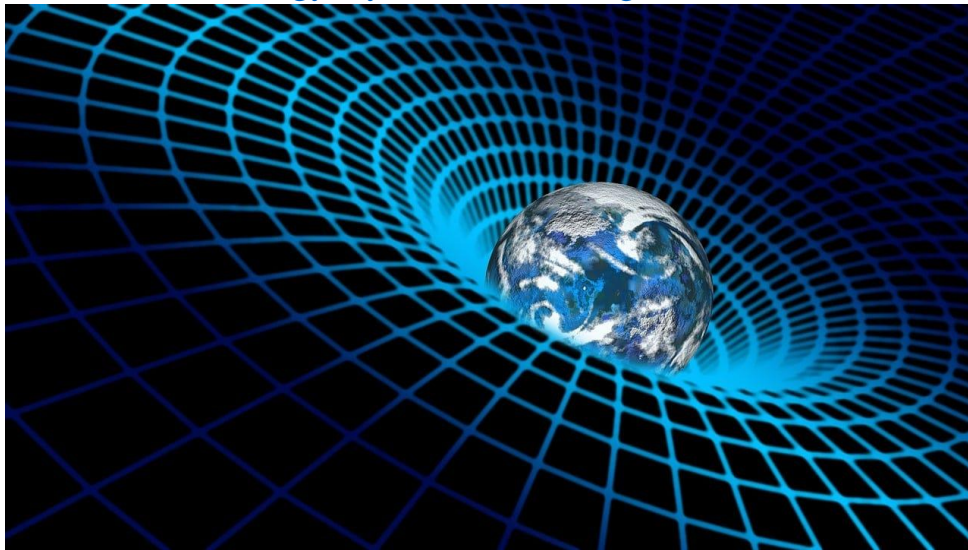
**"Aether, Fields and Energy Dynamics in Living Bodies"** refers to a concept that proposes a subtle, all-pervasive energy field, often called "aether," plays a crucial role in the functioning of living organisms by mediating complex interactions



between magnetic, electric, and dielectric fields at the cellular and molecular level, essentially acting as a medium for the flow of energy throughout the body.

See:

- [Aether, fields & energy dynamics in living bodies - Part I](#)
- [Aether, Fields & Energy Dynamics in Living Bodies - Part II](#)
- [Aether, Fields & Energy Dynamics in Living Bodies - Part III](#)



Earth's Aether Net

## Spectrin and the "Spectrum"

The word "**spectrin**", from beta spectrin, literally means "**spectrum**," reminiscent of the **electromagnetic spectrum**. [R]

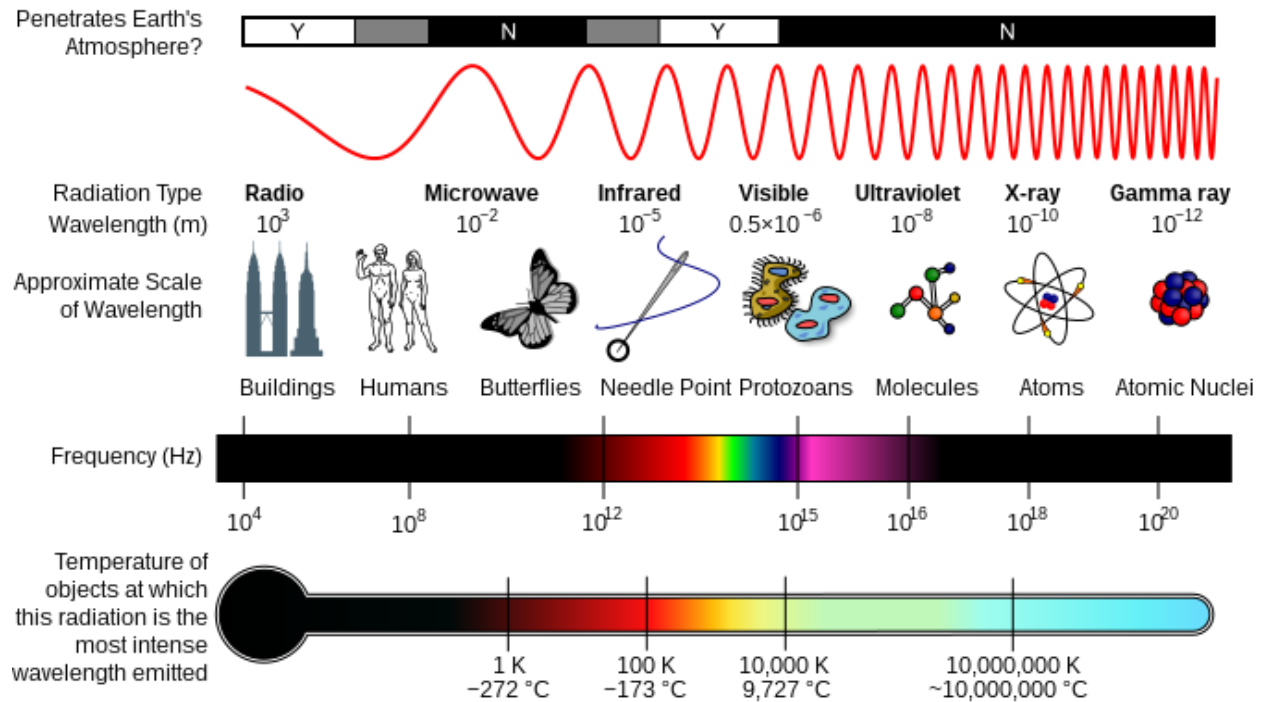
The word *spectrin* comes from the French and Latin words for “ghost” and “apparition”, “**spectre**” and “**spectrum**”.

Spectrin proteins encompass mechanical support, regulation of membrane stability, and cell signaling pathways.

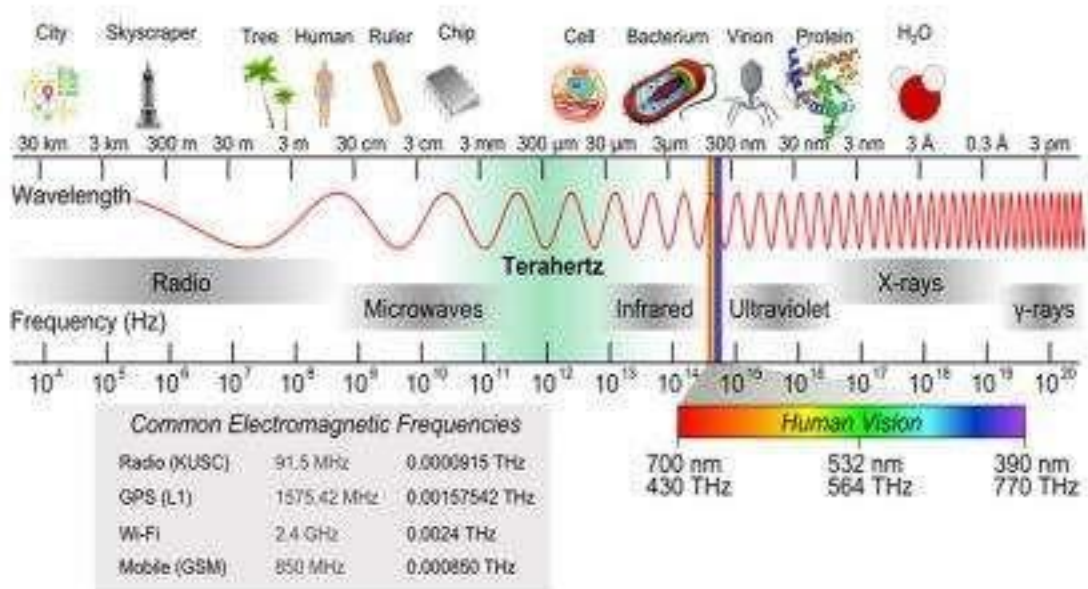
## Frequency Bands

A frequency band can be described as a collection of frequencies ranging from a lower frequency to a higher frequency within the electromagnetic spectrum.





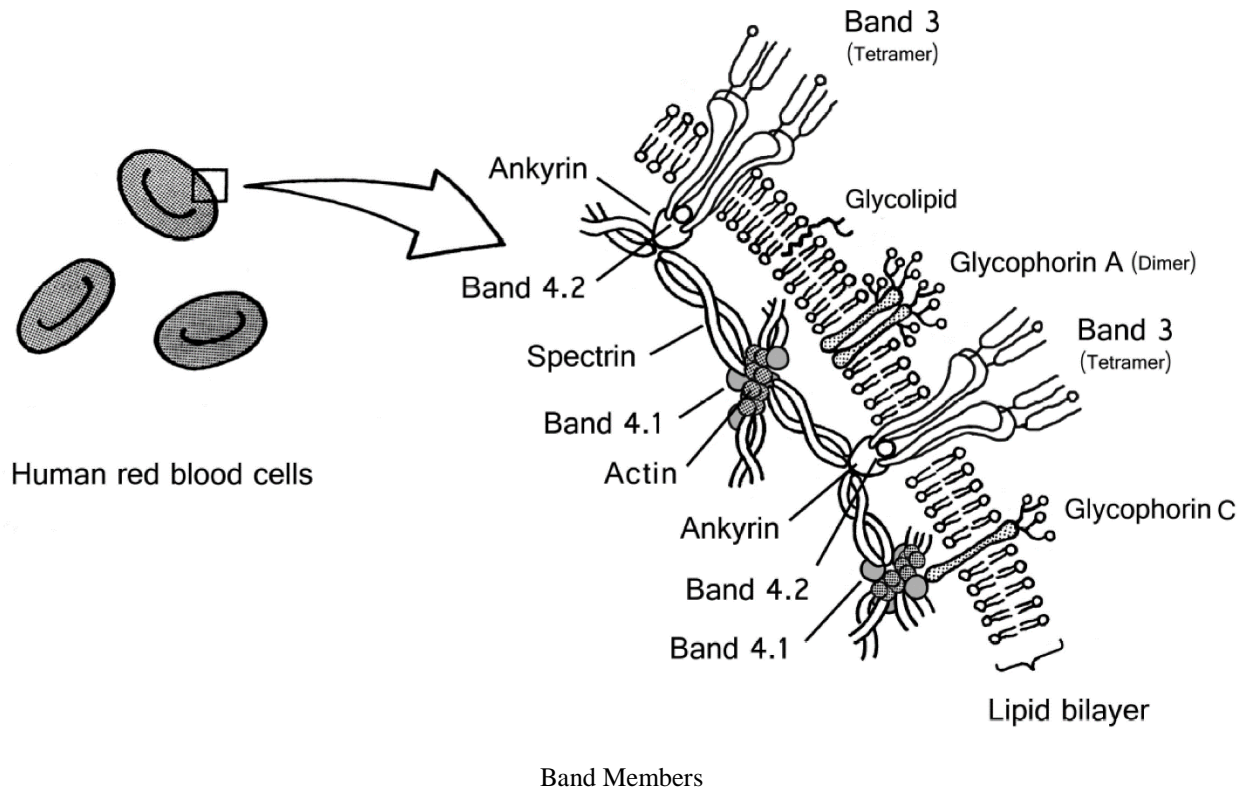
Electromagnetic spectrum



The erythrocyte, or red blood cell, is a marvel of biological architecture, primarily known for its role in oxygen transportation from the lungs to various parts of the body and carbon dioxide transportation back to the lungs for exhalation.



The stability and flexibility of the erythrocyte membrane are essential for its ability to deform as it navigates through the narrow capillaries and the spleen without rupturing. This remarkable stability and flexibility are attributed to the erythrocyte membrane's complex network of proteins, including Ankyrin, Protein Band 4.1 (EPB41), Protein Band 4.2 (EPB42), Protein Band 4.9 (DMTN), Protein Band 3 (SLC4A1), Protein Band 7.2 (STOM), and Beta Spectrin, among others. These proteins work collaboratively to maintain the erythrocyte's integrity and function.



### Structural Support and Flexibility

- **Beta Spectrin** forms a **lattice-like network (NET)** on the cytoplasmic side of the plasma membrane, providing structural support. This protein interacts directly with **Ankyrin**, a critical adaptor protein that links the spectrin-actin network to the plasma membrane, establishing connectivity and stability.
- **Protein Band 4.1 (EPB41)** plays a crucial role as a stabilizer by linking the spectrin-actin skeleton with the cell membrane. It binds to spectrin and actin, reinforcing the network and directly interacting with glycophorin, a transmembrane protein which connects the structure to the lipid bilayer.



- **Protein Band 4.2 (EPB42)** stabilizes the interactions between spectrin, actin, and the lipid bilayer. Its deficiency is associated with spherocytosis, emphasizing its role in maintaining erythrocyte stability.

Additionally, **Protein Band 4.9 (DMTN)**, also known as dematin, plays a role in linking the spectrin-actin network to the plasma membrane, contributing to membrane stability and flexibility.

### **Anion Exchange and Gas Transport**

- **Protein Band 3 (SLC4A1)**, acting as an anion exchanger, facilitates the exchange of chloride and bicarbonate across the erythrocyte membrane. This exchange is crucial for carbon dioxide transport from tissues to the lungs. CO<sub>2</sub> produced as a waste product of metabolism diffuses into erythrocytes, where it's quickly converted to bicarbonate (HCO<sub>3</sub><sup>-</sup>) by carbonic anhydrase. The bicarbonate is then shuttled out of the cell in exchange for chloride ions (Cl<sup>-</sup>) through Protein Band 3, maintaining ionic and pH balance in blood.
- **Protein Band 7.2 (STOM)**, also known as stomatin, is implicated in the organization of the lipid raft domains and is thought to play a role in ion channel regulation, which could indirectly affect the anion exchange and membrane stability.

### **Integrative Function**

The interplay among these proteins ensures the erythrocyte's structural integrity and flexibility, enabling efficient gas exchange and transportation. The spectrin-actin framework provides mechanical stability and elasticity, allowing erythrocytes to resume their biconcave shape after deformation. The Ankyrin and Band 4.1 mediated linkage between this framework and the plasma membrane proteins, including the key anion exchanger Band 3, ensures cohesive structural integrity.

This orchestration allows erythrocytes to perform their gas transport functions optimally, highlighting the critical nature of protein interactions in cellular physiology. Disruptions in these interactions can lead to various pathologies, including spherocytosis and elliptocytosis, underscoring the importance of these proteins in erythrocyte stability and function.

### **Anion Exchange and Gas Transport: CFTR and Protein Band 3 (SLC4A1)**



## Oxygen and Carbon Dioxide Transportation

As mentioned, protein Band 3 (SLC4A1) is a critical component of red blood cells (RBCs) involved in anion exchange, primarily facilitating the **exchange of chloride (Cl<sup>-</sup>) and bicarbonate (HCO<sub>3</sub><sup>-</sup>) ions across the erythrocyte membrane**. This exchange is essential for maintaining acid-base balance in the blood and optimizing oxygen and carbon dioxide transport.

During oxygen transportation from the lungs (**Chi Rho**) to various tissues, hemoglobin in RBCs picks up oxygen. When these oxygen-loaded RBCs reach tissues, oxygen is released to fulfill metabolic needs. The byproduct of metabolism, carbon dioxide (CO<sub>2</sub>), is produced in tissues and must be transported back to the lungs. A significant proportion of CO<sub>2</sub> is converted into bicarbonate ions in RBCs, a reaction catalyzed by the enzyme carbonic anhydrase.

Here, Band 3 facilitates the outward movement of bicarbonate from RBCs into the plasma in exchange for chloride ions. This exchange is **vital for transporting CO<sub>2</sub> in a soluble form back to the lungs**, where bicarbonate is converted back into CO<sub>2</sub>, which is then exhaled. This anion exchange mechanism is **crucial for CO<sub>2</sub> removal**, a process extensively mediated by Band 3.

## Role of CFTR in Respiratory Gas Exchange

The Cystic Fibrosis Transmembrane Conductance Regulator (CFTR) also plays a supportive role in this system. CFTR is an ATP-gated chloride channel primarily found in epithelial cells of various tissues including the lungs, where its function as a chloride channel **contributes to the hydration of mucus and movement of chloride ions**. CFTR is also permeable to **HCO<sub>3</sub><sup>-</sup>**, or **sodium bicarbonate** and helps **regulate bicarbonate secretion** and salvage in epithelial cells. CFTR also helps with **glutathione** flux.

CFTR ensures efficient chloride transport, which is crucial for **maintaining the fluid balance and proper viscosity of the mucus**. This, in turn, supports the respiratory system's ability to clear out CO<sub>2</sub> efficiently and maintain adequate oxygen levels.

## Role of CFTR in Viral Infections

CFTR contributes to the regulation of the pH and the ion content of the airway surface fluid layer and thereby plays an important role in defense against pathogens. CFTR has been recognized for its role beyond chloride transport,



particularly in the context of viral infections. It functions as a regulator of innate immunity and influences the susceptibility of epithelial cells to viral infections. CFTR modulations affect the body's inflammatory responses and the efficiency of pathogen clearance. Lower or dysfunctional CFTR expression, as observed in cystic fibrosis (CF), can lead to increased vulnerability to infections, including those caused by viruses.

Additionally, recent findings suggest that CFTR can impact the entry and replication of certain viruses within host cells. For instance, in the case of influenza, CFTR has been implicated in modulating the pH of endosomes, which can affect viral uncoating and replication processes within cells, altering the course and severity of infections. Thus, CFTR contributes indirectly to controlling viral propagation, influencing both disease progression and the body's response to respiratory viral infections.

In summary, while Band 3 directly facilitates CO<sub>2</sub> transportation and supports oxygen delivery through its role in anion exchange, CFTR also plays a role in respiratory gas transport but is directly involved in maintaining epithelial defense mechanisms against viral infections. These functions highlight the complex interplay of ion channels and transporters in respiratory physiology and pathophysiology.

Thus, the intimate relationship with **erythrocytes and gas exchange in the lungs plays a vital role in maintaining our “electrochemical gradient” which helps control the movement of ions across cell membranes ensuring we are “in tune” with the proper “alignment” of the “electromagnetic spectrum.”**

Remember the **“Chi Rho” as breathe is life force!**

RHO proteins, through their regulation of the cytoskeleton, affect the structure and function of erythrocyte membrane proteins, such as the band proteins (e.g., spectrin, ankyrin, band 3 protein). These interactions are crucial for maintaining the shape, flexibility, and integrity of red blood cells (RBCs). Specifically, the influence of Rho proteins on the assembly and function of band proteins **ensures that erythrocytes can endure the mechanical stress** they experience as they



travel through the circulatory system and assist with the proper transportation of oxygen through the body.

### **Rho GTPases and Actin Communication**

Rho GTPases are pivotal in regulating actin cytoskeleton dynamics. Through their active and inactive states, they modulate the assembly of actin filaments, thereby influencing cell shape, adhesion, and mobility. When activated, Rho GTPases can interact with various effector proteins that directly or indirectly affect actin polymerization and depolymerization, resulting in actin filament rearrangement.

### **Clathrin's Role**

Clathrin is involved in mediating vesicular transport by forming coated vesicles that facilitate the internalization of molecules from the cell membrane, a process known as clathrin-mediated endocytosis.

Interestingly, the actin cytoskeleton, under the regulation of Rho GTPases, plays a crucial role in this process. Actin polymerization provides the **mechanical force necessary for the invagination of the plasma membrane** and the subsequent scission of clathrin-coated pits.

Therefore, clathrin-mediated endocytosis is a point of convergence for the actions of Rho GTPases and actin dynamics, exemplifying their collaborative roles in cellular functions.

In summary, the dialogue between **Rho GTPases, Actin, Spectrin, Clathrin**, and **MARVEL** domain proteins like **Tricellulin** encapsulates a fascinating narrative of cellular coordination and communication. Drawing parallels with elements like the Triskeleion from the MARVEL universe not only adds an element of intrigue but also underscores the intricate and sometimes symbolic relationships observed in the biological world, highlighting the seamless integration of structure, function, and symbolism across different domains of knowledge.

### **RHO, Spark of Life, & Gatekeepers**

At the precise moment when the male sperm inseminated the female egg a miracle takes place. Life as we know it begins.



In a 2016 study titled “**The zinc spark is an inorganic signature of human egg activation** [R]”, we see an important relationship between calcium signaling and zinc.

The authors go on to write...

“Egg activation methods, as expected, induced rises in **intracellular calcium** levels and also triggered the coordinated release of zinc into the extracellular space in a prominent “**zinc spark**.”

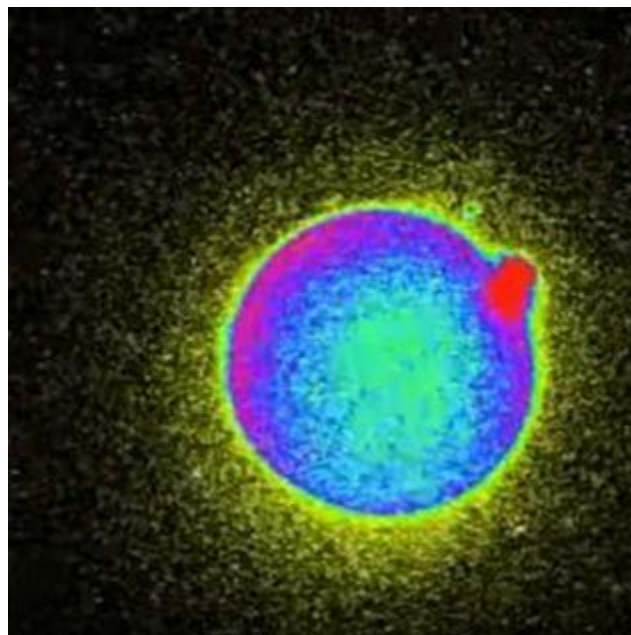
They add...

“**Altering the natural pattern of calcium transients in the zygote can have long-term effects on gene expression in the embryo and on offspring development.**”

Yes, pathogens hijack this process as well!

When the “zinc spark” occurs it must be followed by the rise in calcium, otherwise the female egg does not get fertilized and there is no you...no me!

Check out the video here: [Zinc Fireworks Reveal When Human Egg is Fertilized](#)



Spark of Life

In other words, you and I would not even be here today if it was not for Calcium and Zinc, which are both required for human egg activation!



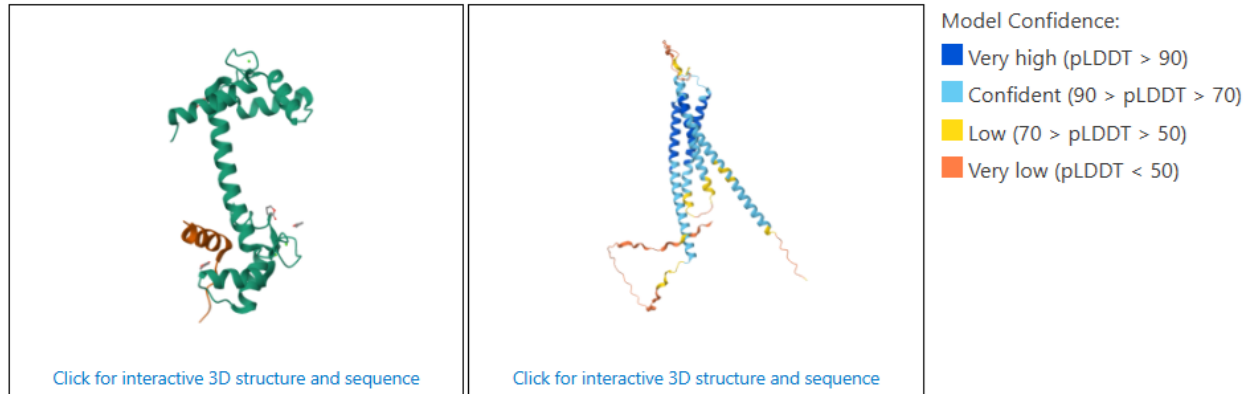
Calcium is a key signaling agent in the information networks of life. As calcium ions cannot cross cell membranes directly, the rise and fall of calcium levels within a cell are controlled through a set of proteins known as the [ORAI](#).

**“In Greek mythology, the 'Orai' are the keepers of the gates of heaven: Eunomia (order or harmony), Dike (justice) and Eirene (peace).”**

Miscellaneous:

> In Greek mythology, the 'Orai' are the keepers of the gates of heaven: Eunomia (order or harmony), Dike (justice) and Eirene (peace).

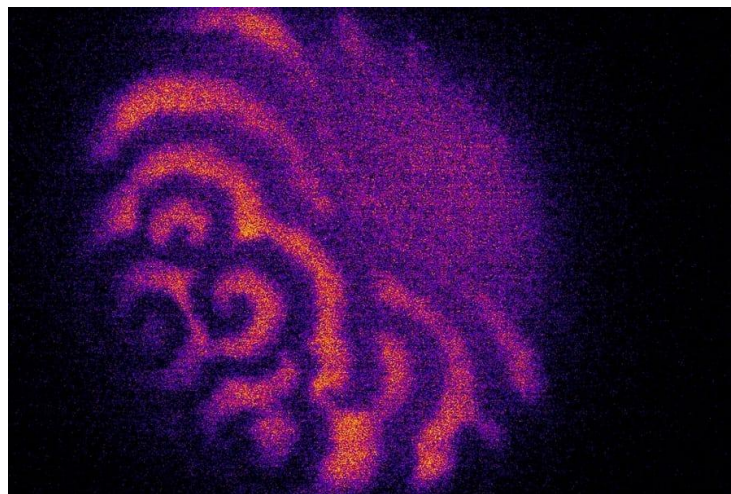
Three dimensional structures from [PDB \(representative\)](#) and [AlphaFold \(predicted\)](#) for ORAI1 Gene



ORAI1 Gene

Quick summary of how it all works...

The Zinc Spark kick starts life itself when the sperm hits the egg. This **spark of life** is followed by a heavy influx of calcium voltage waves. Those waves of frequency ride in on **RHO GTPases (ROCK) signaling** as previously mentioned from the MIT study earlier.



RHO Waves



These RHO frequency waves themselves form a toroidal vortex generated from a **Triskelion**, which, is are further transmitted via **Piezo** and **Clathrin** Mediated Endocytosis and Exocytosis.

Then, from there, the signals further move and propagate into microtubules and the actin cytoskeleton.

Again, **PATHOGENS CAN HIJACK EVERY PART OF THIS PROCESS!**

Take for example [Vertically Transmitted Infections](#), which infections caused by pathogenic bacteria or viruses that use **mother-to-child transmission**, that is, transmission directly from the mother to an embryo, fetus, or baby during pregnancy or childbirth.

## HIJACKING THE SPARK OF LIFE ENERGY!

Now, the question that begs to be asked is what forms the Clathrin Triskelion?

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 JCB  
Journal of Cell Biology  
Rockefeller University Press

• J Cell Biol. 1997 Apr 21;137(2):335-345. doi: [10.1083/jcb.137.2.335](#)

**Mannose 6-Phosphate Receptors Regulate the Formation of Clathrin-coated Vesicles in the TGN**

[Roland Le Borgne](#)<sup>1</sup>, [Bernard Hoflack](#)<sup>1</sup>

• [Author information](#) • [Article notes](#) • [Copyright and License information](#)

PMCID: PMC2139777 PMID: [9128246](#)

Abstract

The transport of the two mannose 6-phosphate receptors (MPRs) from the secretory pathway to the endocytic pathway is mediated by carrier vesicles coated with the AP-1 Golgi-

**Mannose 6-Phosphate Receptors Regulate the Formation of Clathrin-coated Vesicles** [\[R\]](#)

**Mannose 6-Phosphate Receptors require Mannose.** [\[R\]](#)



The root word of mannose means “MANNA”.

**Therefore, Mannose (The MANNA) helps form the clathrin triskelion toroidal vortex!**

There's also an additional sugar that assists the formation of the Clathrin Triskelion called **Inositol**.

**The “FORCE & POWER” of Inositol**

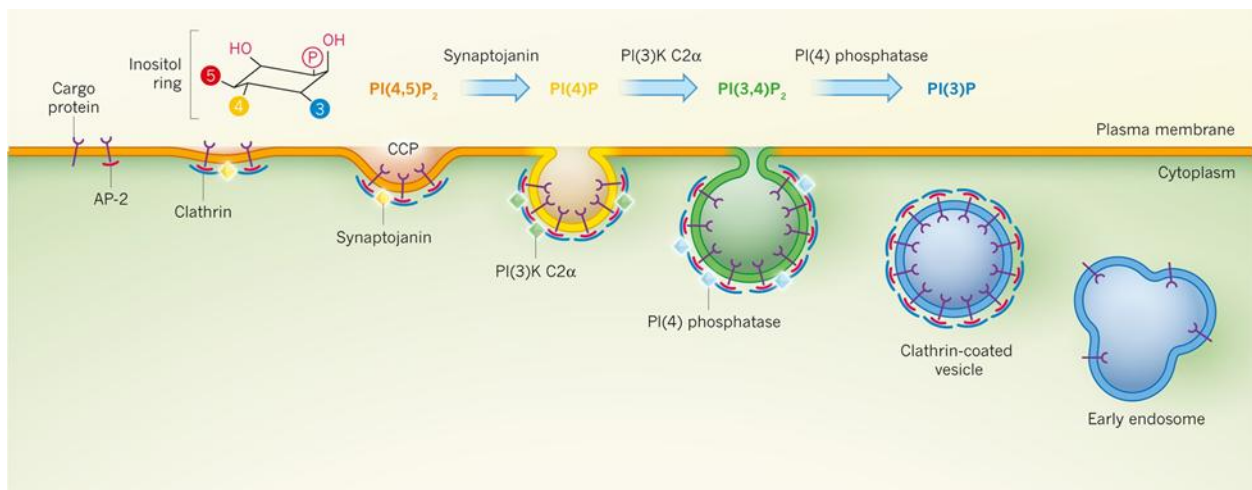
**Inositol Etymology:** From Ancient Greek *ἰνός* (*inós*, genitive singular of *ἴς*) [R, R]

*ἴς • (ís) f. (genitive ἰνός); third declension*

1. force, power

2. muscle, sinew, tendon [quotations ▼]

Combined, Mannose and Inositol create the **ENERGY, POWER, and FORCE**.



Inositol and clathrin are interconnected in several ways:

1. **Inositol Polyphosphate Receptor and Clathrin Assembly Protein AP-2:** These proteins collaborate to create ion channels specifically tailored to permit the passage of potassium ions.
2. **Inositol Hexakisphosphate and Clathrin Assembly Protein AP-3:** Here, Inositol Hexakisphosphate connects with a protein called AP-3, a part of the clathrin assembly process. This binding prevents the normal formation of clathrin structures known as cages.



3. **Clathrin and AP1:** These two elements work together to organize and distribute certain types of proteins, specifically those with sugar and lipid components attached, within the cell. They manage this both through the recycling process and by creating new protein routes.
4. **Inositol 5-Phosphatase SHIP2 and Clathrin:** SHIP2 is a specific type of enzyme that controls how clathrin is involved in the endocytosis process, where substances are brought into a cell.
5. **Inositol Phospholipid-Modifying Enzymes and Clathrin:** General enzymes that modify inositol phospholipids also interact with clathrin, affecting its function and behavior within the cell.

These interactions highlight the complex relationships and roles that inositol and related proteins have with clathrin in cellular functions.

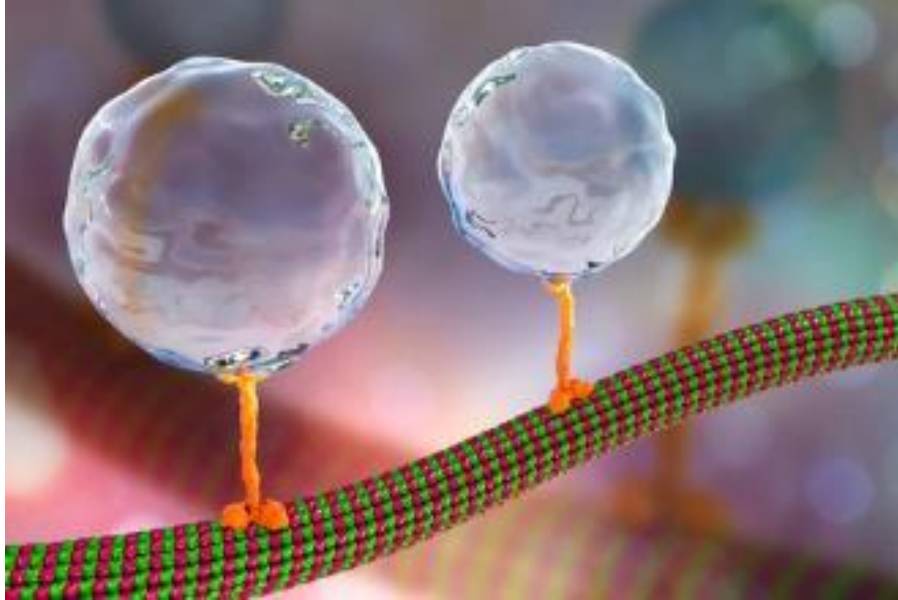
**So, both Mannose (The Manna), and Inositol (Force/Power) both form and maintain the Clathrin Triskelion.**

Now, it gets even more interesting when we bring microtubules into this mix as everything described above is connected such as RHO, Spectrin/Actin, and Clathrin.

### **The Role of Microtubules and Clathrin in Cells**

Microtubules and clathrin are both critical components in the structure and operation of cells. Their collaboration mainly happens during the process of endocytosis, where the cell takes in materials from the outside.





Clathrin Coated Pits Walking On Microtubule

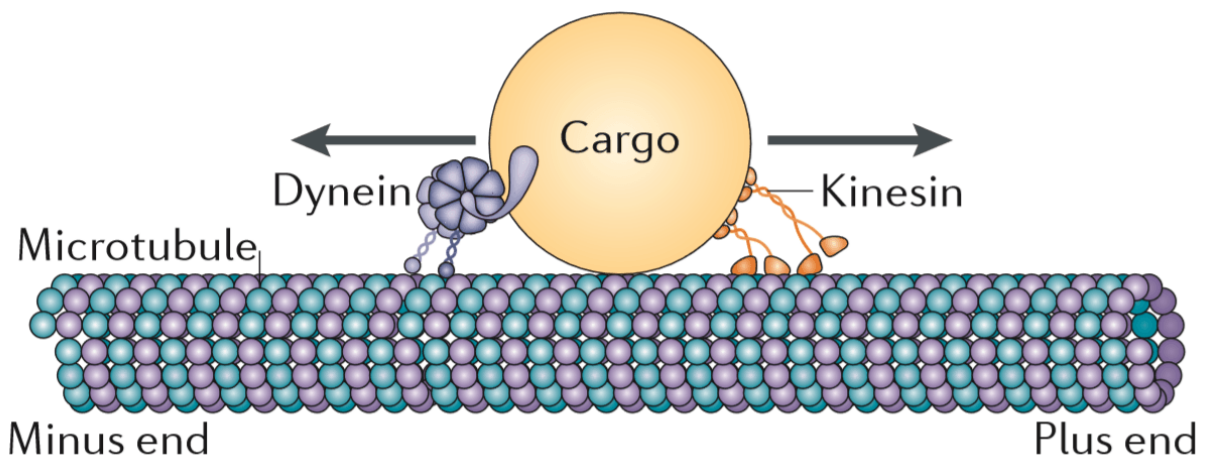
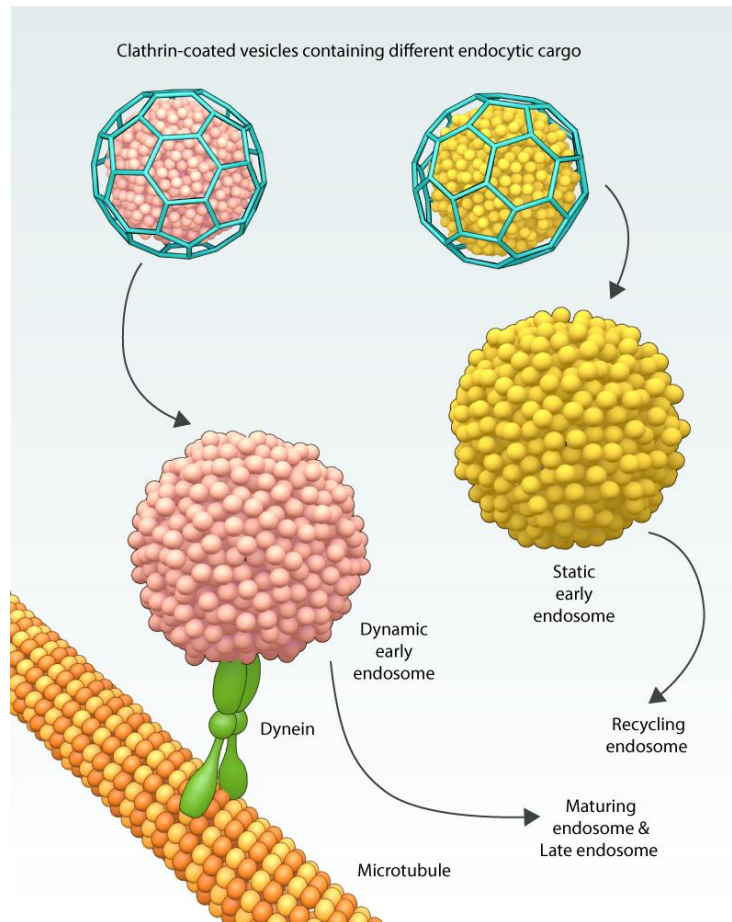
### What are Microtubules?

- **Structure:** Microtubules are like the highways of the cell. They are long, tube-like structures that extend throughout the cell. They help in maintaining the cell's shape and are involved in various movements within the cell, such as transporting different materials.

### What is Clathrin?

- **Function:** Clathrin comes into play specifically when the cell needs to intake substances from outside. It forms a coat around a small area of the cell membrane that is about to be drawn inward. This coated area eventually pinches off to capture the external substances in a new bubble-like vesicle inside the cell. It then connects to microtubules.





## How They Work Together

1. **Vesicle Formation:** When the cell needs to take in material, clathrin gathers at a specific spot on the cell membrane and helps form a new vesicle.



2. **Transport:** Once the vesicle is formed with the help of clathrin, microtubules take over. Because these microtubules act like roads within the cell, they guide the newly formed vesicle to its correct destination within the cell. This might be towards the center of the cell or towards another specific location depending on what needs to be done with the vesicle's contents.
3. **Efficiency and Support:** This team effort between microtubules and clathrin ensures that substances captured from outside the cell are quickly and efficiently transported inside the cell. This helps in maintaining the cell's environment and allows it to function properly.

In summary, microtubules guide and support the transport of clathrin-coated vesicles within the cell, making sure that what the cell engulfs is efficiently processed and dispatched to the right internal areas.

### **Clathrin-Coated Pits, Rho GTPases, and the Microtubule Connection**

In the dynamic world of intracellular trafficking, clathrin-coated pits play a central role in the endocytic pathway, facilitating the uptake of various molecules into the cell. The interaction of these specialized structures with Rho GTPases and their subsequent collaboration with molecular motors such as **kinesin**, as well as with the GTPase **dynamin**, exemplify the complexity of vesicular transport and cytoskeletal cooperation. Together, these components orchestrate the trafficking of vesicles along microtubules, which serve as **cellular 'highways'**.

### **Interplay Between Clathrin-Coated Pits and Rho GTPases**

The life cycle of a clathrin-coated pit begins at the plasma membrane, where selected cargo molecules get trapped within a clathrin lattice, leading to vesicle formation. Rho GTPases are integral in remodeling the actin cytoskeleton, a process which is closely tied to the early stages of clathrin-coated vesicle formation. By helping to orchestrate the dynamics of actin filaments, **Rho GTPases** facilitate the necessary **force generation** for the budding of the clathrin-coated pits. This actin-driven process propels the nascent vesicles into the cellular interior.

Are you wondering at this point what “GTPase” stands for? The “GTP” stands for **Guanosine Triphosphate**.



## The Guarded Passage of Frequency & The Etymology of Guanosine

First, the word guanine derives from the Spanish loanword guano ("bird/bat droppings"), which itself is from the Quechua word wanu, meaning "**dung**". Dung can also mean "**weaving, or to cover**". [R, R]

Dung is manure. The guanosine found in dung is pure energy needed for plant growth.

### GUAN

Guan is a masculine name of Chinese origin meaning "mountain pass" or "**guarded passage**." This name was historically given as a title to those in charge of guarding passes. [R]

### Guanosine & Guan-o-Sine

The word "**Sine**" is derived from an ancient Sanskrit word जीव (*jīva*, "**sine, chord, life, existence**"), perhaps related to [Sine Wave](#). [R]

Frequency determines physiology! And, ALL PATHOGENS ARE ENERGY SIPHONS!

Sine wave patterns occur often in nature, including wind waves, sound waves, and light waves.

So we can see that breaking up the word **Guan-o-sine** means...

## Guarded Passage of Frequency

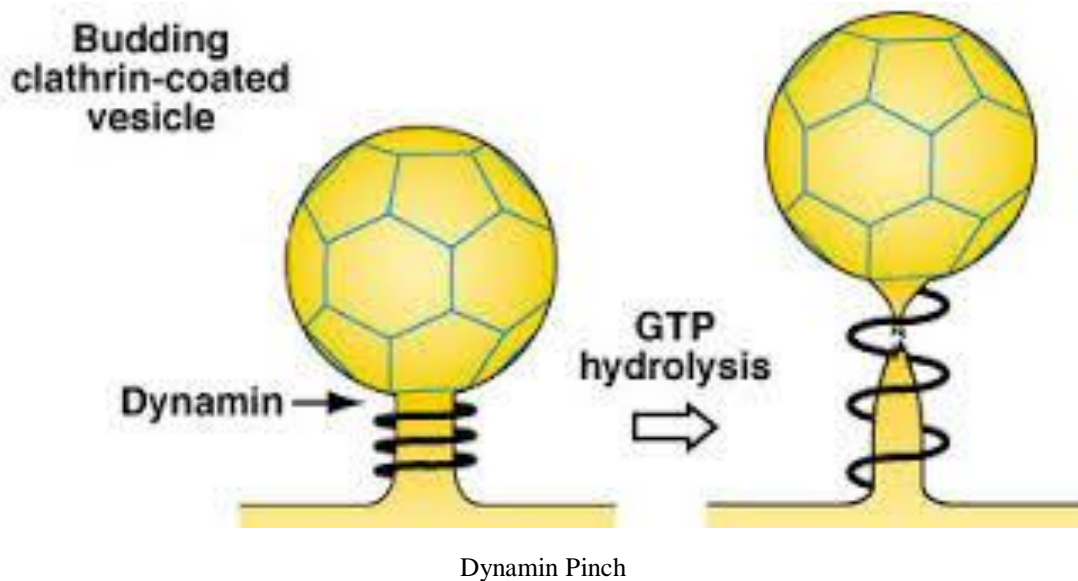
GTPases are a large family of enzymes that function as **molecular switches** inside cells. They bind and hydrolyze guanosine triphosphate (GTP) to guanosine diphosphate (GDP), a process that changes their conformation and activity. GTPases play crucial roles in various cellular processes, including **signal transduction**, protein synthesis, cell division, and cytoskeletal organization. When GTP is bound, the GTPase is typically "on," transmitting a signal or effecting a change, and when GDP is bound, it is "off."

### Dynamin: The Pinch-Hitter in Vesicular Release

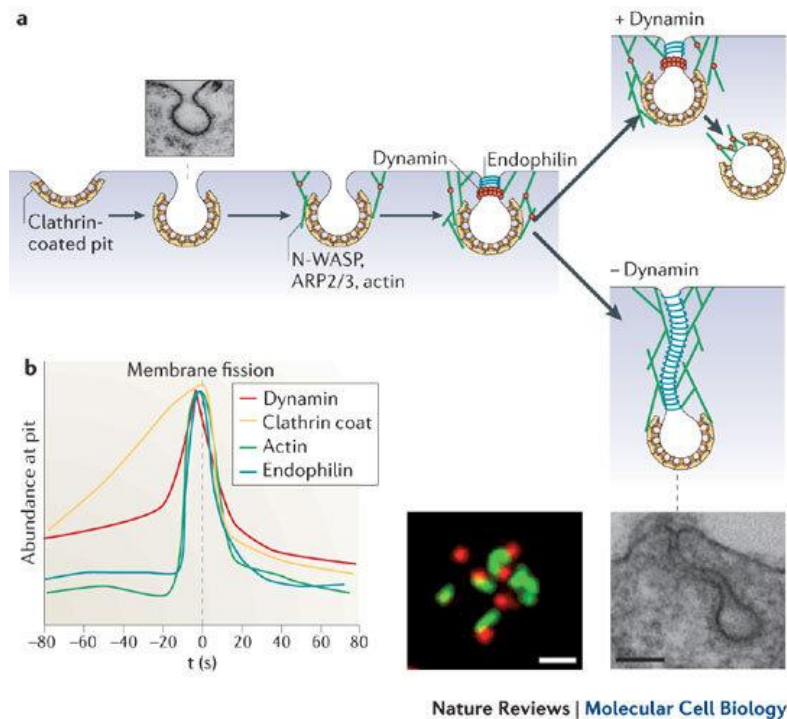


The word dynamin comes from the Greek word *dýnamis*, which means "**power**, strength, capability, **energetic force**; **motive force**".

Before a clathrin-coated vesicle can fully mature and detach from the membrane, dynamin is recruited to the neck of the budding vesicle. Dynamin is a GTPase that, upon GTP hydrolysis, constricts the neck of the clathrin-coated pit, separating the newly formed vesicle from the plasma membrane in a process known as fission. This cleavage is essential for the immature vesicle's release into the cytoplasm where it can be transported to its target destination.







Dynamin Pinch & Release

Pathogens use cellular endocytosis to enter host cells. Dynamin is essential for infection with single-receptor viruses, but it's not essential for multi-receptor viruses like influenza. However, dynamin can increase the uptake and infection efficiency of multi-receptor viruses. [[R](#), [R](#)]

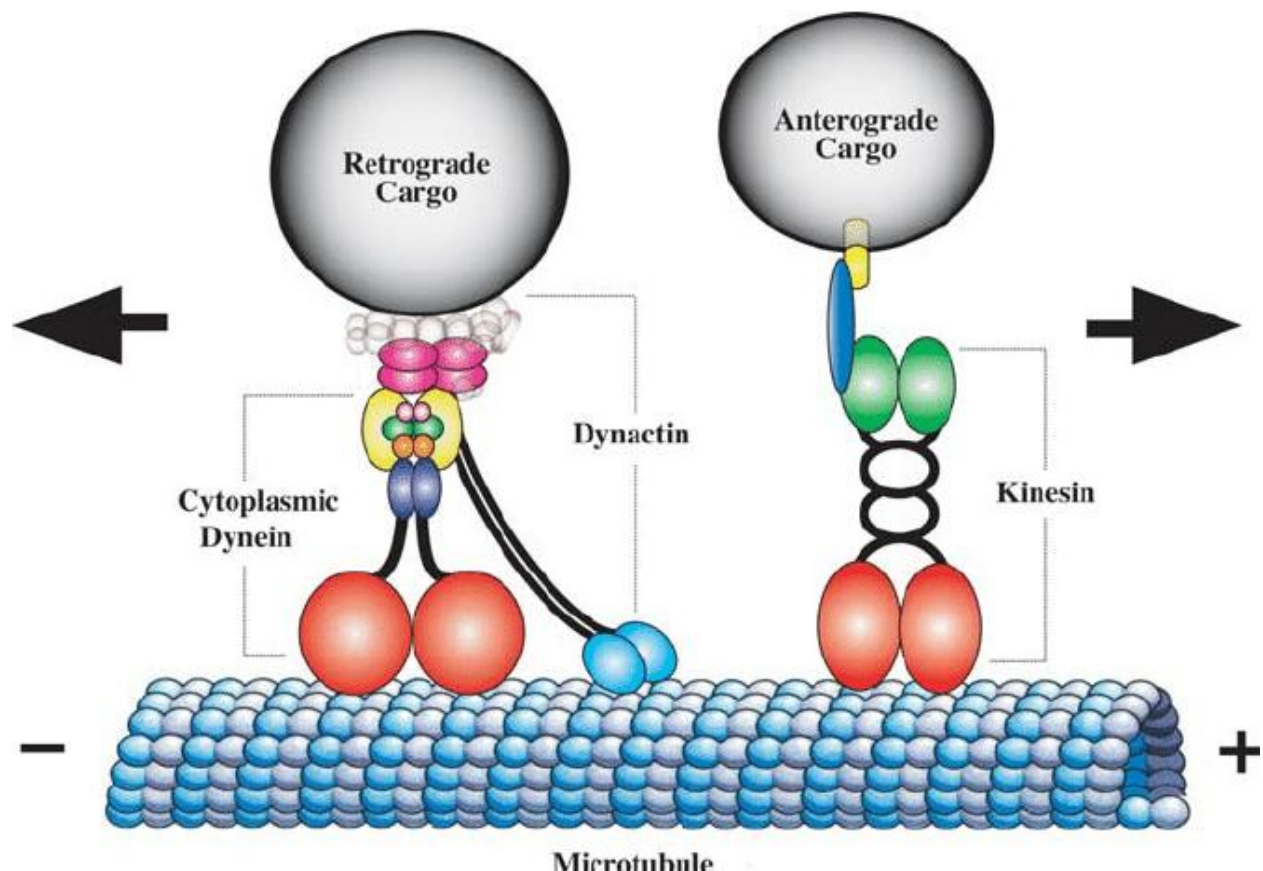
## Kinesin and the Association with Microtubules

Once released into the cytosol, clathrin-coated vesicles need to be transported to specific locations within the cell, such as endosomes or lysosomes. This is where microtubules and their associated motor proteins, particularly kinesins, come into play. Kinesins are microtubule-dependent motors that harness the energy from ATP hydrolysis to "walk" along microtubules, effectively transporting cargo throughout the cell.

By binding to the vesicle membrane, kinesin motors facilitate the long-distance movement of clathrin-coated vesicles along the microtubule network. The microtubules act as tracks, directing the vesicle to its correct intracellular location, thus playing a crucial role in maintaining the proper flow of materials and signals within the cell.



The entire process, from the initial formation of clathrin-coated pits influenced by Rho GTPases to the dynamin-mediated scission and the kinesin-driven transport on microtubules, highlights the remarkable coordination between the cell's structural frameworks and its molecular machinery. It is a symphony of interactions where each component is fine-tuned to contribute to the overall function and efficiency of cellular transport.



## Microtubules & Quantum Consciousness

Research reveals hints of quantum states in microtubules inside brain cells.

[Orchestrated objective reduction theory](#) (Orch OR), originally proposed by physicist Roger Penrose and anaesthesiologist Stuart Hameroff in the 1990s, seeks to **bridge the gulf between physical matter and felt experience**. The idea is that consciousness arises when gravitational instabilities in the fundamental structure of space-time collapse quantum wave functions in tiny proteins called microtubules, which are found inside neurons.

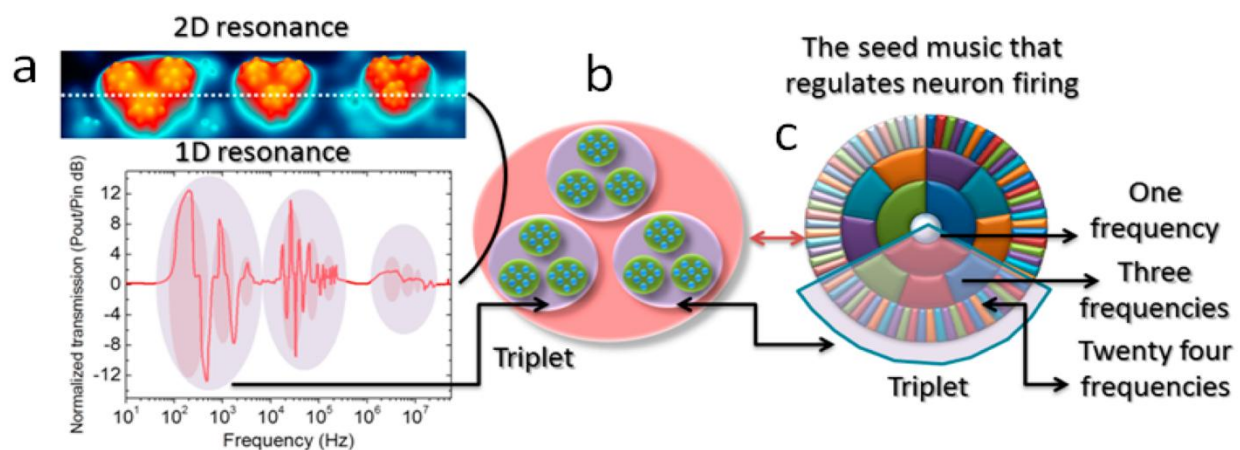


The recent discovery of quantum vibrations in "microtubules" inside brain neurons corroborates this theory, according to review authors. They suggest that EEG rhythms (brain waves) also derive from deeper level **microtubule vibrations**, and that from a practical standpoint, treating brain microtubule vibrations could benefit a host of mental, neurological, and cognitive conditions.

This suggests that **consciousness derives from quantum vibrations in microtubules**, protein polymers inside brain neurons, which both govern neuronal and synaptic function, and connect brain processes to self-organizing processes in the fine scale, 'proto-conscious' quantum structure of reality.

### Understanding Microtubules and Actin Networks

To grasp the magnitude of this advancement, it's crucial to first understand the pivotal roles of microtubules and actin networks in our bodies. These are the building blocks of the cytoskeleton, providing structure and support to our cells. Not just static scaffolding, these elements are dynamic in nature, responsible for a plethora of critical cellular functions including the precise timing of electrical signals in neurons, as revealed in research highlighted on [SpaceFed.com](https://www.spacefed.com).



[Triplet of Triplet Fractal Resonance Harmonics of Neuronal EM Information Processing](#) (Video)

These tiny biological components function akin to **fractal antennas** within our body, resonating at the cellular and molecular levels. But how exactly do they affect the body's electrical signals?



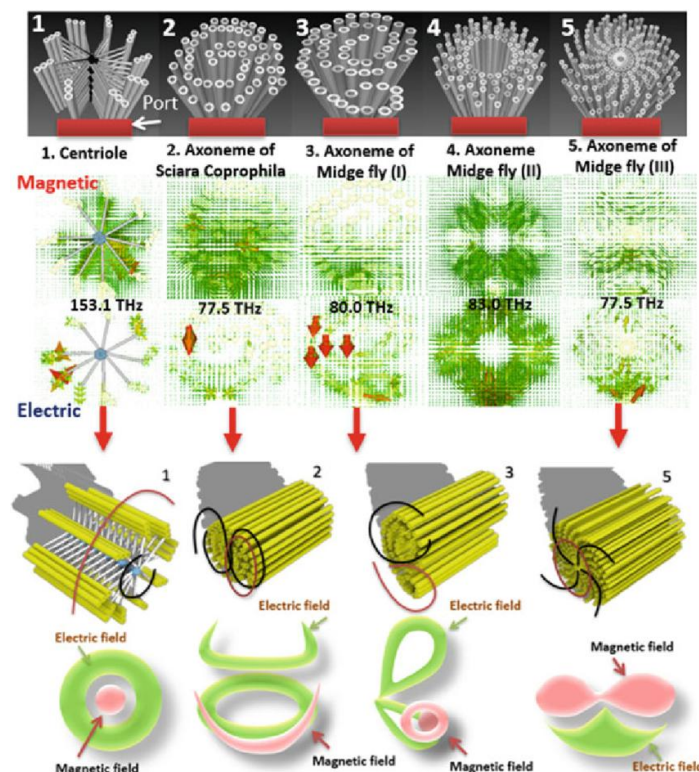
## Electromagnetic Vortices and Cell Communication

It turns out, just below the membrane of a cell lies an actin filament network arranged like a grid, capable of generating **electric field vortices**. Imagine these filaments coherently **activating ion channels in a circular patch** of the cells membrane, essentially steering an electrical signal's pathway.

Using sophisticated technologies, the **Bandyopadhyay** research team visualized this in action. They observed how the neuron's core—full of microtubule networks—instructs a cylinder-like grid formed by actin and another protein called **beta-spectrin**. Together, these structures **create electrical vortices** capable of regulating when cells fire their signals.

These **Fractal-Antenna-Like-Biopolymers** are akin to “**Dielectric Resonators**” that form **Cylindrical Superstructures of Ionic Electrical Vortices** which fire **200 microseconds** before a cells electrical signal initiates.

These Electromagnetic Vortices are **1000 times faster than a nerve spike** and form a **3D Gaussian Wave Packet** creating **Morphic Resonance** thereby regulating the timing of action potentials with unparalleled precision.



DNA DETERMINATION ©  
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## **The Importance of Microtubules and Actin Networks**

Microtubules and actin networks are the building blocks of what's called the cytoskeleton in our cells. This isn't just a static structure; it plays a dynamic role in supporting cells and helping with many essential functions, like how electric signals move in our neurons.

These components are like tiny antennas for our bodies, working at the cellular and even molecular levels. How do they affect the body's electric signals?

## **Cell Communication and Electrical Vortices**

Right under the cell's outer layer, there is a network of actin filaments, laid out like a grid, that can create swirling electric fields. Imagine these filaments working together to direct where an electric signal goes inside a cell.

Using some really advanced tech, researchers saw this happening. The center of a neuron, filled with microtubule networks, talks to a grid made by actin and a protein called beta-spectrin. This teamwork creates electric swirls that control when cells send out their signals.

These tiny biological parts act like special antennas that form electric swirls shaping a sophisticated type of electric signal, which are way faster than typical nerve signals. This advanced timing control helps the cell to fire signals with incredible precision.

In the simplest terms, all of this research is helping us understand how tiny structures in our cells might play a big role in consciousness and how our brains work on a very basic level.

See:

**Part 1** [Quantum Vibration, Sound Frequency, and Cognition with Dr. Anirban Bandyopadhyay](#) (Video Interview)

**Part 2:** [Quantum Vibration, Sound Frequency, and Cognition with Dr. Anirban Bandyopadhyay](#) (Video Interview 43:39)

This whole process actually creates “**Quantum Atomic Water**” inside the microtubule itself [R]. Which, is like saying the 5th phase of water.





Atomic Microtubule Water

Again, PATHOGENS HIJACK ALL THESE SYSTEMS! Especially viruses!  
Pathogens are energy siphons!!!

Let's break down that complex information into a super simple explanation:

### **Microtubules & The Idea of Quantum Consciousness**

Scientists have found hints that microtubules, tiny protein structures in brain cells, might work in a quantum way - a way that's really small and fundamental to how things work in the universe.

A theory called Orchestrated Objective Reduction, or Orch OR for short, was thought up in the 1990s. It's a bit like trying to find a bridge between the stuff everything is made of and the way we experience life. The big idea is that what we call consciousness - our awareness - might come from special quantum activities happening in these microtubules.

Recently, scientists noticed that these microtubules vibrate in a quantum manner, which backs up the Orch OR theory. They also think that the vibrations in microtubules might explain the patterns we see in brain activity, known as EEG rhythms. This could mean that understanding and maybe even treating the way these microtubules vibrate could help with various brain-related health issues.

Basically, this suggests our consciousness might be connected to these tiny, vibrating parts of brain cells, which have a big job in controlling how neurons



work and link up our brain's activities with the most basic elements of reality on a quantum level.

In addition, not only are microtubules found in brain cells, but they are actually **more abundant in our hearts!**

### **The Coherent Heart & Brain Microtubule Connection to the Ether**

Recent studies have revealed a fascinating insight: our hearts contain a greater density of microtubules than our brains. In fact, the heart's magnetic field can be more than 5,000 times stronger than that of the brain and can be measured as far as 3 feet away from the body in every direction. Scientists use special devices called SQUID-based magnetometers to detect this strong magnetic field from the heart. The heart is incredibly powerful, having an electrical component that is about 60 times greater and an electromagnetic energy field that is about 5000 times greater than the brain's.

This discovery challenges the traditional view of the brain as the body's sole center of advanced communication and suggests a more integrated and complex network linking the heart and brain.

These microtubules, known for their crucial role in cellular processes, are believed to enable a sophisticated form of communication between these two vital organs. Drawing from this, it's possible to theorize that the heart, much like the brain, plays a significant role in processing and transmitting information not only throughout our bodies but also, potentially, to the ether - the vast, interconnecting space that encompasses us.

This could imply that the rhythms of the heart and brain are intricately connected in ways previously unimagined, syncing not just with each other but also with a larger, universal network. The concept of the ether, long considered in various philosophical and spiritual traditions as the medium through which cosmic energy flows, becomes relevant here as a conduit for this sophisticated interplay of biological rhythms and energies.

Thus, the abundance of microtubules in the heart may be a key component in an advanced communication network that extends beyond the physical confines of our bodies, linking us to the ether and the rhythmic pulses of the universe itself. This perspective opens thrilling avenues for understanding how our internal states are not isolated systems but part of a grand, interconnected cosmic web.



## Harmonizing the Heart's Energy with Nature

Among the 20,000 or so genes that we have, there's one named hERG. The hERG, or **human Ether-à-go-go-Related Gene**, is a special gene (scientifically known as KCNH2) that instructs our bodies to create a protein called Kv11.1.

This hERG channel has a crucial role in managing the **electrical activity in our heart**. It controls a charging-and-discharging activity called the IKr current, which helps regulate the rhythm of our heartbeat.

## The Etheric Heart: Bridging the Heavenly Ether to Our Sacred Heart Temple

Interestingly, the term "hERG" has meanings such as a "**pile of stones**", "**altar**", and "**sacred place or temple**" [\[R\]](#).

### HERG ETYMOLOGY

#### Etymology [\[ edit \]](#)

From Proto-West Germanic *\*harug*, from Proto-Germanic *\*harugaz* ("stoneheap, pile of stone; altar").

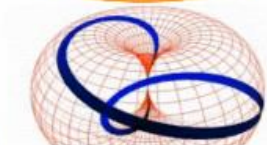
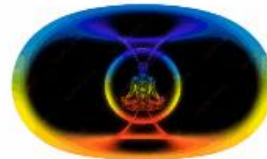
#### Pronunciation [\[ edit \]](#)

- IPA<sup>(key)</sup>: /xæɹɔɹg/, [hæɹɔɹɣ]

#### Noun [\[ edit \]](#)

hearg *m*

- 
1. **pile of stones**
  2. **altar**
  3. **sacred place; grove; temple**
  4. **idol**



#### hERG

Article [Talk](#)

From Wikipedia, the free encyclopedia

*"IKR" redirects here. For the airline code, see IKR (ICAO code).*

**hERG** (the **human Ether-à-go-go-Related Gene**) is a gene (*KCNH2*) that codes for a protein known as **Kv11.1**, the alpha subunit of a potassium ion channel. This ion channel (sometimes simply denoted as "hERG") is best known for its contribution to the electrical activity of the heart: the hERG channel mediates the repolarizing *I<sub>Kr</sub>* current in the cardiac action potential, which helps coordinate the heart's beating.

When this channel's ability to conduct electrical current across the cell membrane is inhibited or compromised, either by application of drugs or by rare mutations in some families,<sup>[[R\]](#)</sup> it can result in a potentially fatal disorder called **long QT syndrome**. Conversely, genetic mutations that increase the current through these channels can lead to the related inherited heart rhythm disorder **short QT syndrome**.<sup>[[R\]](#)</sup> A number of clinically successful drugs in the market have had the tendency to inhibit hERG, lengthening the QT and potentially leading to a fatal irregularity of the heartbeat (a ventricular tachyarrhythmia called *torsades de pointes*). This has made hERG inhibition an important **antitarget** that must be avoided during drug development.<sup>[[?\]](#)</sup>

hERG has also been associated with modulating the functions of some cells of the nervous system<sup>[[R\]](#)</sup> and with establishing and maintaining cancer-like features in leukemic cells.<sup>[[?\]](#)</sup>

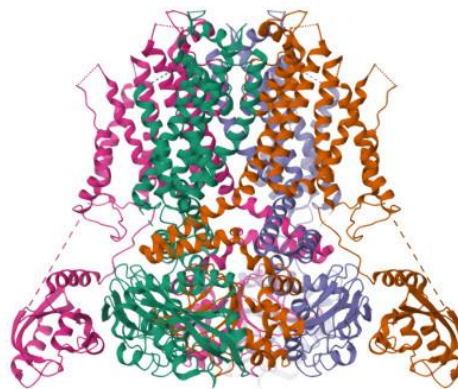
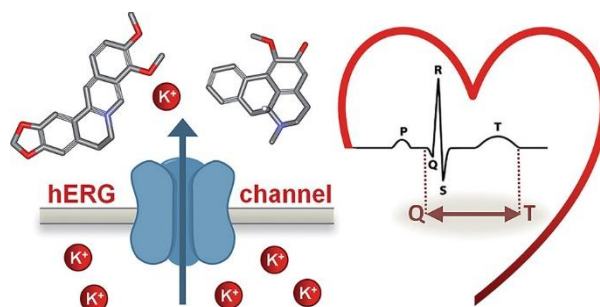




This is reflective of the idea that our bodies are our personal sacred temples. Simply divine! Incredibly profound! If we see our bodies as such sacred temples, the following information could be quite amazing for you!

The concept of the Ether, which is often described as a "heavenly body", represents an energy that fills up empty spaces like dark matter and carries heat and light.

This energy comes from outside into our bodies, specifically into our hearts. It's as if it fills the sacred space in the heart, and this process happens, in part, through the human **Ether-à-go-go-Related Gene**, or hERG. So, the hERG – the "**sacred temple**" - is both our heart and the place where perhaps this heavenly energy enters our body!



hERG crystal structure resembling meditation

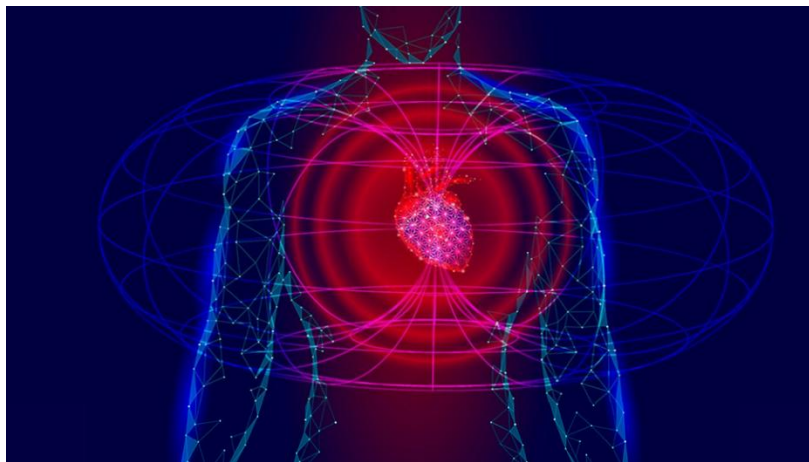
The Ether-à-go-go gene **synchronizes** our internal bioelectric field with the external Aether field.

## The Aether Field



Ether, also known as Aether, is a concept that dates back to ancient times. The word "Ether" comes from the Latin term "aethēr" and the Ancient Greek word "αἰθήρ," which referred to the clear upper air in the sky or the space where God resides; it was believed to be a pure and holy form of air, even higher than the air we breathe. This term also described the belief in a special substance or medium that filled the universe, especially the space that seemed empty. In essence, it's the space between the space.

People once believed that Aether was the magical ingredient that made it possible for **light**, **electricity**, and **magnetism** to move through what seemed like empty space. Essentially, it was thought to be the unseen 'stuff' that everything in the universe needed to move and exist, from the stars and planets right down to the basic forces of nature.

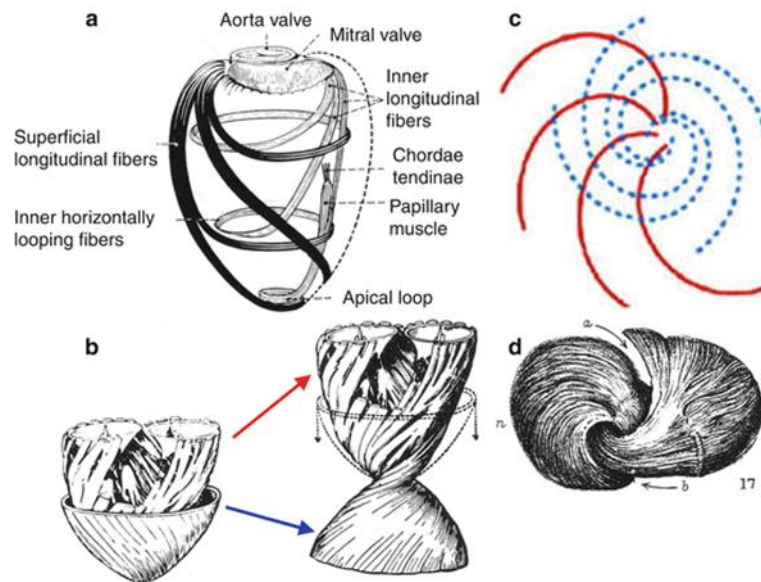


Heart & Magnetic Field

In the heart's lower point, the muscle fibers form a spiral loop. This is known as the "**Vortex Cordis**". Cordis comes from the word Cor meaning "heart, soul, mind."

[[R](#), [R](#)]





Vortex Cordis

The evidence suggests that it's not electric currents that cause the heart to contract. Instead, these currents are likely creating a magnetic field around the heart. It's even possible that this magnetic field comes from the Aether itself!

Every time the heart squeezes (a phase called systolic contraction), it creates a pulling force that draws electrical signals forward into the nerves that help us sense things and into the dendrites that cover the outer part of our brain.

When the heart expands, it moves fluids around in the body; when it squeezes, it helps move electrical currents.

This is the driving force that moves red blood cells associated with the “NET!”

### **Aether and the Dielectric Field**

After the heart squeezes (contracts) to pump blood, it somehow gets energy from nowhere to stretch back out (dilate). So, the way dielectric materials store energy and how that involves their internal fields is thought to possibly have a connection to the aether fields, a theoretical concept from physics suggesting there's a special kind of field out there affecting these processes.

In our bodies, a special kind of energy comes from a fluid that fills the spaces between our cells, and water plays a big part in this process. Water is really good at storing energy because it has a high dielectric constant. This means it can hold onto energy well, thanks to its ability to work with both magnetic and electric fields, as



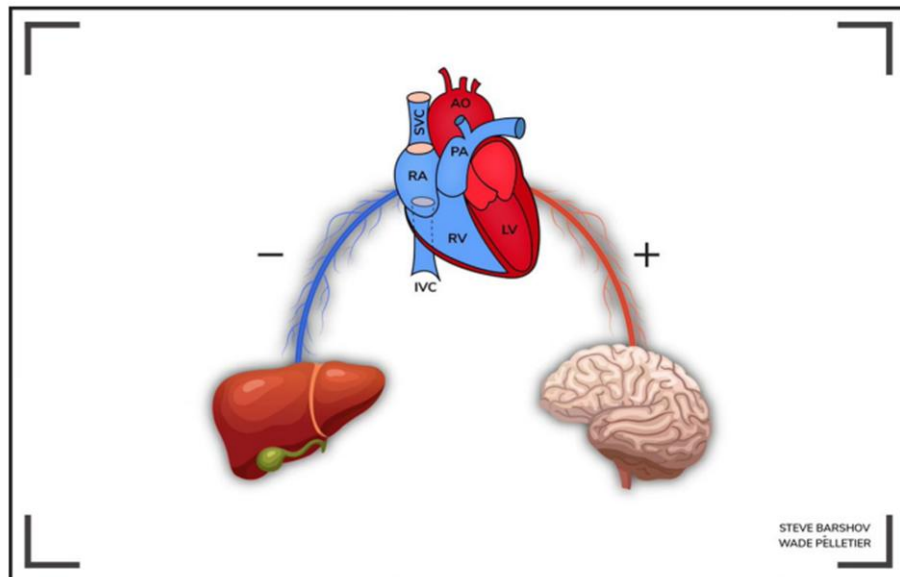
well as something called the aether, to create new energy. What's really interesting about water is that, even though it's great at storing energy like this, it can also carry electricity, which is not something all materials can do. This makes water quite special.

When electric current flows through a wire connected to the negative end of a power source, known as a cathode, it creates a magnetic field around the wire. This magnetic field actually makes water expand. On the other hand, when the current is pulled out from the wire connected to the positive end, called an anode, the water around it gets squished together, and the water level goes down.

Given this, it's not shocking to learn that the heart, which is like the main power station for our body's energy, is the first part of the body to be affected by this special aether-related resonance.

In a way, our arteries and veins work like power cables, connecting the heart and its energy to every cell and part of the body.

Figure 3. Biologically closed electric circuit between heart (energy source), liver (cathode), and brain (anode) mediating polarized dielectric currents.



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## The Role of Microtubule-Associated Protein Tau in the Heart: From Ancient Symbols to Quantum Physics

The role of Microtubule-Associated Protein Tau (MAPT), otherwise known as just **‘Tau’**, in the heart is gradually unveiling a spectrum of cellular mechanisms once veiled in mystery. Tau's primary function in neurons is renowned for stabilizing microtubules—tiny tubes that act as structural scaffolds and paths for intracellular transport.

Emerging insights suggest that, similarly, in the heart, Tau plays a role in bolstering the microtubules that underpin mechanical resilience and cellular communication within the myocardium.

The Tau protein is like the **"helper"** in our heart cells. It supports microtubules, allowing them to maintain the shape of the cell and help in carrying things around inside the cell, sort of like a highway system.

### Etymology of Tau

The name "Tau" comes from an old Hebrew word, **טָו (tav)**, which means character, mark, sign or **musical note** [\[R\]](#). This reflects Tau's biological essence perfectly—**serving as a cellular note** in the symphony of cardiac function, marking the pathways of intracellular transport and communication, and characterizing the structural integrity of heart cells.

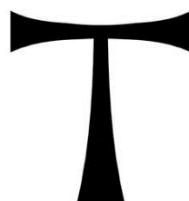
### Symbolism of Tau

In symbolisms past, the Tau manifests as the **ankh** [\[R\]](#)—an ancient Egyptian token of life. This intimate symbol for vitality and endurance resonates with the life-sustaining affordances that Tau provides to the very cells that comprise the human heart. As the ankh endorses resurrection and immortality, so does Tau propound cell survival and functionality, sanctioning the rhythm of life to continue unabated. The ankh is known to **represent life**, and Tau, in its own way, helps to keep our heart cells alive and healthy.





Egyptian  
Ankh



Tau  
Symbol

### Physics of Tau: The Tau Particle

In physics, Tau extends its reach into the inherent fabric of the universe through the **Tau lepton** [\[R\]](#), a fundamental particle associated with the family of heavier **electrons**. Its fleeting existence could be seen as a mirage for the ephemeral yet impactful role Tau proteins play in the constituent functions at cellular levels. Even though this Tau and the Tau in our body aren't the same, they share a name and both perform important roles in their respective fields.

### The Aetherial Connection

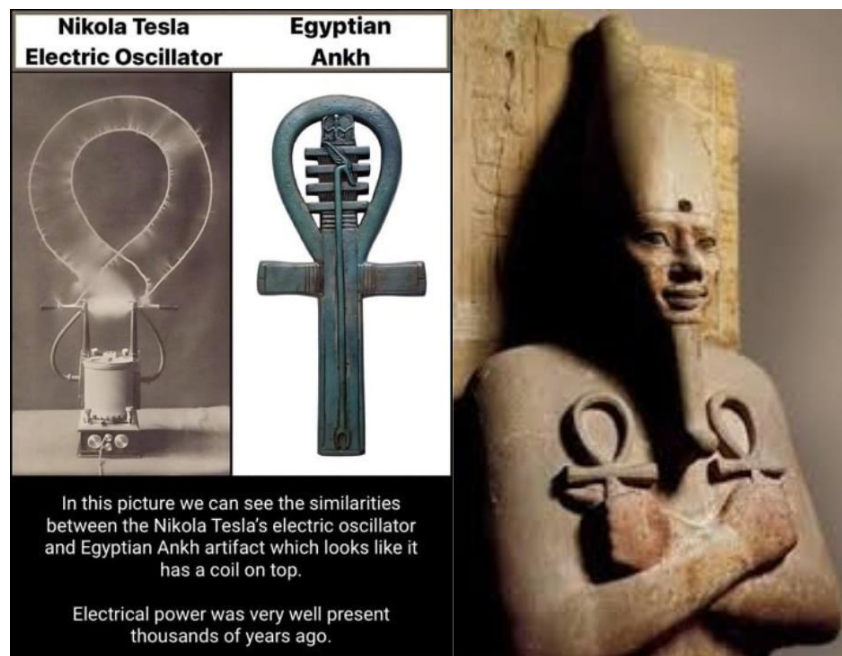
Finally, these realms of symbolism, functionality, and subatomic mysteries might, in fact, **knot us to the Aether**—the hypothesized medium for light and all electromagnetic waves to traverse the universe. In antiquity, Aether denoted the material that filled the cosmos beyond our terrestrial sphere, a space that Tau, in all its forms, might subtly reflect. In stabilizing microtubules within the heart, facilitating communication within the brain, or in the transitory existence as a particle, Tau embodies the interconnectivity that threads through life, consciousness, and the cosmos.

Thus, the tapestry woven by the role of Tau—enriched by **etymology**, emboldened by **symbolism**, and enlightened by **physics**—suggests a **harmony that resonates from the cellular heartbeats to the quantum fields**. It is a reminder of the intricate connections that bind the microcosmic intricacies of biology to the macrocosmic mysteries of the universe, conjuring a modern reflection on the ancient concept of Aether that sustains us all.

### The Ankh Symbol & Genetic Connection



The Ankh, also known as **the key of life** or the **cross of life**, is an ancient Egyptian hieroglyphic symbol representing eternal life. It resembles a cross with a loop at the top and is found in numerous inscriptions, artifacts, and Egyptian art. The symbol has been discovered on temple walls, in tombs, and in the hands of deities and pharaohs, signifying their power over life and death and their divine connection to the afterlife.



## Nikola Tesla's Oscillator and the Ankh

Nikola Tesla, a visionary inventor in the field of electrical engineering, invented numerous devices and made breakthroughs that significantly contributed to the development of modern technology. One of Tesla's notable creations is his electric oscillator which resemble the Ankh symbol, similar to the Ankh's loop.

## The ANKH Gene

The [ANKH gene](#), has a nickname "[HANK](#)," which means; “**a coil or loop of something as a gate**,” and has a biological function symbolic of electrical realms of the Ankh symbol and Tesla's inventions.

This gene plays a critical role in regulating mineralization, which is essential for bone health. By **transporting Adenosine Triphosphate (ATP)** and **Nucleoside Triphosphates (NTPs)** from the cytosol to the extracellular space, the ANKH gene helps control the levels of **inorganic pyrophosphate (PPi)**, a molecule that



inhibits abnormal mineral deposition in the joints and promotes a healthy balance of mineralization in the bones.

### **Piezoelectric Properties of Bones and ANKH's Role**

Calcium is a principal component of bone and is known to be **piezoelectric**, meaning it generates an electric charge in response to applied mechanical stress. This property is significant for bone remodeling and repair, as the generated piezoelectric fields could signal cellular responses and stimulate bone growth.

The ANKH gene contributes to the maintenance of our internal piezoelectric field by regulating the minerals crucial to bone density and structure. The controlled release of extracellular citrate, for example, not only strengthens bone but also impacts the piezoelectricity of calcium, thereby influencing bone regeneration processes.

### **Nucleoside Triphosphates**

ANKH transports Nucleoside Triphosphates (NTPs), which are the molecular precursors of both DNA and RNA and are:

- **Guanosine triphosphate (GTP)**

A nucleoside triphosphate that's important for protein synthesis and signal transduction

- **Cytidine triphosphate (CTP)**

A nucleoside triphosphate that's involved in lipid synthesis and RNA transcription

- **Thymidine triphosphate (TTP)**

A nucleoside triphosphate that's important for DNA synthesis and cellular metabolism

- **Uridine triphosphate (UTP)**

A nucleoside triphosphate that's important for carbohydrate metabolism and RNA synthesis

Nucleoside analogues have also be used to treat viral infections. [[R](#)]

### **Energy Currency**



ANKH transports Adenosine Triphosphate (ATP), which is considered the "**energy currency**" of cells, meaning it's the primary way cells store and transfer energy to power various biological processes like muscle contraction, nerve impulses, and protein synthesis; when a cell needs energy, it breaks down ATP to release a usable form of energy.

### **The Tricarboxylic Acid (TCA) Cycle**

The ANKH gene also regulates the release of the tricarboxylic acid (TCA) cycle intermediates to the extracellular space, in particular **citrate**, **succinate** and **malate**.

The tricarboxylic acid (TCA) cycle, also known as the citric acid cycle or Krebs cycle, is a series of chemical reactions that generates energy for cells.

This makes the ANKH gene VITAL for the generation of ENERGY!

### **Inorganic Pyrophosphate (PPi) and Energy Equilibrium**

The ANKH gene prevents abnormal mineralization of the joints by regulating the extracellular levels of the calcification inhibitor inorganic pyrophosphate (PPi), which originates from the conversion of extracellular NTPs to NMPs and PPis by **ENPP1** gene.

ENPP1 co-leads with ANKH and is a nucleotide pyrophosphatase that generates diphosphate (PPi) and functions in bone mineralization and soft tissue calcification by regulating pyrophosphate levels. **PPi inhibits bone mineralization and soft tissue calcification by binding to calcium crystals**, thereby preventing further growth of these crystals. ENPP1 also activates **STING** and **triggers type-I interferon production**.

PPi also plays an integral role in energy metabolism by interacting with ATP and ADP (adenosine diphosphate). ATP is the primary energy currency in the cell which, when hydrolyzed to ADP, releases energy that the cell can use for various functions. PPi is a byproduct of this reaction and can be hydrolyzed to release energy that furthers ensures the continuous availability of ATP.

In this context, the ANKH gene's function in regulating extracellular levels of PPi is critical in maintaining the necessary **balance for normal mineralization and energy equilibrium in the body**. By ensuring that the calcification processes in the joints and bone tissue are closely regulated, the ANKH gene aids in preventing



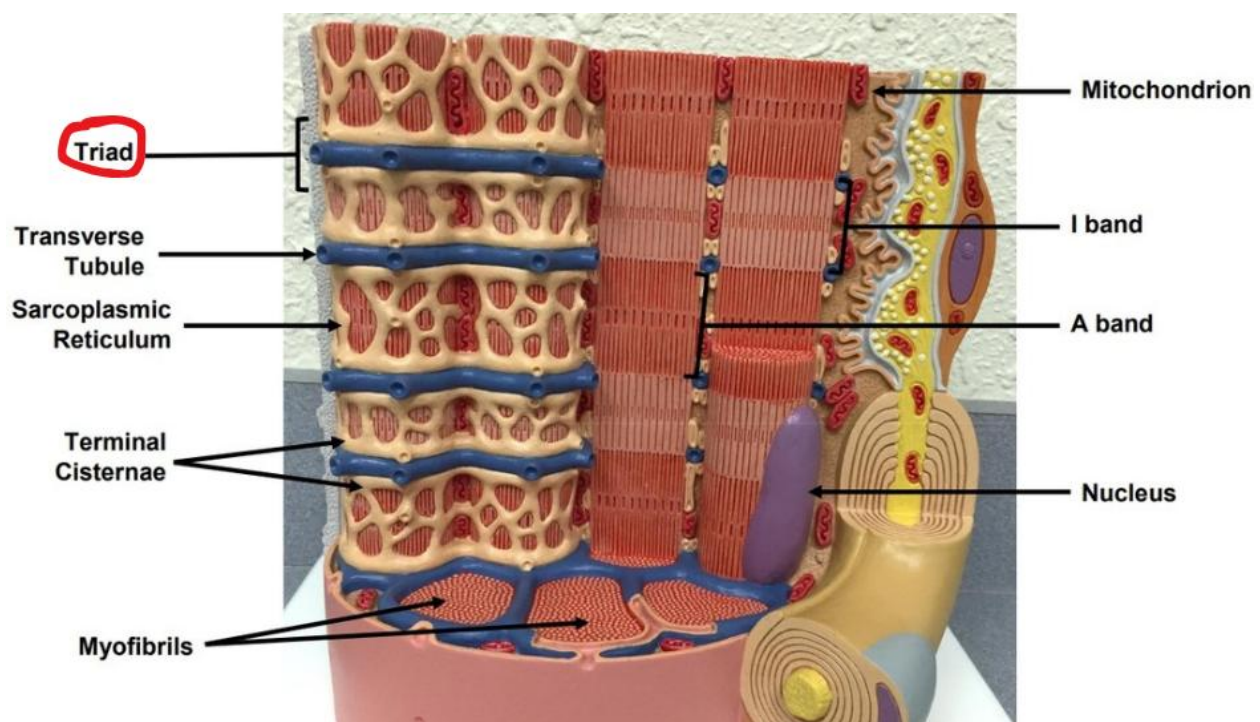
disorders related to abnormal calcium deposits, such as calcification of the arteries or certain types of arthritis.

In simple terms, **the ANKH gene regulates the piezoelectric energy calcium crystals in the body that are able to transmit and receive frequency.**

### **The Triskelion Connection to ANKH**

The [Triadin](#), also named **TRISK**, short for “**triskelion**,” also plays a role with ANKH function through its protein-protein interactions.

Triadin is protein found in skeletal and cardiac muscle. It plays a role in skeletal **muscle excitation-contraction coupling** as part of the calcium release complex and is required for normal skeletal muscle strength. This protein indirectly **links triads and microtubules** in skeletal muscle. The [ORIA1](#) gene (**gatekeeper to heaven**), as previously mentioned, helps regulate Triadin as well.



Triadin helps regulate **Cardiac conduction** and **Ion channel transport** associated with triggering skeletal and heart muscle contraction and in regulating the rate of heart beats through the organization of the triad junction, where T-tubules and the sarcoplasmic reticulum terminal cisternae are in close contact.



## Quantum Quin

Quinone comes from “quin.”

The root of quinine/quinone is “**quin**”, from Latin *quantus*, of Sanskrit कियत् (kiyat), ultimately meaning **QUANTUM**! [[R](#), [R](#), [R](#)]

What’s interesting about this is the fact that **Cinchona bark** is a potent source of quinine, related to **hydroquinone/hydroxychloroquine**, which also plays a HUGE role in regulating electrical activity of the heart through the **Human Ether a go-go gene**!

Naphthoquinones are a group of organic compounds that are derived from naphthalene. They are found in plants and microorganisms, and have a variety of biological and pharmacological properties.

Biological and pharmacological properties:

- **Anticancer**: Some naphthoquinones have anticancer activity.
- **Antifungal**: Naphthoquinones have antifungal activity.
- **Antibacterial**: Naphthoquinones have antibacterial properties.
- **Insecticidal**: Naphthoquinones have insecticidal properties.
- **Blood clotting: Vitamin K**, a naturally occurring **naphthoquinone**, is necessary for blood clotting.

In addition to Vitamin K, both **Juglone** and **Plumbagin** compounds, which are found in **Black Walnut**, are also Naphthoquinones. [[R](#)]

Black Walnut is also considered to be a naturally occurring Vitamin K analog.

What this tells us is that **Vitamin K**, **Black Walnut**, and **Cinchona Bark** are literally **QUANTUM COMPOUNDS**!

## Triad in Music

- A triad is a chord made up of **three notes**, usually the first, third, and fifth notes of a scale.
- The notes of a triad are called the root, third, and fifth.



- Triads are also known as **harmonies**.
- There are four types of triads: major, minor, augmented, and diminished.
- Perfect **fifths** are the most common interval above the root in Western music.

### **Triad in Religion**

- A triad is a group of three gods that are usually similar in role or importance.
- Triads were common in ancient Greece and Egypt.

### **Harmonizing Cellular Signals: The SRF-ROCK Symphony in the Orchestra of Our Cells**

**Serum Response Factor (SRF)** is the **master regulator of actin** that plays a key role in the **transduction of mechanical signals** from cytoplasmic actin and the **extracellular environment**, to the cell nucleus and plays a role in a large number of **mechanotransduction** pathways. It has been estimated that the transcription of as many as **300 genes is under the control of SRF signalling**, and of these, more than 200 are directly targeted by the protein.

The SRF (Serum Response Factor) gene is a pivotal actor in our body's grand play of health. Think of it as the **director pulling the strings** behind the scenes in a theatre of cells, making sure everything runs smoothly, especially in the context of our heart and blood vessels.

SRF plays a critical role particularly in cardiovascular health. Its main job? Directing the construction crews of cells called '**smooth muscle cells**'. These cells are **key contributors to the structures of our heart and the miles upon miles of blood vessels in our body**.

By binding itself to specific areas in our DNA, SRF switches on the production of proteins needed for smooth muscle cells to function well and maintain the healthy composition and contraction of our blood vessels. This mechanism is crucial in **controlling blood pressure and blood flow**, keeping our cardiovascular system in prime condition.

In short, the SRF gene is akin to a maestro, ensuring the harmonious performance of our heart and vessels, thereby propelling our cardiovascular health to its peak.



With SRF at the baton, the symphony of our cardiovascular system can play its best tune!

### **A Role in Mechanobiology**

SRF is integral to the cells ability to sense and respond to mechanical cues from its environment. The term is called **mechanotransduction**.

Park et al. have shown that smooth muscle cells (SMC) specific Srf knock-out is embryonic lethal in mice due to severe defects in cardiac development.

The Serum Response Factor (SRF) is an interesting character and includes multiple roles, one of which includes being the main actor in the orchestration of several signal transduction pathways influenced by **RHO GTPases**.

RHO GTPases are like the advisors to the king in a kingdom. They subtly shift and manipulate processes, playing a critical part in directing signaling pathways that influence gene expression, including the activity of SRF. As such, SRF's involvement with RHO GTPases, including RHO-associated kinase (ROCK), is a significant alliance.

ROCK signaling, in turn, is influenced by these decisions made by RHO GTPases. Therefore, in the context of ROCK signaling, the SRF is intricately linked, acting as an important partner in the cell signaling process that these GTPases oversee.

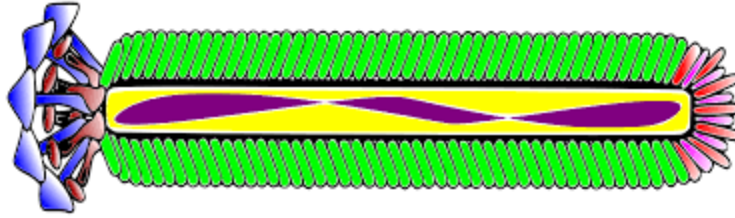
**Now that we have a base understanding of how energy transduction flows throughout the body let's go further and discover how this energy may be harvested.**

## **Piezoelectric Energy Harvesting Devices & M13 Virus**

### **Biological Building Block for Piezoelectric Energy Harvesting Devices**

M13 Bacteriophages: Due to their unique structural, biological, and physical properties, the M13 phage is the most attractive candidate in biomaterials for mimicking natural structures and developing novel **piezoelectric energy harvesting devices**. [[R](#)]





M13 Bacteriophage

The article from [Phys.org](https://phys.org) titled “**Researchers use engineered viruses to provide quantum-based enhancement of energy transport,**” discusses a pioneering study where researchers have **used genetically engineered viruses to enhance the quantum-based transport of energy.**

See: [Engineering viruses to produce enhanced photoelectrics](#) (Video)

"Among various biomaterials, viruses are expected to be very promising biomaterials for the fabrication of functional devices due to their unique characteristics. While other natural biomaterials have limitations in mass-production, low piezoelectric properties, and surface modification, **M13 bacteriophages** (phages), which is one type of virus, are likely to overcome these issues with their mass-amplification, **self-assembled structure**, and genetic modification.

Based on these advantages, many researchers have started to develop **virus-based energy harvesting devices** exhibiting superior properties to previous biomaterial-based devices. To enhance the power of these devices, researchers have tried to modify the surface properties of M13 phages, form biomimetic hierarchical structures, **control the dipole alignments**, and more.

These methods for **fabricating virus-based energy harvesting devices** can form a powerful strategy to develop high-performance biocompatible energy devices for a wide range of practical applications in the future."

In another [study](#), scientist discovered that when we **apply heat** to virus particles, they undergo structural changes that lead to changes in spontaneous polarization and the **generation of electric potential.**"

“Viruses possess some remarkable properties that make them an ideal model system for studying the links between structure and function in the **generation of bioelectricity,**” said Lee. “These include the ability to quickly **self-replicate at a**



**massive scale**, evolve and — because of their identical **shape** and material — self-assemble like chopsticks in a box.”

By genetically engineering the phage’s external protein structures, the researchers discovered that they could **enhance its piezoelectric performance**. And while M13 viruses lack the direct ability to sense heat, the researchers had observed that they undergo structural changes in **response to thermal stimuli**. These characteristics led them to suspect that the phages might possess pyroelectric properties.

And where might this thermal stimuli come from?

### **Thermal Stimuli from Radio Frequency Electromagnetic Fields**

The biological impacts of EMF can be classified as thermal. The thermal effects of RF-EMFs suggest the possibility of affecting neuronal activity by temperature generated by mobile phones (Wainwright, 2000). **Exposure to RF-EMF can produce mild whole-body hyperthermia and cause behavioral changes.** [[R](#), [R](#), [R](#)]

### **Triboelectricity and Energy Harvesting**

This [study](#) called “**M13 Virus Triboelectricity and Energy Harvesting**,” talks about Triboelectrification using a virus. Triboelectrification is a fancy word for **creating electricity just by touching things**, like a piezoelectric effect.

In the study, scientists talk about a kind of virus, known as the M13 bacteriophage, that can do this trick—create electricity when it touches things. They did some science magic to change the virus a bit so it has more negative charges. It turns out, the more negative charges these viruses have, the better they are at making electricity and moving it around quickly.

They also played around with something called glutamate on these viruses, making them even better at grabbing electrons (tiny parts of atoms that help make electricity) from other stuff they touch. By doing all these changes, they **created a tiny power generator out of these viruses**. This tiny generator made enough electricity to light up 30 little lights (LEDs) just by giving it a little push or squeeze.

**These M13 bacteriophages can both produce energy and harvest energy.**



**The M13 bacteriophage has been used for nanostructures and nanotechnology applications** [[R](#), [R](#)]

“Bacteriophages, viruses that infect bacteria, have been used to develop technology that links proteins with the genes that encode them, allowing for selection of antibodies and functional peptides against target antigens. Owing to their unique nanoscopic structures capable of displaying **genetically programmable surface peptides**, M13 bacteriophage (phage) has drawn attention as a powerful bionanomaterial with the advent of bionanotechnology.”

The question then becomes are scientists and pharmaceutical companies using this technology for good or bad?

And here’s the kicker...cloning viruses!

## **Influenza Cloning**

**M13 bacteriophage has been used to clone influenza cDNA.** Restriction fragments from double-stranded cDNA copies of influenza RNA were cloned into the M13mp2 bacteriophage. [[R](#)]

Cloning influenza cDNA into M13, a filamentous bacteriophage used in molecular biology as a cloning vector, was primarily aimed at facilitating the study, **manipulation**, and sequencing of the influenza virus’s genome.

## **Genetic Manipulation and Analysis**

Cloning into M13 allowed for the detailed analysis and **manipulation of specific gene sequences**.

## **Reverse Genetics Systems**

Cloning influenza cDNA into vectors like M13 was a step towards developing reverse genetics systems, which allow for the **generation of live attenuated influenza viruses**.

## **Synthetic Generation of Influenza Virus**

With the entire influenza genome cloned in M13 or similar vectors, it becomes possible to **synthetically reconstruct the virus**.

## **Bacteriophage & mRNA Vaccines**



Bacteriophages are being used in mRNA vaccines and as vaccine delivery systems in a number of ways:

- **mRNA synthesis:** Bacteriophage-derived RNA polymerases (RNAPs) were used to synthesize mRNA for COVID-19 vaccines. [R]
- **Vaccine delivery:** Bacteriophages can be used as a delivery system for vaccines. [R]

### **M13 bacteriophage Primarily Infect *E. coli***

*Escherichia coli* (*E. coli*) plays a critical role in the production of materials used in mRNA vaccines through a process called **microbial fermentation**. Here's how scientists employ *E. coli* in the development of mRNA vaccines:

#### **Production of DNA Template**

- **Plasmid Production:** In the context of mRNA vaccine manufacturing, *E. coli* is primarily used to produce high-quality, high-yield plasmid DNA. These plasmids contain the DNA template that codes for the antigen of interest (e.g., a spike protein of a virus).
- **Choosing the Right Type of *E. coli*:** Scientists use a specific type of *E. coli* that is very good at making lots and lots of this recipe without breaking it.

#### **Making the Machinery (Enzymes for mRNA Production):**

- **Making Machines (Enzymes):** *E. coli* is also used to make special machines (enzymes). These enzymes are needed to read the recipe (plasmid DNA) and produce the mRNA, which is the core component of mRNA vaccines.

In simple terms, ***E. coli* bacteria are utilized as tiny factories in vaccine production** plants. They are critical in creating both the recipe and the machinery needed to put together the mRNA vaccines. *E. coli* is utilized in mRNA vaccine production to generate critical raw materials like plasmid DNA and enzymes needed for synthesizing the mRNA. These components are vital for the cell-free system that underpins modern mRNA vaccine technology, making *E. coli* an integral part of the vaccine manufacturing process. [R]

### **Is there *Escherichia coli* in the human body?**



Yes, Escherichia coli normally lives in the intestines of healthy people and animals. Most strains of E. coli are harmless and are part of a healthy intestinal tract, where they help with digestion and the production of vitamins, as well as protect against harmful microorganisms.

However, under certain circumstances, some strains of E. coli can become pathogenic and cause illness. For example, the strain O157:H7 is known to cause severe foodborne disease that can lead to abdominal pain, nausea, and diarrhea.

### **Lambda Phage: From Viral Intruder to Universal Symbol and Beyond**

Lambda phage is a bacterial virus, or bacteriophage, that infects the bacterial species Escherichia coli (E. coli) similar to the M13 bacteriophage.

The Greek letter lambda ( $\Lambda$ ,  $\lambda$ ), both upper-case and lower-case, comes from the Phoenician letter Lamed, which may have been a **shepherd's staff**.

#### **Examples of the symbolic use of uppercase lambda include:**

- The lambda particle is a type **of subatomic particle in subatomic particle physics**.
- Lambda denotes the de Bruijn–Newman constant which is closely connected with **Riemann's hypothesis associated with Prime numbers**.
- In crystal optics, lambda is used to represent a **lattice period**.
- In electrochemistry, lambda denotes the "**equivalent conductance**" of an **electrolyte solution**.
- In cosmology, lambda is the symbol for the cosmological constant, a term added to some dynamical equations to account for the **accelerating expansion of the universe**.
- In optics, lambda denotes the grating pitch of a Bragg reflector. Also in optics, it **denotes wavelength of light**.

#### **Examples of the symbolic use of lowercase lambda include:**

$\lambda$  indicates the **wavelength of any wave, especially in physics, electrical engineering, and mathematics**.

In probability theory,  $\lambda$  represents the **density of occurrences within a time interval**, as modelled by the Poisson distribution.



In the physics of particles, lambda indicates the **thermal de Broglie wavelength**.

In the physics of electric fields, lambda sometimes indicates the **linear charge density of a uniform line of electric charge** (measured in coulombs per meter).

In electrochemistry, lambda also **denotes the ionic conductance of a given ion** (the composition of the ion is generally shown as a subscript to the lambda character).

In **neurobiology**, lambda denotes the length constant (or exponential rate of decay) of **the electric potential across the cell membrane along a length of a nerve cell's axon**.

In the science and technology of **heat transfer**, lambda denotes the heat of vaporization per mole of material (a.k.a. its "latent heat").

In the technology and science of celestial navigation, lambda denotes the longitude as opposed to the Roman letter "L", which denotes the latitude.

A block style lambda is used as a recurring symbol in the Valve computer game series Half-Life, referring to the Lambda Complex of the fictional **Black Mesa Research Facility**, as well as making appearances in the sequel Half-Life 2, and its subsequent prequel Half-Life: Alyx as an in-**universe symbol of resistance**. [[R](#)]



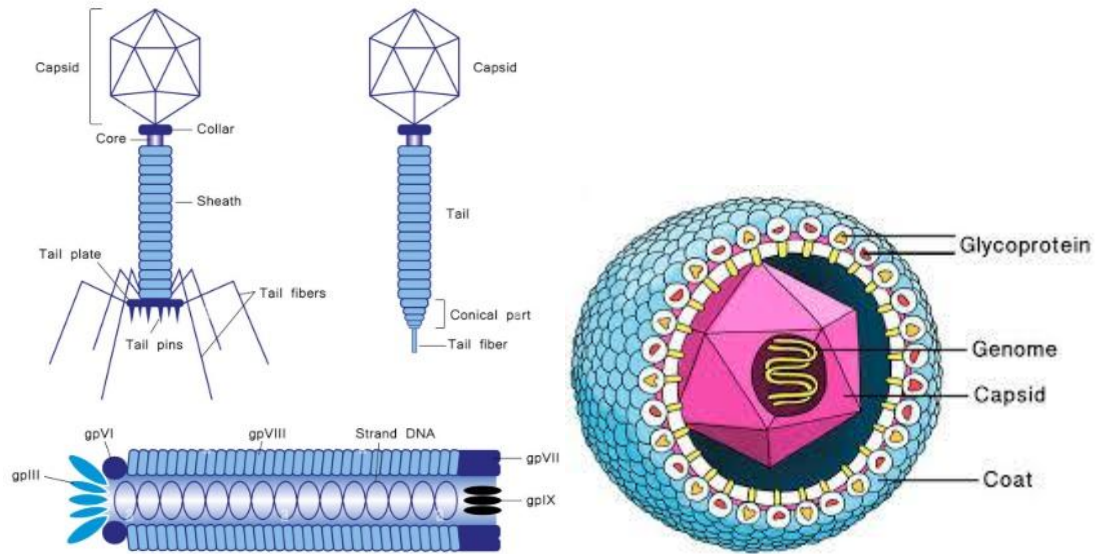
Lower-case lambda

## **The Viral Icosahedral Capsids, Platonic Solids, and Multi-Dimensional Signal Transmission**

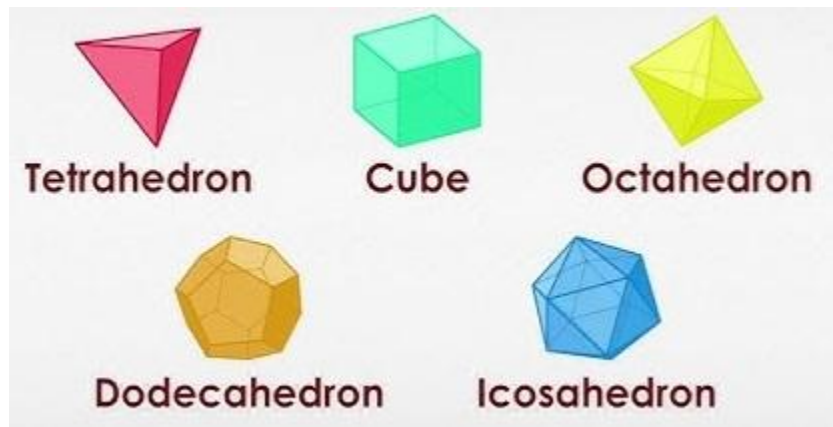
Both the M13 and Lambda phage have a “**Capsid**” which is the exact same geometrical structure found within many other viruses.



## Bacteriophage Structure



Viral Icosahedral Capsids



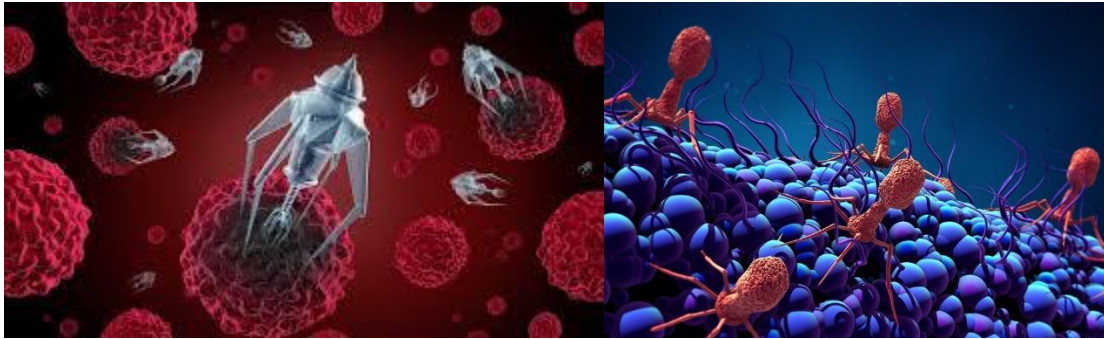
Platonic Solids

Because these viral capsids mimic the exact geometry of an icosahedral platonic solid, this makes the **viral icosahedral capsid** ideal for **multi-dimensional frequency transmission**.

In other words, the viral icosahedral capsid is the **perfect vector for energy transmission to and from different planes** (3D, 4D, 5D etc.). I believe this is the exact mechanism that allows for the “loosh” to take place from **fallen energetic vampires**.



What's interesting, to say the least, is that if you took an image of a bacteriophage and set it side by side with a Nanobot they are strikingly similar.



Nanobot vs Bacteriophage

Perhaps, our modern Nanobot technology is based on the bacteriophage itself. Or, perhaps the bacteriophage is **ancient organic nanotech** itself.

Remember, **bacteriophages outnumber every living organism on the planet by orders of magnitude** that are almost incomprehensible. It's estimated that there are more bacteriophages on Earth than any other form of biological life, including bacteria themselves. The current estimates suggest that there are approximately  **$10^{31}$  phage particles globally.**

Because of this fact, this makes the bacteriophage, with its viral icosahedral capsid, the **most likely suspect in pathogenic energy harvesting and siphoning.**

This of course is highly speculative based solely on the recognition of patterns found all throughout nature.

### **The 5 Platonic Solids: The Sacred Geometry of the Universe**

The philosopher Plato believed that five shapes of Platonic Solids were the building blocks of the universe, and that everything in the universe could be reduced to these basic forms.

#### **What Are Platonic Solids**

Platonic solids are a set of five regular, three-dimensional polyhedrons that are characterized by their congruent faces, edges, and vertices. They were named after the ancient Greek philosopher Plato, who studied these shapes in depth. The five platonic solids are:

- Tetrahedron: A solid shape with four equilateral triangle faces.



- Cube: A solid shape with six square faces.
- Octahedron: A solid shape with eight equilateral triangle faces.
- Dodecahedron: A solid shape with twelve regular pentagonal faces.
- **Icosahedron: A solid shape with twenty equilateral triangle faces.**

**Again, The Icosahedron is the same exact geometry of a viral capsid.**

Plato associated each of the five platonic solids with one of the classical elements:

- Tetrahedron – Fire
- Cube – Earth
- Octahedron – Air
- Dodecahedron – Universe or Cosmos
- **Icosahedron – Water**

These associations were based on the shapes' symmetries and other properties, as well as their relationships to the natural world and the cosmos.

Many scientists believe that they may play a role in the structure of the universe and that they may even hold the key to unlocking some of the mysteries of the cosmos. Some believe that platonic solids may be the building blocks of matter, similar to the way atoms and molecules form the building blocks of matter on Earth.





## The Icosahedron Conceptual Connection to the Loosh

The icosahedron could conceptually be used as a model or structure to navigate higher dimensions.

### Mathematical Perspective

In higher-dimensional geometry, an icosahedron is a special polyhedron that can be **embedded in four or more dimensions**.

If you consider its four-dimensional counterpart, the 600-cell (a four-dimensional polytope), it exists naturally in a higher-dimensional space and could theoretically be projected or "**moved**" **between dimensions**.

### Physics & Theoretical Applications

If we assume dimensions beyond the three we experience, an icosahedron could be used as a structural basis for understanding how objects might "**shift**" **between dimensions**.

In string theory and M-theory, higher-dimensional spaces (10+ dimensions) exist, and certain geometric structures, like Calabi-Yau manifolds, define how dimensions "**fold**" or "**connect**."

Some speculative theories suggest that complex geometric shapes like the icosahedron could serve as **resonance structures for manipulating higher-dimensional space**.

### Metaphysical Ideas

In metaphysics, some propose that certain geometric shapes act as **keys or gateways to other dimensions**, with the icosahedron being linked to sacred geometry and Platonic solids **influencing energy flow**.

If space-time can be "folded" or manipulated via geometry, then an icosahedron could theoretically be a **vehicle or tool for inter-dimensional travel in hypothetical advanced technology**.

### Conclusion

The icosahedron, with geometric properties, could quit possibly connect energetic flow into higher dimensions.



## The Arc

With the previous mention of the viral icosahedron capsids being the possible loosh mechanism used for the connection of energetic flow into higher dimensions, we now need to focus your attention on “**The ARC.**”

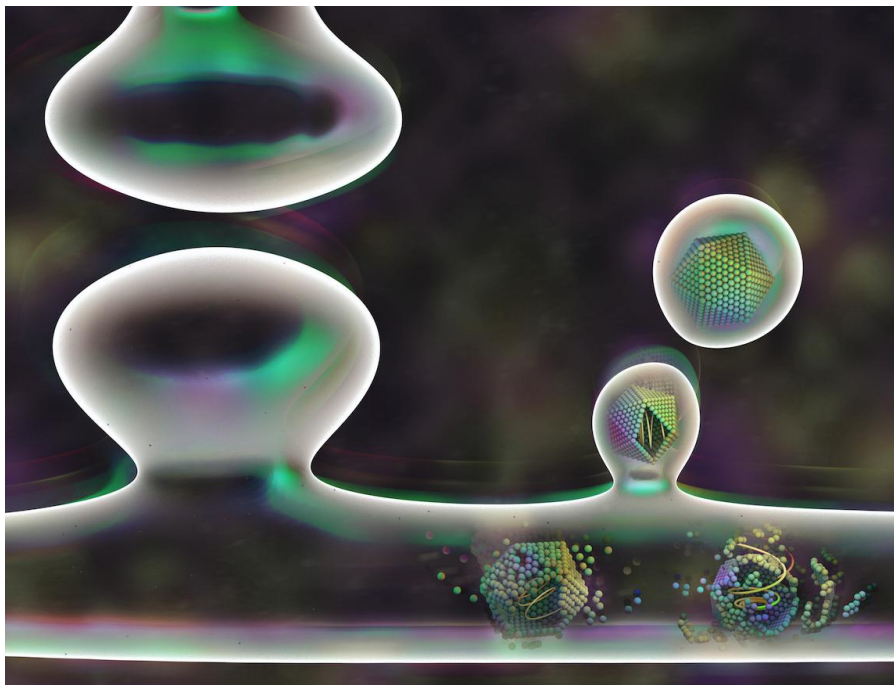
The “ARC protein”, which stands for “[Activity Regulated Cytoskeleton Associated Protein](#)”, enables mRNA binding. Diseases associated with ARC include [Retrograde Amnesia](#).

The fact that this gene is involved with **Retrograde Amnesia** is a tell-tell as to what may have taken place to humanity at large as a result of pathogenic hijacking and the energy harvesting loosh.

**Have we forgotten who we are?** Have we forgotten our divine energetic connection to Source, God, the Universe, and the Cosmos? Have our memories been wiped like what took place in the movie Men in Black?

The ARC protein **forms viral like icosahedron capsids** exactly how bacteriophages and other viruses do!

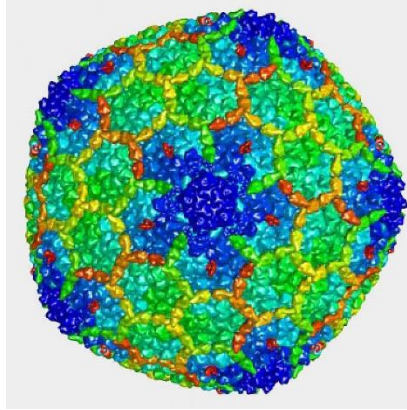
[Surprise: A Virus-Like Protein is Important for Cognition and Memory](#)





## ARC Protein

### [Memory gene goes viral](#)



ARC Protein

ARC can send its genetic material from one neuron to another by employing a strategy commonly used by viruses and is known to play a vital role in the brain's ability to store new information.

The ARC “capsids” appeared to mirror viral capsids in their physical structure as well as their behavior and other properties.

Experiments performed by teams of researchers suggested that ARC capsids act like viruses by delivering mRNA to nearby cells. They found that **cells made more of the protein when their electrical activity increased**.

They also found that flies lacking the ARC gene form fewer connections between their motor neurons.

In addition, scientists believe it may be possible to **use ARC capsids for genetic engineering**.

### [Going off on an Arc Tangent](#)

“Memories are formed through the recurrent activities of extensive networks of neural circuits, which consist of neuronal cells that transmit signals to each other at sites called synapses. Synaptic strength can change in intensity over time, a phenomenon known as “synaptic plasticity,” which may involve changes in synapse size, development of new synapses, or removal of existing ones. Synaptic plasticity is thought to be crucial for learning and memory.”



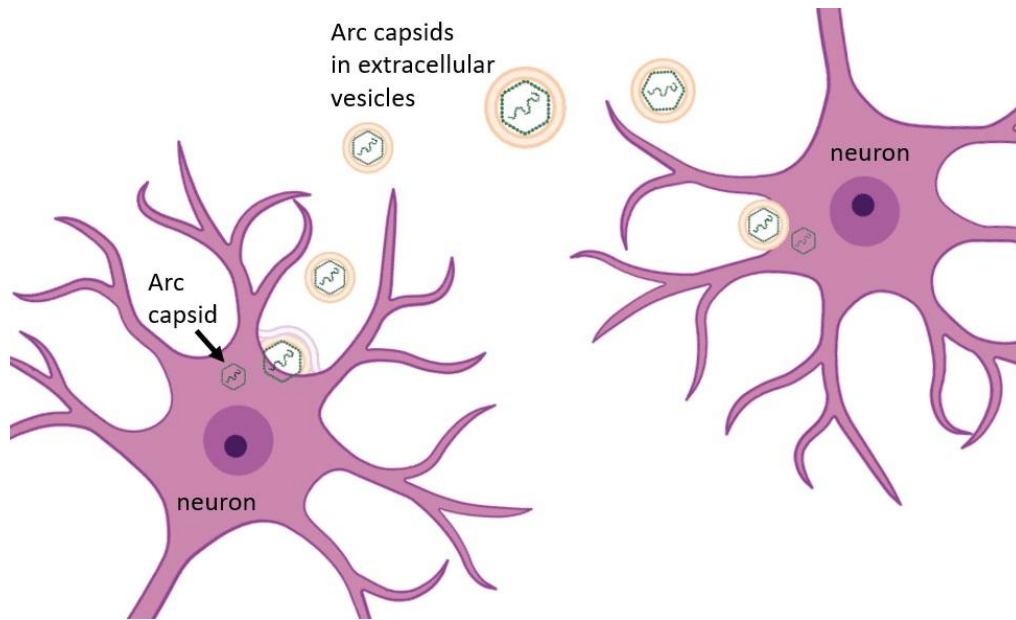
At this point you may wonder what this topic has to do with virology! It turns out that one of the key regulators of synaptic plasticity is a gene coding for Activity-regulated cytoskeleton-associated protein (ARC). ARC is a member of a family of mammalian genes thought to have **originated from an ancient retrotransposon family that also includes the Gag proteins of HIV and other retroviruses.**

Retrotransposons are mobile genetic elements that can relocate from one genomic site to another by **converting their DNA into RNA and back into a new DNA copy that is then re-inserted at a different place in the host genome.**

Gag protein, which is essential and sufficient for the formation of viral capsids, consists of three domains: 1) the matrix protein, which mediates virus assembly and steers newly formed virions to the cell surface; 2) the nucleocapsid protein, which binds viral RNA for incorporation into the capsid; and 3) the capsid protein, which forms the inner shell of the virion enclosing the RNA. The amino acid sequences and structures of both the mammalian and *Drosophila* (i.e., fruit fly) Arc proteins are very similar to those of the capsid domain of Gag protein.

Following his lifelong interest in Arc, Jason Shepherd, a neurobiologist at the University of Utah, accidentally stumbled into the world of virology when he carried out a series of experiments to determine whether Arc's sequence similarity to Gag is reflected in its function. Shepherd and colleagues purified Arc protein produced in bacterial cells and visualized it by electron microscopy. The resulting images **revealed double-shelled soccer ball-like structures** with a 32 nanometer diameter that **resembled HIV particles**, which upon further analysis were not artifacts or contaminants, but were in fact, **virus-like capsids.**"





ARC Capsids

According to the researchers “This suggested that the presence of RNA enhances the likelihood of capsid assembly, in agreement with what is observed with HIV Gag. They also showed that the ability of target neuronal cells to take in **Arc capsids is likely mediated by endocytosis (clathrin triskelia)**, a mechanism in which cells absorb and engulf external material.”

The taking in of matter (endocytosis) and the exportation of matter (endocytosis) is regulated by the protein **Clathrin**.

Again, Clathrin forms a **triskelion shape** which is one of the most ancient symbols known to man. Clathrin then goes on to form a “**soccer ball**”, similar to the same “**water buckyballs**” found in space, **which is exactly what the ARC protein does!**

The triskelion spiral design can be based on interlocking **Archimedean** spirals. The **Archimedean** spiral then goes on to form the Golden spiral, or Golden ration.

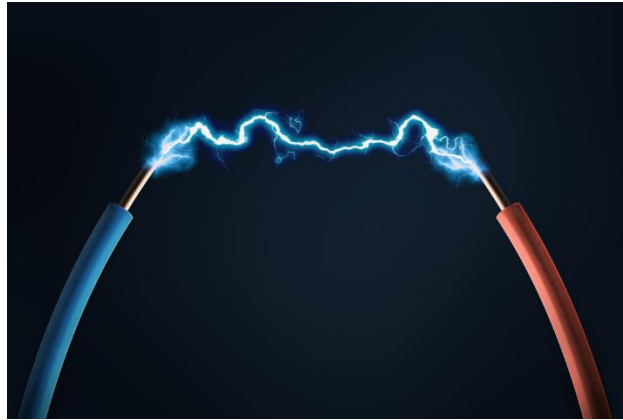
What this tells us is that there is a clear correlation of patterns held between the ARC protein and the Golden Spiral of life.

If we look at what an actual meaning of the word ARC is we see that an ARC means:

**“That part of a circle which a heavenly body appears to pass through as it moves above and below the horizon; a flow of current across an insulating**



medium; especially a hot, luminous discharge between either two electrodes or as lightning.” [R, R]



To further support this we can even look at what’s called a “**Jacob’s Ladder Arc**”



Jacob’s Ladder

A “Jacob's Ladder ARC” is a high-voltage electric arc that rises in a **continuous chain**. It's created by a device called a Jacob's ladder, which is named after Jacob’s ladder to heaven in the Bible where the **Angels ascended and descended**.



The story of Jacob's Ladder is told in the Bible in Genesis 28:10–19.

Genesis 28:10–19

- Jacob leaves Beersheba and travels to Haran
- He stops for the night and **puts a stone under his head**
- Jacob has a dream about a ladder that reaches from the earth to heaven
- Jacob sees angels ascending and descending the ladder
- The Lord appears above the ladder and speaks to Jacob

In my opinion, the stone that Jacob put under his head was [Magnetite](#). When magnetite interacted with the calcium carbonate/calcite [piezoelectric crystal brain sand](#) located in his pineal gland, it **opened a gateway**, or “**stairway**” to heaven due to the existing geomagnetic properties of the earth coupled with the electromagnetic properties of the ether itself. This likely allowed Jacob access to the 90% of his brain called the subconscious part of the brain.

### **Jacob's Ladder found!**

The **stapes** is the body's **smallest bone**! Sometimes called the **stirrup**, this delicate bone works with two others in the ear to **send sound vibrations** into the inner ear through the Organ of Corti (Spiral organ).

The Spiral Organ of Corti works through Piezoelectricity and Mechanotransduction.

This Stapes bone, the smallest bone in the body, conducts frequency and vibration.

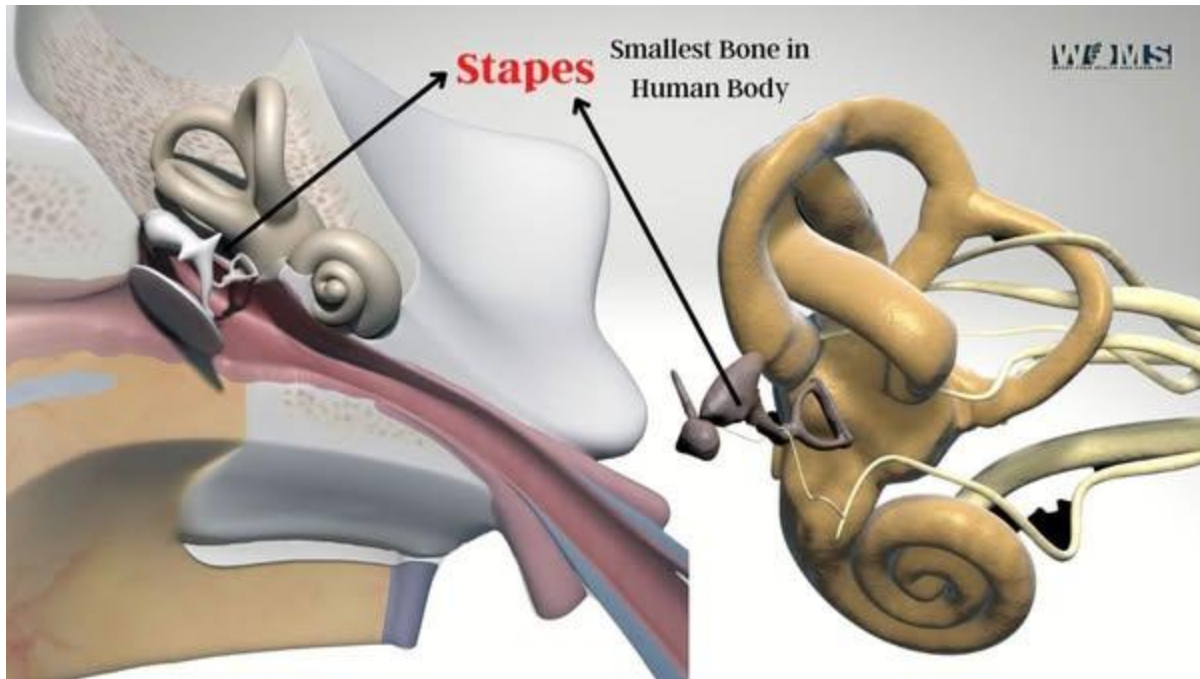
“If you want to find the secrets of the universe, think in terms of energy, frequency, and vibration.” Nikola Tesla

### **Stapes Etymology**

From a Germanic source, possibly Frankish \*stap or Old High German stapf, staph (“**step**, stirrup”), both from Proto-Germanic \*stapiz (“a step, rung (**of a ladder**)”)

The SMALLEST bone, **Stapes**, **literally means LADDER**.



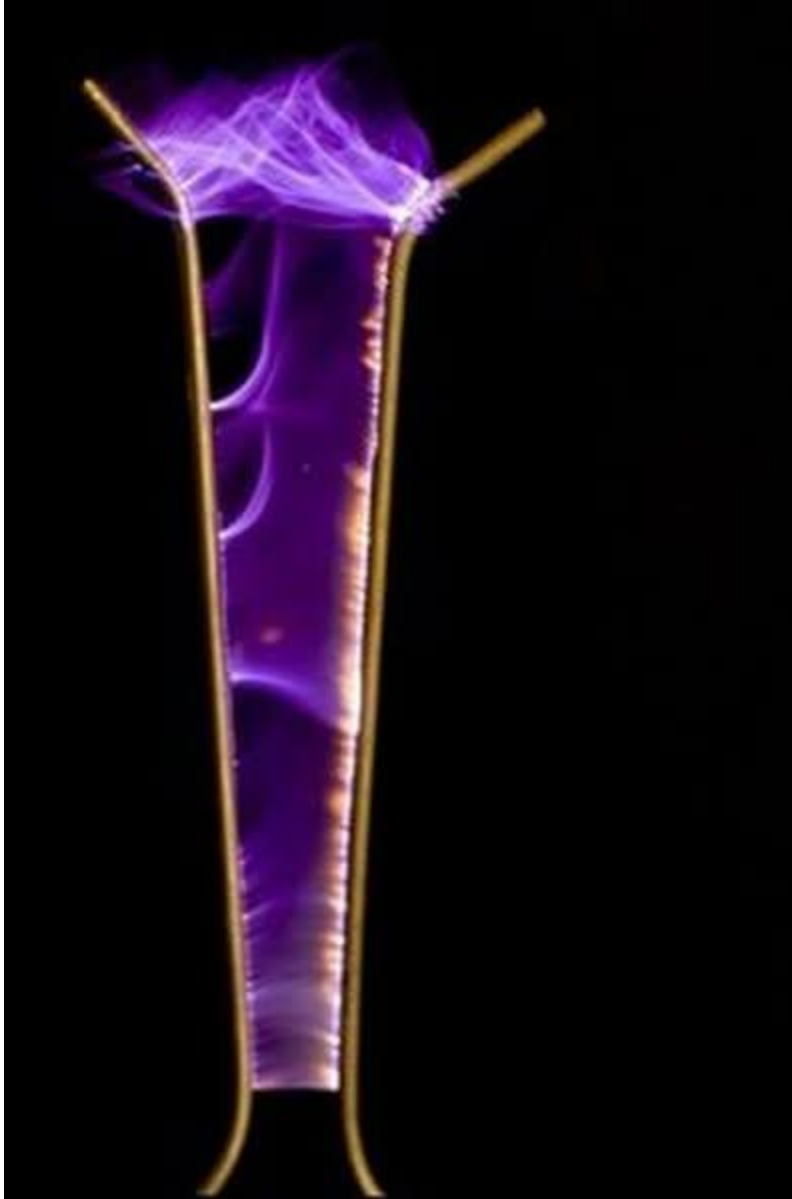


### Jacob's Ladder science

The science behind Jacob's Ladder is simple: When voltage is applied between conductors electrons on the positive side want to leap to the negative side.

Jacob's ladder, more formally known as a high-voltage travelling **arc**, is...well...a high-voltage traveling arc. When the voltage difference between two electrodes exceeds the breakdown voltage, a spark forms.





Jacob's Ladder ARC

What Is the Story of Jacob's Ladder?

The story of Jacob's Ladder refers to the vivid, prophetic dream in which Jacob sees a ladder stretching from heaven to earth.

"And Jacob went out from Beer-sheba, and went toward Haran. And he lighted upon the place, and tarried there all night, because the sun was set; and **he took one of the stones** of the place, and **put it under his head**, and lay down in that place to sleep. And he dreamed, and **behold a ladder** set up on the earth, and the



top of it reached to heaven; and behold the angels of God ascending and descending on it...

And he was afraid, and said, How dreadful is this place! This is none other but the house of God, and this is the **gate of heaven**."

"And Jacob called the name of the place **Peniel**: for I have seen God face to face, and my life is preserved."

You access the gateway and see the face of God through the **Pineal gland** with the **stapes** and **Organ of Corti** magnetized.

Jacob's Stone

As Jacob laid his head upon a stone and drifted off to sleep the "gateway/stairway/ladder" opened up.

What was this stone?

In my opinion, this stone was Magnetite. **Magnetite** is a mineral whose primary component is **iron oxide**. It is the **most magnetic** of all the naturally occurring minerals on Earth.

A study published found that magnetite is indeed present in its crystalline form throughout the human brain, with particularly high concentrations in the cerebellum and brain stem. Moreover, it's highly likely that this magnetite is produced within our cells.

Magnetite is the Altar Stone at Stonehenge made up of Old Red Sandstone (Iron oxide).

When Jacob laid down his head on the Magnetite stone it created a highly magnetic field that vibrated the Spiral Organ of Corti and Stapes (Ladder bone).

This allowed him to "see" into "other realms" and witness the angels of God ascending and descending on it.

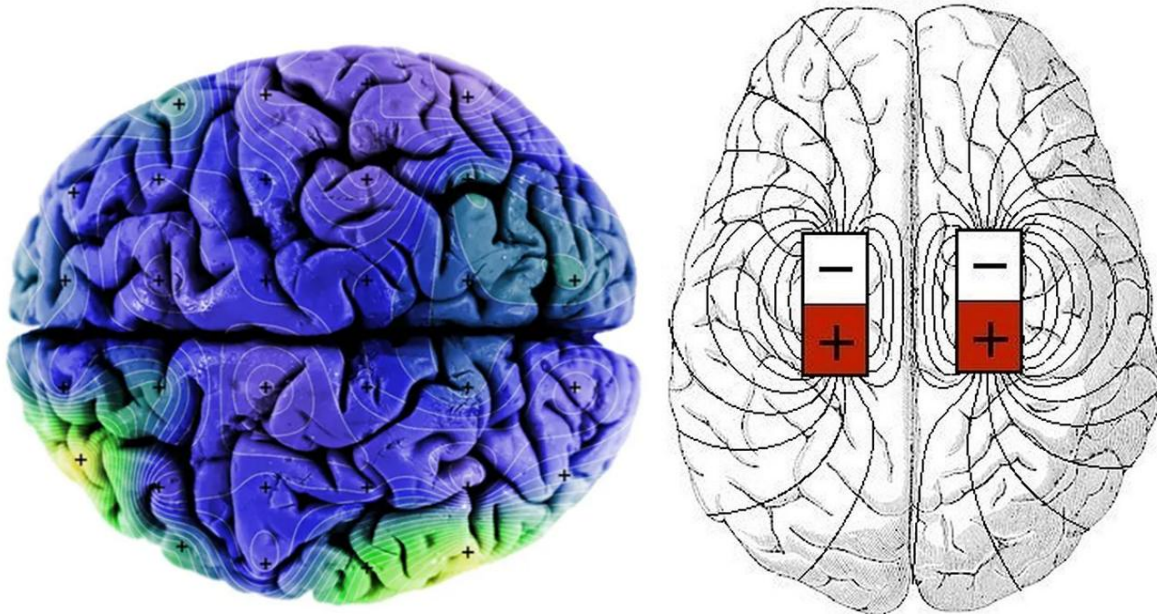
The #1 gene for Stapes (Jacob's Ladder) is the **Noggin** (NOG Gene).

Electromagnetic fields can affect the crystallization process of calcium carbonate, the main component of the **calcite crystals in the brain**. More on the piezoelectric crystals in the brain later.



**Magnetite** is iron, and is ferrimagnetic. **It is the most magnetic of all the naturally occurring minerals on Earth.** Naturally magnetized pieces of magnetite, called lodestone, will attract small pieces of iron, which is how ancient peoples first discovered the property of magnetism.

Yes, magnetite is present in the human brain, particularly in the **brain stem (tectum)** and cerebellum. [[R](#)]



Magnetite can respond to external magnetic fields and magnetic particles in the brain may allow humans to sense Earth's magnetic field. [[R](#), [R](#)]

The brain stem (**tectum**) has consistently higher magnetization than other regions of the brain [[R](#)].

This magnetization of the brain stem will become important to understand later when we discuss the section of the brain stem called the “**Tectum**”, which is the “**nexus**” **point of where sound and light meet** from the Spiral Organ of Corti, located in the inner ear, to the back end of our photoreceptors (**Rhodopsin/RHO**).

**Magnetoreception** is a sense which allows an organism to detect the Earth's magnetic field. Animals use magnetite to navigate long distances and to adjust their direction of travel. Bats, birds, and turtles use magnetite to navigate. [[R](#), [R](#), [R](#), [R](#)]



Essentially, this is our piezoelectric “**6<sup>th</sup> sense**” used as a make-shift type **echolocation** where frequencies, both heard and unheard, are used to sense the environment.

PIEZO genes actually have been shown to control specific aspects of human proprioception, a “**sixth sense**” describing awareness of one's body in space. [[R](#), [R](#)]

## **Sound, Light, & The “Holy Grail”**

Sound and light stand as the twin pillars that regulate and animate the rich tapestry of life that envelops all of existence down to a molecular level to higher dimensions. From the depths of the oceans to the highest peaks, these aspects of our environment govern the behaviors, functions, and very essence of all living things.

### **The Cadence of Sound: The Spiral Organ of Corti**

Within the realm of sound, the human ear features a remarkable structure known as the Spiral Organ of Corti. Nestled within the cochlea, this organ is a true marvel of biological engineering. It comprises rows of tiny hair cells that **convert sound vibrations into electrical signals** our brains interpret as sound. These hair-like structures are finely tuned to various frequencies, enabling us to detect and discern an intricate array of sounds from the faintest whisper to the mightiest roar.

One of the orchestrators of this process is a gene known as **Tricellulin**, also related to the symbol of the **triskelion**, a symbol associated with the concept of three interlocking spirals. **Tricellulin** is located within what's called the “**MARVEL**” domain which plays a crucial role in ion channels within the tight junction proteins between the cells in the epithelia, ensuring the integrity of barriers and cellular cohesion. This gene contributes to the highly selective nature of the Organ of Corti, allowing it to **distinguish between the diverse frequencies and tones** that reach our ears.

Interestingly, in the “Marvel Cinematic Universe”, the Triskelion is the headquarters of the famed agency S.H.I.E.L.D.

### **The Luminance of Light: Rhodopsin and Phototransduction**

When we turn to light, we find a similar harmony governing our visual experience. The **RHO gene** produces the protein Rhodopsin, which resides in the rod cells of



our retinas and is essential for **phototransduction** – the process of **converting light into the electrical impulses** our brains interpret as vision. Rhodopsin functions as a biological transducer, capturing photons and initiating a cascade of biochemical reactions that enable us to see.

The etymology of "RHO" resonates with a spectrum of meanings across various disciplines.

### **RHO meaning in Mathematics and Science**

In the physical sciences to represent:

- Densities: mass density, air density or **charge density** ( $\rho$ )
- General **quantum states**

In mathematics to represent:

- A length coordinate in polar, cylindrical, spherical, and **toroidal** coordinate systems, and toroidal and poloidal coordinates of the **Earth's magnetic field**.

So RHO represents the **toroidal spin**, or the **quantum vortex** from the Macro to the Micro. As above so below!

### **Chi Rho**

The letter rho overlaid with chi forms the Chi Rho symbol, used to represent **Jesus Christ**.

Chi: A life force in traditional Chinese philosophy, culture, medicine, etc, related (but not limited) to **breath** and **circulation**.

In molecular biology, RHO is the forerunner of a family of **GTPases**, which govern cytoskeletal dynamics in concert with actin and microtubules – the threads and scaffolds of cellular architecture.

### **What are GTPases?**

GTPases are a group of enzymes that regulate many cellular processes, including cell growth, protein synthesis, and signal transduction (emphasis added). GTPases are Guanosine Triphosphates (GTP).

### **The Guarded Passage of Frequency**

The Etymology of Guanosine



First, the word guanine derives from the Spanish loanword guano ("bird/bat droppings"), which itself is from the Quechua word wanu, meaning "dung". Dung can also mean **“weaving, or to cover”**.

## GUAN

Guan is a masculine name of Chinese origin meaning “mountain pass” or **“guarded passage.”** This name was historically given as a title to those in charge of guarding passes.

## Guan-o-Sine

The word **“Sine”** is derived from an ancient **Sanskrit** word जीव (jīva, **“sine, chord, life, existence”**), meaning Sine Wave.

Sine wave patterns occur often in nature, including wind waves, sound waves, and light waves.

So we can see that breaking up the word Guan-o-sine means **“guarded passage of frequency!”**

Frequency determines physiology!

## The Holy Grail

Now, there is an area in the brain where **sound and light meet** and it's called the **“Tectum”**.

The word Tectum means: From Latin tēctum (**“roof”**), from tegō (**“I cover”**), cognate with Ancient Greek τέγος (tégos, “roof; any covered room of a house”).

This is related to Guanosine as guanine derives from the Spanish loanword guano meaning “weaving, or **“to cover”**”.

The gene that controls the Tectum is called “Engrailed Homeobox” and goes by an alias of **“Hu-En”**.

The word **“Hu”** means: the personification of a religious term, the **“creative utterance”**. Hu was deification of the first word, the word of creation. See also **“Logos”**.

The word En means: **“in, into”**

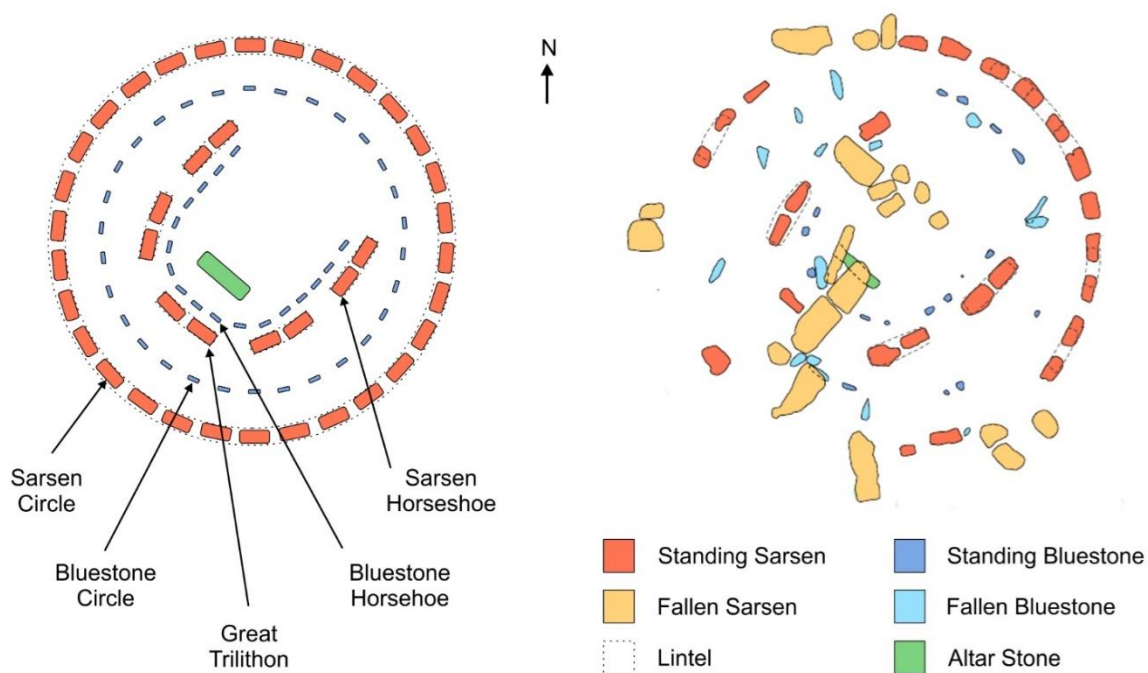


Then we have “Grailed” associated with the name of the gene “Engrailed Homeobox”, which is a reference to a “cup, bowl, or “The Holy Grail”.

In other words, The “**Holy Grail**” is the “**Logos Within**” where **Sound and Light intersect** at the **Tectum (covering)**!

## The Stonehenge Leucine ARC

Where this gets really interesting is the connection with magnetite, magnetoreception, and echolocation in relation to the actual **stones used at Stonehenge**, an iconic monument from about 5,000 years ago.



<https://creatureandcreator.ca/wp-content/uploads/2016/08/tpstonehengeplan.jpg>

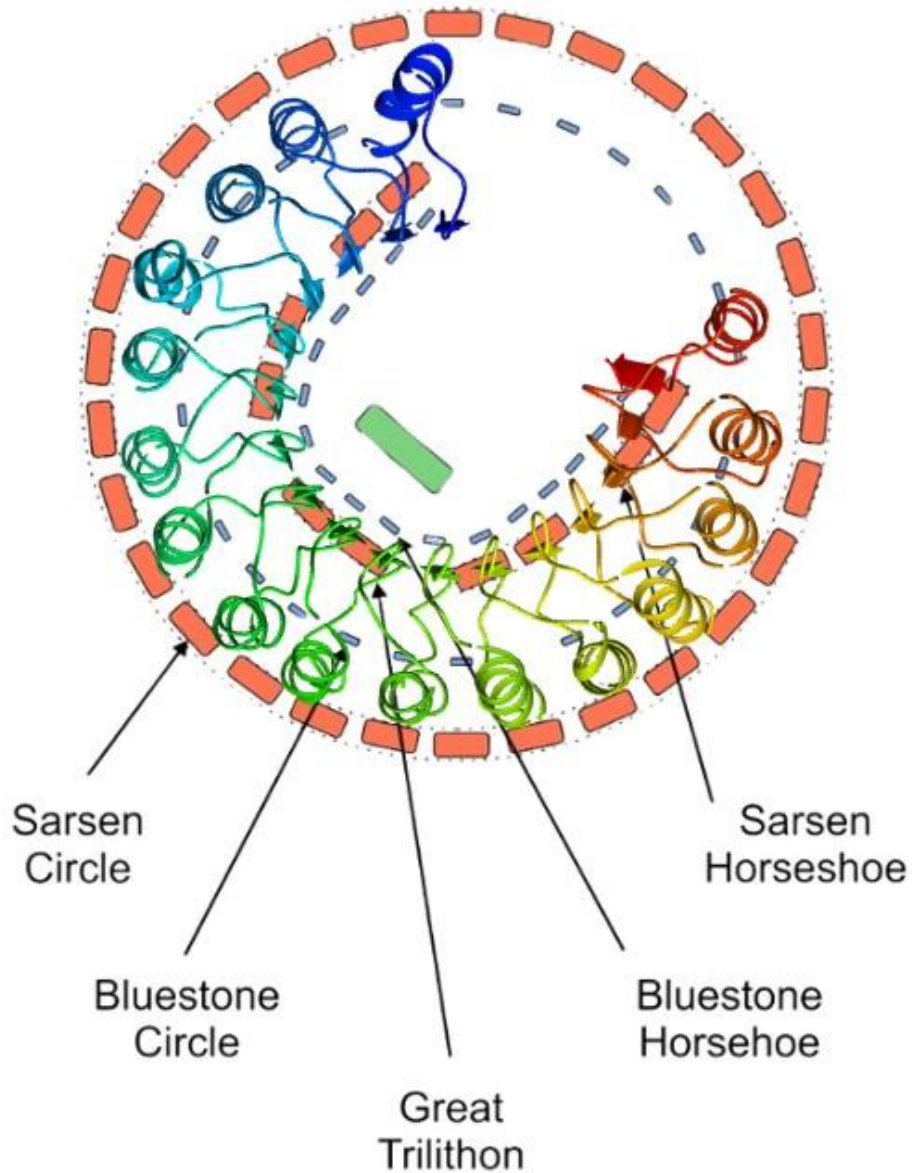
The central part of Stonehenge historically would have been dominated by the **inner horseshoe arrangement** of the smaller **dolerite bluestones** with the “**Alter Stone**” being **green micaceous sandstone** (or "greensand"). These stones were a mixture of **magnetite and quartz sand**. [R]

The “**horseshoe arrangement**” described perhaps was used as a lock and key mechanism for a **gateway to transfer energy** related to what was described earlier with how the **Leucine-Rich Repeat (LRR) Domains**, rich in Leucine, with

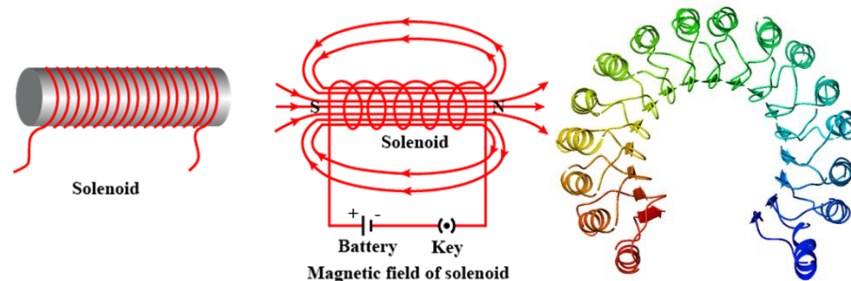


**piezoelectric properties**, organize into a highly stable **solenoid structure**, often described as an  $\alpha/\beta$  **horseshoe fold**.

**Leucine Rich Repeat Domain Horseshoe Solenoid ARC +  
Inner Stonehenge Horseshoe ARC Overlaid**





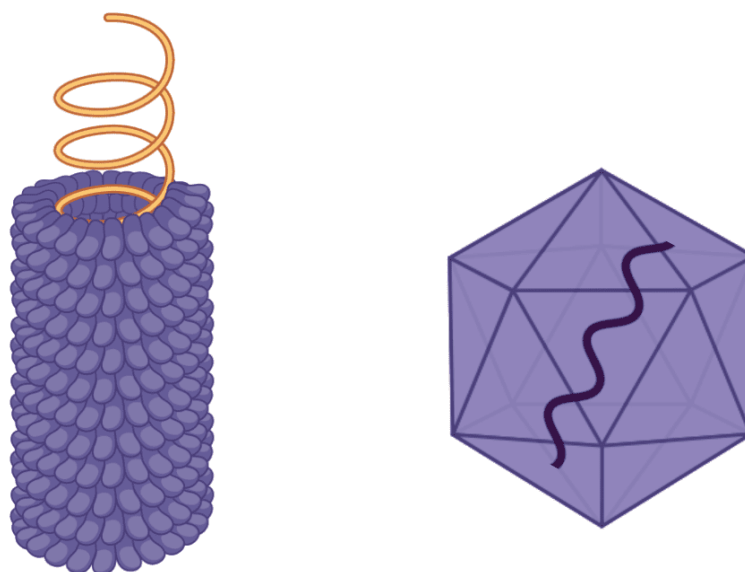


Again, a solenoid is a type of electromagnet formed by a **helical coil of wire** which **generates a controlled magnetic field**. The coil can produce a uniform magnetic field in a volume of space when an electric current is passed through it.

Later, we will discuss the significance of this *helical coil wire* as it relates to a “**Wreath**” [תְּהִלָּה] defined as: “**coiled or twisted shape**”, in relation to the section below titled “**The Flower Laced Palm Tree**” associated with Cherubim’s and ancient temples.

Again, LRR’s commonly fold into a **horseshoe shape**, which can **mediate molecular recognition events** and **facilitate pattern recognition** akin to picking up frequency patterns.

It’s worth mentioning again that this horseshoe **ARC** shape of the Leucine Rich Repeats (LRRs) are similarly named in association with the **ARC gene** described above which has an **icosahedral capsid and a helical solenoid like coil**.



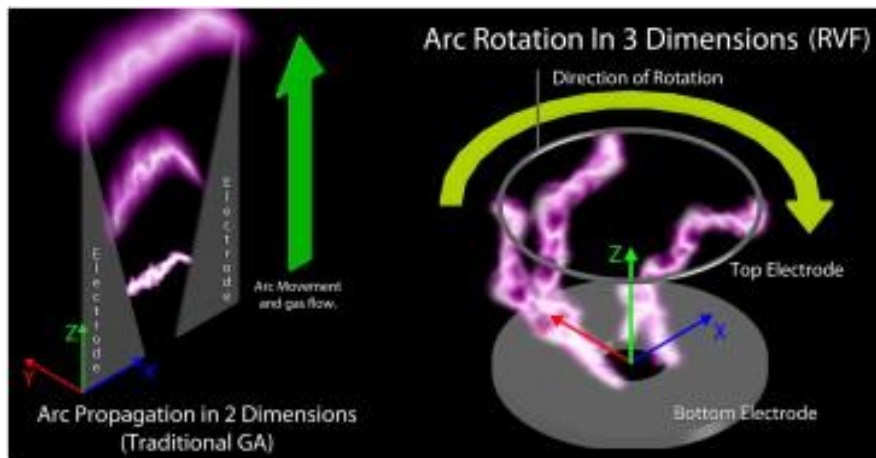


#### Capsids and nucleocapsids

Leucine rich repeats (LRRs) are present in over 60,000 proteins that have been identified in viruses, bacteria, archae, and eukaryotes. All known structures of repeated LRRs adopt an **arc shape**.

The Horseshoe Arch appears as a **key hole**. This type of architecture is found all throughout the world.

**Jacob's Ladder ARC**, when rotated, forms a *triskelion archimedean golden spiral* vortex plasma field.



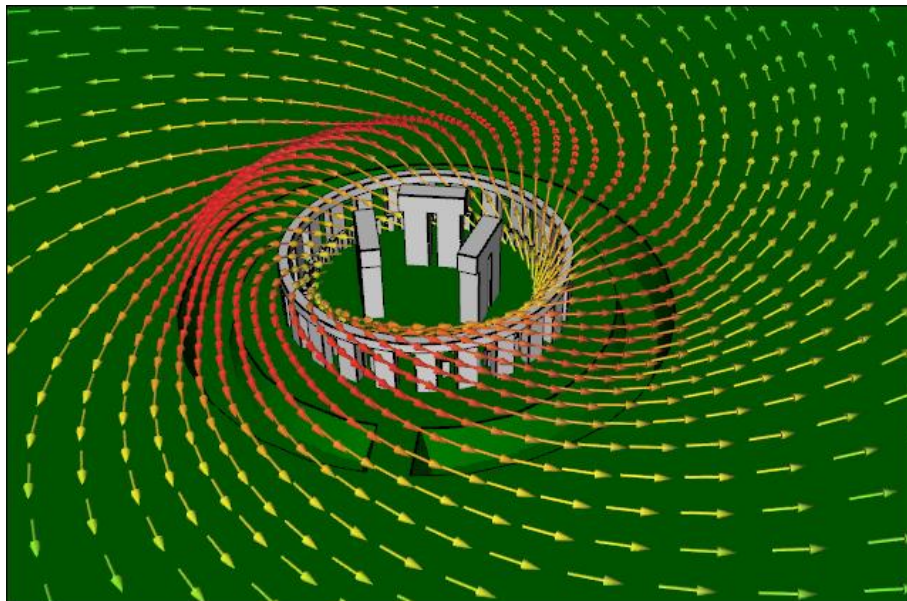
[An experimental investigation of reverse vortex flow plasma reforming of methane](#)



Figure 1. The Archimedes spiral shape in nature.



[The Archimedes spiral shape in nature](#)



[CFD Simulation of a Vortex at Stonehenge](#)

Streamline arrows colored by velocity

**144 Stones**



The Israelites had no temple till the time of Solomon, but they had circles of stone pillars at Gerizim and Gilgal, exactly the same as those at the Stonehenge. According to some scholars, the whole number of stones which Stonehenge consisted of was **144**. [R]

"have been originally in the other. I also think that the whole number of stones which Stonehenge consisted of was 144, according to Mr. Walfire's model, and including along with it three stones which could not be described in Mr. Walfire's model for want of room; thus making the sum-total of stones amount exactly to the Oriental cycle or yau of 144 years.

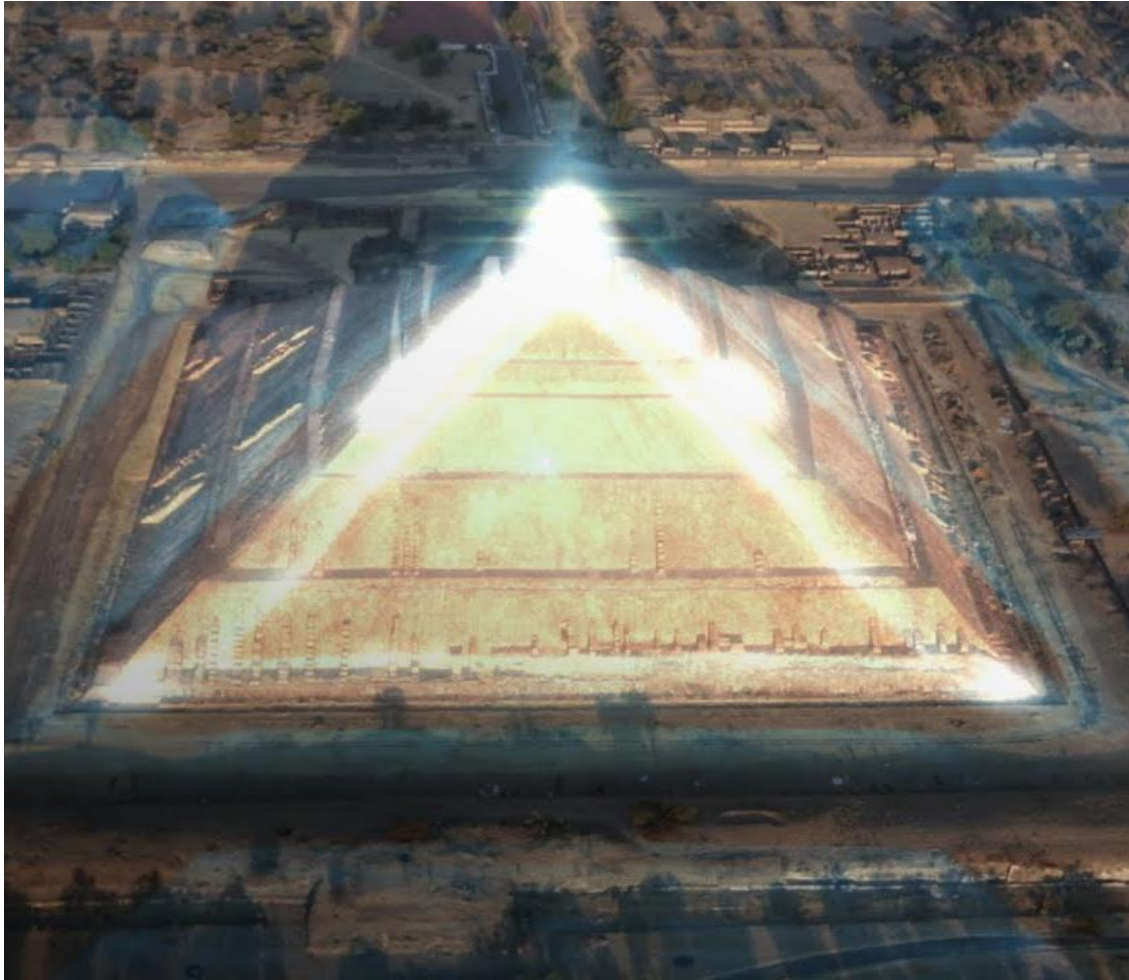
Outer circle with its coping stones .....	60
Inner... ..	49
Outer ellipse ... ..	21
Inner parabola.....	19
Altar .....	1
Three outer stones .....	3
	<hr/>
	144

ANACALYPSIS 1874

In the 1920s, Hawley dug up nearly **60 cremation burials** from inside Stonehenge but all had been reburied in 1935. By the mid-1990s some prehistorians such as Alasdair Whittle (1997), Barbara Bender (1998) and Josh Pollard were beginning to think about the properties of different materials – **stone, earth** and **chalk (bone/calcium carbonate)**. [R]

Human bones are piezoelectric and are made of calcium. Calcium carbonate is highly piezoelectric. And it's been said that the Great Pyramid in Egypt, before it was stripped, was also laced with calcium carbonate. This would have generated a power station.





Hence, this is how the hijacking is taking place!

How do we know this you ask?

Because “The endocytosis and exocytosis of vesicles, through clathrin (*triskelion archimedean golden spiral*), allows cells to **communicate**, to transfer nutrients, to **import signaling** receptors, to mediate an immune response after sampling the extracellular world, and to clean up the cell debris left by tissue inflammation. The endocytic pathway **can be hijacked** by viruses and other pathogens in order to gain entry to the cell during infection”. [[R](#)]

### **The Piezoelectric Pyramid Connection**

When I research genes I also research the etymology of the alias' that are chosen for that gene(s). In so doing, it opens up a floodgate of hidden codes and meanings encrypted within our genome.



This rabbit hole goes DEEPER than anything you have ever imagined! But, this has also allowed me to literally crack the entire genomic code and bring remedies to the world.

Example:

PIEZO1 Gene is also called “**Mib**”, a corruption of **marble**. [[R](#)]

**Marble** - (marmáreos, “**gleaming**”); To become **interlaced with fat; crystalline limestone**.

Piezoelectricity is the electric charge that accumulates in certain solid materials—such as crystals, certain ceramics, and biological matter such as bone, DNA, and various proteins—in response to applied mechanical stress.

PIEZO1 is a mechanically-activated ion channel that **links mechanical forces to biological signals**.

In other words, it converts the energy from the universe into the physical and vice versa!

"Marble" fine tunes this response.

**Dietary fatty acids fine-tune Piezo1 mechanical response.** [[R](#), [R](#)]

**Crystalline limestone is calcium carbonate.**

It's what the Great Pyramid would have been covered with before the last Pharaoh stripped it.





This would have created a huge power plant through piezoelectric effects.

Example: [How to generate free electricity with limestone.](#)

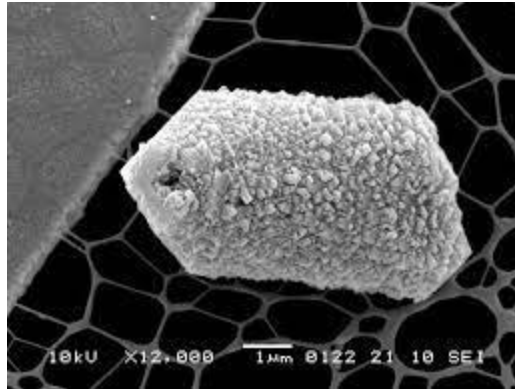
Calcium carbonate is also considered to be **chalk**.

## **Warding Off Disease Carrying Demons**

Chalk is one of three elements used to create a **Magician's circle**, which was used to **ward off disease carrying demons**.

The Ancients knew how to harness this piezoelectricity using "Marble/Limestone/Calcium Carbonate" which was found on the Pyramids but is **ALSO found in our Pineal Gland**.





Crystal in the pineal gland

A new study titled “[New crystal in the pineal gland: characterization and potential role in electromechano-transduction](#)” stated that a new form of biomineralization has been studied in the human pineal gland. It consists of small crystals that could be responsible for an **electromechanical biological transduction mechanism in the pineal gland** due to their structure and **piezoelectric properties**.

These small crystals that are less than 20  $\mu\text{m}$  in length and could be responsible for an electromechanical biological transduction mechanism in the pineal gland due to their structure and piezoelectric properties.

Because of the fast development of mobile telecommunication, the interaction of Electromagnetic Fields (EMF) with biological environment becomes a public health concern.

Although the action of non-ionizing radiation on biology is still unclear, several hypotheses of interaction have been suggested: hot spot phenomena, ADN/RF-EMF interaction, EMF effect on cellular development (oncology).

According to the study, two biomineralization forms can be observed in the pineal gland of which only calcium carbonate and calcium oxalate are potential candidates. Concretions so called “**brain sand**”, a polycrystalline complex of few millimeters long, and microcrystals the length of which does not exceed 20 micrometers.

Microcrystals properties and particularly piezoelectricity would give them an active role in a potential mechanism of electromechanotransduction in the pineal body.

These pineal microcrystals appear as a **stack of thin rhombohedrons**.



In geometry, a rhombohedron is a three-dimensional figure with six faces which are **rhombi**; from French rhombe, from Latin rhombus "**a magician's circle**".

## Rhombus Etymology

Learned borrowing from Latin **rhombus**, from Ancient Greek ῥόμβος (rhómbos, "rhombus, spinning top"; a magician's circle).

So basically a "**magical**" **spinning top**!

# rhombus

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[Entry](#) [Discussion](#) [Citations](#)

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See also: [Rhombus](#)

## English [\[ edit \]](#)

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### Etymology [\[ edit \]](#)

Learned borrowing from Latin *rhombus*, from Ancient Greek ῥόμβος (*rhómbos*, "rhombus, spinning top"). Doublet of *rhomb* and *rhumb*.

<https://en.wiktionary.org/wiki/rhombus>



## Latin [ edit ]

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### Alternative forms [ edit ]

- *rombus, rumbus* (*Medieval Latin*)

### Etymology [ edit ]

From Ancient Greek *ῥόμβος* (*rhómbos*, “rhombus, spinning top”), from *ῥέμβω* (*rhémbō*, “I turn around”).

### Pronunciation [ edit ]

- (*Classical Latin*) IPA<sup>(key)</sup>: [ˈrɔ̃m.bʊs]
- (*modern Italianate Ecclesiastical*) IPA<sup>(key)</sup>: [ˈrɔm.bʊs]

### Noun [ edit ]

**rhombus** *ῥ* (*genitive* **rhombī**); *second declension*

1. *rhombus* (*geometry*)
2. *flatfish*
3. *a magician's circle*
4. (*Medieval Latin*) *sturgeon* [synonym ▲] [hyponym ▼]

<https://en.wiktionary.org/wiki/rhombus#Latin>

The rhombic dodecahedra is considered a golden rhombi related to the golden ratio, or Fibonacci Sequence, or Golden Spiral.

A Magic circle is believed to contain energy and form a sacred space.

### **It was used to ward off disease carrying demons!**

Traditionally, it was marked physically, drawn in a material like **salt**, **flour**, or **chalk**, or merely visualized.

**Salt = Chloride ion**

**Flour = Wheat (Spermidine/Fermented Wheat Germ Extract)**

**Chalk = Calcium carbonate**

Again, the Calcium Carbonate crystal found in the Pineal Gland just so happens to form the same geometry (**rhombohedrons/rhombi/rhombe/rhombus**) as a



'**Magician's Circle**' used to ward off disease-carrying demons and form a sacred space of protection against evil.

Proponents believe that the vibrational influence on the pineal gland could facilitate altered states of consciousness, spiritual experiences, and enhance psychic abilities. They speculate that the pineal gland, acting as a type of "**biological antenna**," may enable individuals to access higher realms of awareness.

But what does electromechano-transduction mean? It refers to the process by which mechanical forces are converted into electrical signals. In the case of the piezoelectric crystals in your pineal gland, they have the ability to interact with electromagnetic fields.

On the flip side, researchers have also suggested that the interaction of these pineal crystals with **negative EMF waves may cause harm**. It is therefore theorized that EMF electrical components could induce morphological changes in these pineal crystals and alter the cellular environment, potentially affecting our pineal glands and potentially further increasing pineal disruption and calcification.

### **Platonic Icosahedral ARC Viral Solenoid Capsids, Temples, and Palm Trees**

Continuing forward, in relation to **Icosahedral ARC protein**, the scientists noticed that the formation of capsids and their interactions with the cell membrane to enable exit from the cell may be **regulated by** modifications like phosphorylation and/or **palmitoylation**.

**Palmitoylation** involves the **attachment of fatty acids (Palmitic acid/Palm oil)** – which may **induce Arc to interact with the plasma membrane**, allowing capsids to exit the cell inside extracellular vesicles.

What does this mean in terms of energetic hijacking?

If the "**Platonic Icosahedral ARC Viral Solenoid Capsid**" is to enter (endocytosis) or exit (exocytosis) its frequency domain (3D, 4D, 5D, etc.), it will use the process of palmitoylation.

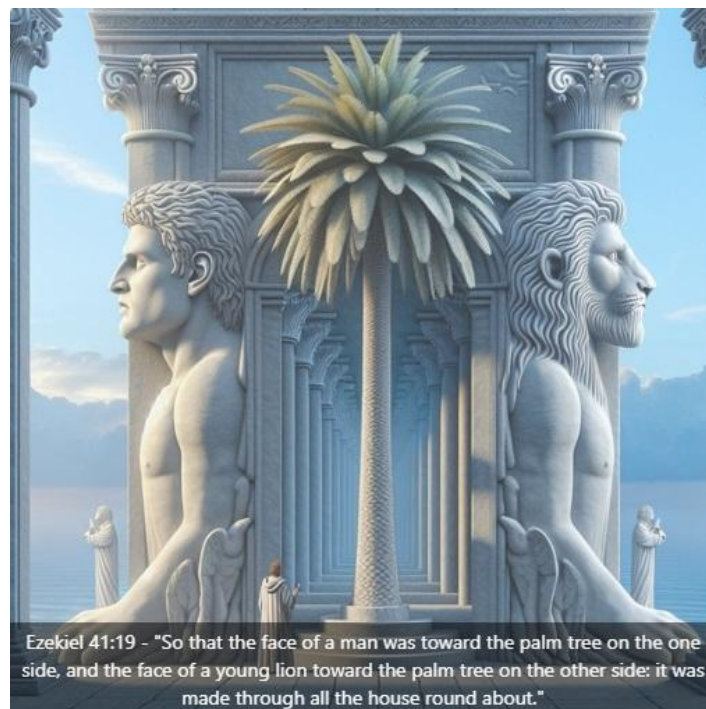
### **Palmitoylation**



Perhaps this is why we see many ancient temples surrounded by Palm Trees and why at the end of the Bible, people from every nation raise palm branches. Palm Sunday commemorates the entrance of Christ into Jerusalem, during which palm branches were placed in his path.

In fact, palm trees were carved into the walls of Solomon's Temple.

**Ezekiel 41:18-20:** “All the walls were decorated with carvings of **cherubim**, each with two faces, and there was a **carving of a palm tree between each of the cherubim**. One face—that of a man—looked toward the palm tree on one side. The other face—that of a young lion—looked toward the palm tree on the other side. The figures were carved all along the inside of the Temple, from the floor to the top of the walls, including the outer wall of the sanctuary.”



On the walls all around the temple, in both the inner and outer rooms, he carved cherubim, palm trees and open flowers. (1 Kings 6:29)

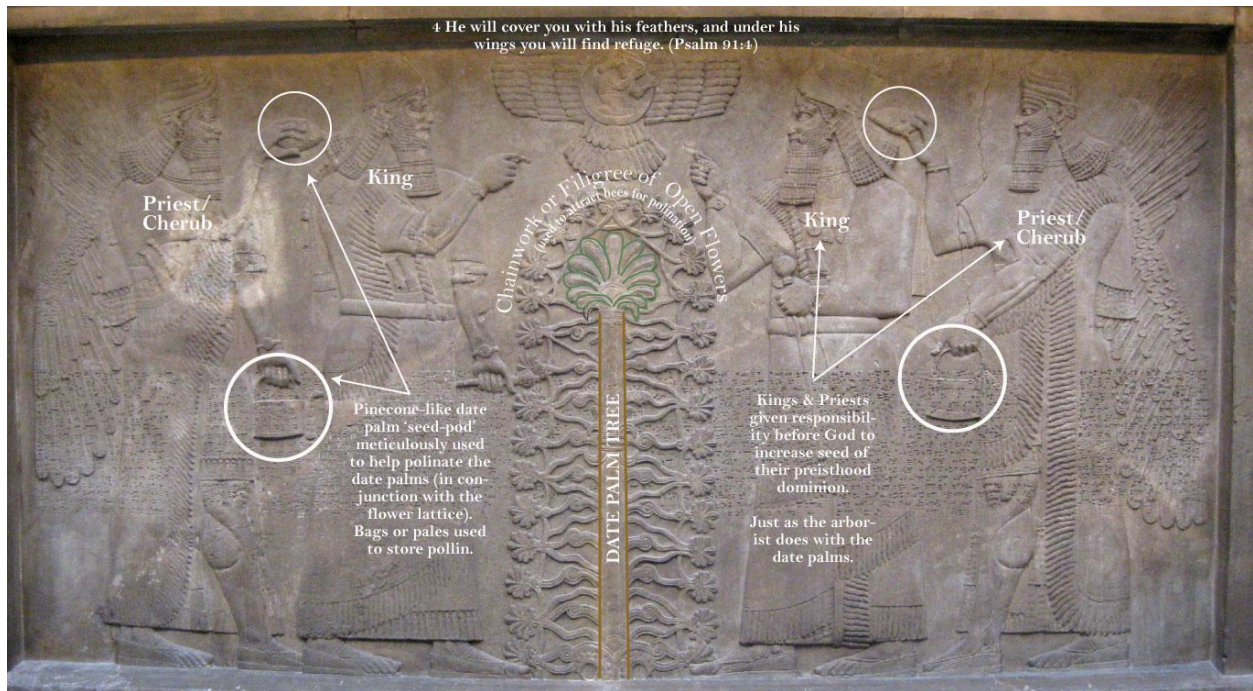
According to some scholars, the Palm tree could in fact be “[The Tree of Life](#).”





Sacred Assyrian Palm Tree





Dur-Sharrukin near the village of Khorsabad in northern Iraq

<https://gatheredin.one/15645/the-jerusalem-temple-at-assyria/>

Ezekiel 9-10: “Their faces looked like this: In front a human face, on the right side the face of a lion, on the left the face of an ox, and in back the face of an eagle. So much for the faces. The wings were spread out with the tips of one pair touching the creature on either side” (Ezek 1:10–11)

“the first face was the face of a cherub [or ‘bull’ see CEV], the second face the face of a man, the third the face of a lion, and the fourth the face of an eagle.” (Ezek 10:14)

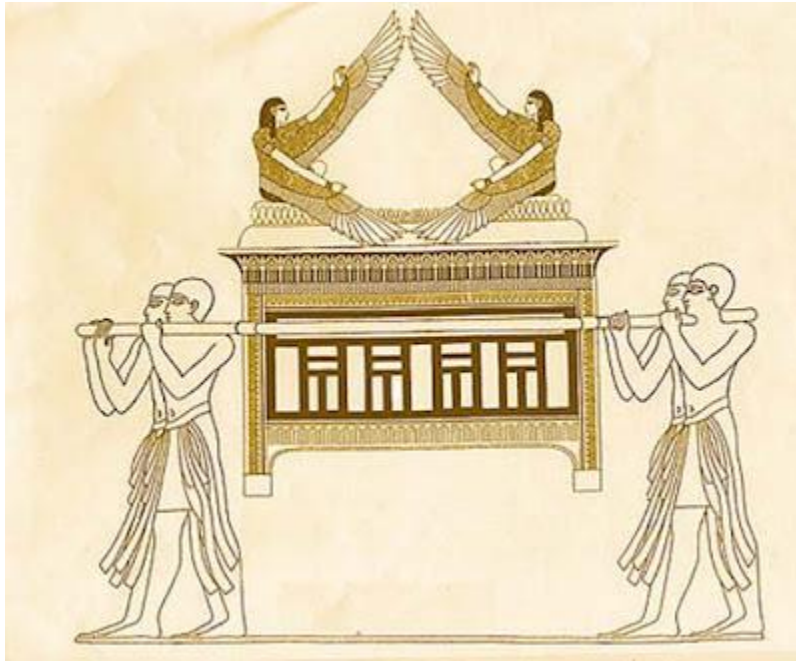


Cherubim in Solomon’s temple

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## The Cherub of the Arc



Biblical Ark of the Covenant

“the wings were spread out with the tips of one pair touching the creature on either side... the four creatures looked like a blazing fire, or like fiery torches ” (Ezek 1:9–13); “He placed the cherubim inside the innermost room of the temple, with their wings spread out. The wing of one cherub touched one wall, while the wing of the other touched the other wall, and their wings touched each other in the middle of the room. He overlaid the cherubim with gold. (1 Kings 6:27–28)

## The Flower Laced Palm Tree

Palm trees held a special place in ancient Israeli religion, being an important part of the Exodus myth, there being 12 wells and 70 palm trees in the first stop after Moses took Israel across the Red Sea and healed the waters in Exodus 15.

Afterwards palm fronds were made to be an important part of the festival of Booths (Lev 23:40–41). Perhaps because of this, combined with the supreme importance of the Date Palm industry in ancient Israel’s economy, Solomon placed cherubim, lions and palm trees on the inner and outer walls of the temple, as well as on the panels covering the wheels of the portable water basins or arcs.

Or, perhaps there is an even deeper connection here yet to be explored, until now.



“He engraved cherubim, lions and palm trees on the surfaces of the supports and on the panels, in every available space, with wreaths all around” (1 Kings 7:36)

More specifically, 2 Chronicles 3:5 says the Cherubim were associated with “**palm trees and chains**”. This could also be translated as “**twisted chain work cordage**”, or “**filigree**”.

**Wreath** [וְלִיָּוֹת] is defined as: “**coiled or twisted shape**” generally representing a twist of two cords **with metal** [R].

This would point to every indication that the true meaning of wreath means a twisted wire used to conduct electrical energy!

Or, to siphon it!

Strong's Lexicon defines Wreath [#3914] used in 1 Kings 7:36 as: “Weariness, fatigue; labor, toil, or trouble; “**loyah**”; used to describe a state of **physical or emotional exhaustion** conveying a sense of being worn out or tired, often as a result of prolonged effort or struggle. In the biblical context, it can refer to both literal **physical tiredness** and metaphorical spiritual or **emotional weariness**. [R]

Were these passages described above describing something deeper taking place?

Were these so-called “Cherubim” using human biochemistry to siphon and transmit our energy? Were they looshing off of us through the process of **palmitoylation**? Perhaps it wasn’t the Cherubim but some other fallen entity?

Ancient stories tell a story of genetic manipulation that took place involving the “**Sky People**” called the **Anunnaki**.

### **Anu Etymology**

Anu (Akkadian: ANU, from an “**Sky**”, “**Heaven**”) or Anum, originally An (Sumerian: An), was the divine personification of the sky.

(Sumerian, Assyrian and Babylonian mythology) A sky-god, the god of heaven, lord of constellations, king of gods, spirits and demons, who dwelt in the highest heavenly region.



Anu (Akkadian: 𒀭𒀭𒀭 ANU, from 𒀭 an "Sky", "Heaven") or Anum, originally An (Sumerian: 𒀭 An), was the divine personification of the sky, king of the gods, and ancestor of many of the deities in ancient Mesopotamian religion.

<https://en.wikipedia.org/wiki/Anu>

<https://en.wiktionary.org/wiki/Anu>

## **The Palm Tree: A Universal Emblem of Sanctity Near Places of Worship**

Palm trees have long stood as symbols of spiritual aspiration and triumph across numerous faiths, often gracing the landscapes of sacred sites and places of worship. Their presence appears to transcend religious boundaries, serving as a universal sign of peace, eternal life, and divine favor. Below are a few illustrative examples of how different religions have integrated palm trees into their spiritual environments.

### **Christianity**

In Christianity, palm branches are associated with Jesus's triumphant entry into Jerusalem, where he was greeted by a crowd waving palm fronds, a scene celebrated on Palm Sunday. Many Christian churches plant palm trees in their surroundings or use imagery of palms in their art and stained glass as a sign of victory and resurrection.

### **Islam**

Palm trees are also significant in Islam, symbolizing rest and hospitality. They are often found in mosque courtyards and gardens, evoking the image of an oasis, which holds a special place in Muslim heritage, signifying a refuge and a place of respite for travelers. Many Islamic traditions also recall the mention of date palms in the Quran, where they are praised as nourishing gifts from Allah.

### **Judaism**

In Judaism, the palm tree is embodied in the ritual of Sukkot, where the Lulav, a closed frond of the date palm, is part of the Four Species used during the holiday



celebrations. Palm trees and their fronds represent peace and plenty and are a recurrent motif in ancient synagogues and modern Judaica art.

### **Buddhism and Hinduism**

In Buddhist and Hindu traditions, the palm is often seen near temples and is part of spiritual motifs, including artwork and sacred texts. The Bodhi tree, under which Siddhartha Gautama, the Buddha, attained enlightenment, is often depicted alongside palm leaves in ancient reliefs. Similarly, Hindu temples may be adorned with palm motifs or surrounded by palm trees, symbolizing fertility, victory, and the tropical environment of the Indian subcontinent, where nature is closely intertwined with spirituality.

### **Ancient Egyptian Religion**

The palm was symbolic even in ancient religions, such as that of the Egyptians. For them, the palm represented immortality and eternal life, with depictions of palm trees found in many tombs and sacred texts, including the Book of the Dead, where they signified the promise of everlasting life after death.

### **Conclusion**

Despite the variances in religious doctrines and practices, palm trees have found a universal role in adorning the external grounds of sanctuaries, temples, churches, mosques, and synagogues. They often serve as a prelude to the peace and contemplation found within these sacred spaces, bridging the divide between earth and spirituality. While the specific significance of the palm may differ from one religion to another, its placement outside places of worship is a shared practice, highlighting its cross-cultural reverence as a symbol of life, prosperity, and divine protection.

Could **Palmitic acid** inhibit the viral capsid attachment to the host lipid plasma membrane?

## **Red Palm Oil: Ancient Symbolism Meets Modern Science in Brain Health and Antiviral Defense**

### **The Cognitive Enhancer: Red Palm Oil in Brain Function**



Red palm oil has been the subject of scientific studies for its potential impact on brain function. This vibrant oil, derived from the fruit of the *Elaeis guineensis* tree, is rich in beta-carotene, vitamin E, and other antioxidants. These compounds are known to combat oxidative stress, a notorious enemy of cognitive health, by neutralizing free radicals that can damage brain cells.

Particularly, tocotrienols, a form of vitamin E found abundantly in red palm oil and seabuckthorn oil, have been associated with neuroprotective benefits. These potent antioxidants have the capacity to cross the blood-brain barrier, a unique property that allows them to exert their effects directly within the brain's milieu. Studies suggest that tocotrienols can help maintain brain health by protecting against neuronal cell death, potentially improving memory and reducing the risk of neurodegenerative diseases such as Alzheimer's and Parkinson's.

### **Antiviral Interactions: The Palmitoylation Connection**

Beyond its neurological benefits, palmitic acids influence extends into the realm of antiviral defense, thanks to its effect on a biochemical process known as palmitoylation. Palmitoylation is the attachment of palmitic acid, a saturated fatty acid, to specific proteins, which can influence the function and localization of these proteins within the cell. It plays a key role in how viral proteins assemble and how viruses, such as HIV, influenza, and coronavirus, interact with host cells.

Research indicates that certain compounds in red palm oil can affect the palmitoylation of viral proteins, potentially disrupting the lifecycle of viruses and impairing their ability to infect cells. By modifying this critical step in viral replication, red palm oil compounds may offer a unique antiviral advantage, preventing the spread of viral infections within the body.

### **Ancient Wisdom: Palm Tree Symbolism and Health**

The reverence for palm trees, including the oil palm, dates back to ancient civilizations, where they often symbolized fertility, prosperity, and life. In many cultures, the palm tree was seen as a cosmic axis, connecting the heavens and earth, perhaps a subtle nod to its life-sustaining properties. While the ancients may not have understood the science behind red palm oil's health benefits, their veneration of palm trees suggests an inherent recognition of their value to wellbeing and sustenance.



The fact that the palm tree and its oil have enjoyed a symbolic status since time immemorial raises the intriguing possibility that our ancestors may have intuitively appreciated the health-giving properties we are only now beginning to understand scientifically. Whether through observation or empirical knowledge, the ancient wisdom that accorded the palm tree a special place in diverse cultures might have stemmed from its profound impact on health, vitality, and perhaps even viral protection.

## **Conclusion**

As we explore the connection between red palm oil's bioactive components and their potential effects on brain function and antiviral activity, we bridge the gap between historical symbolism and contemporary science. The palm tree, once a sacred emblem of ancient civilizations, might hold clues to modern nutritional and medicinal practices, offering a hopeful prospect in safeguarding brain health and bolstering the body's natural antiviral defenses through nature's own bounty.

## **Crossing the Rubicon: Inhibiting Bacteriophages through the "Red" Connection**

### **The Role of Neuraminidase & YWHAB**

At the heart of bacterial infections, the enzyme neuraminidase stands out for its critical role in initiating infections. By interacting with sialic acid sugar chain receptors, neuraminidase paves the way for pathogens to invade host cells.

The activity of this pivotal enzyme is under the control of the gene YWHAB, a key player in the outset of microbial attacks on the immune system.

**Cape Jasmine is a key Hemagglutinin/ Neuraminidase compound.**

And, **Watercress, which targets YWHAB upstream**, which ultimately regulates Neuraminidase activity.

**So, combining Cape Jasmine and Watercress is a POWERFUL combination!**

## **The Red Connection: From Rubiaceae to Rubicon**



The color "**Red**" serves as a profound link connecting various elements involved in immune responses and pathogen inhibition mechanisms. The **Rubiaceae** family, to which the **Cape Jasmine and Cinchona Bark (Quinone/Hydroxychloroquine)** belongs, translates to "Red". The Rubiaceae family of plants belongs to the "coffee" family.

Simultaneously, the gene name "[Rubicon](#)" also translates to "Red," establishing a significant connection between the control of neuraminidase activity (via YWHAB) and genes pivotal in immune defense, such as Toll-like receptor 2 (TLR2) and RIG-I (RNA antiviral defense).

Rubicon is involved in regulation of pathogen-specific host defense of activated macrophages. Following bacterial infection promotes NADH oxidase activity thereby **affecting TLR2 signaling** which impacts phagosome trafficking to induce antimicrobial burst of ROS and production of inflammatory cytokines (PubMed:[22423966](#)). **Following fungal or viral infection** (implicating CLEC7A (**dectin-1/fungal**)-mediated myeloid cell activation or **RIGI-dependent sensing of RNA viruses**) negatively regulates pro-inflammatory cytokines. (PubMed:[22423967](#)).

Crossing this "Red Rubicon" not only marks the point of no return in the immune response but also signifies a deep linkage between the innate immune mechanisms and the therapeutic potentials harbored within the "Red Rubiaceae" family. The concerted action of these elements culminates in processes fundamental to clearing infections: **apoptosis (cell death) and autophagy (cellular cleanup)**.

### **PI3-Kinase Regulates the Rubicon Gene**

PI3K complexes mediate the formation of phosphatidylinositol 3-phosphate playing a role in multiple **membrane trafficking pathways such as Clathrin Mediated Endocytosis**. This activity is required for SARS coronavirus-2/SARS-CoV-2 replication. [[R](#)]

**PI3K $\alpha$  inhibitor: Quercetin** [[R](#)]

### **Inhibition of Bacteriophages by Cyclotides**

Cyclotides are a family of plant-derived, cyclic peptides that are characterized by their structural stability and resistance to proteolysis due to the presence of a head-



to-tail cyclic backbone and a knotted arrangement of three disulfide bridges, known as the cyclic cystine knot (CCK) motif. These peptides are found in various plant families, with one of the most well-known sources being the **Wild pansy (Viola tricolor)**.

Cyclotides have been found to exhibit a wide range of biological activities, including antimicrobial, antiviral, and insecticidal effects.

While the research on the interaction between cyclotides and bacteriophages (viruses that infect bacteria) is a relatively unexplored field, it is hypothesized that cyclotides may exhibit inhibitory effects on bacteriophages through several possible mechanisms:

1. **Direct Interaction with Phage Particles:**

- Cyclotides might directly interact with bacteriophage particles, leading to the **disruption of the phage capsid or envelope**. This structural damage would inhibit the phage's ability to infect host bacterial cells.

2. **Interaction with Bacterial Surface:**

- Cyclotides may bind to bacterial surface structures that are receptors for phage attachment. Altering the structure or availability of these receptors could prevent phage docking and subsequent infection.

3. **Immune System Modulation:**

- Cyclotides can modulate the innate immune system of the host. Enhanced immune responses could indirectly lead to an environment less suitable for phage proliferation due to the activation of bacterial defense mechanisms.

4. **Membrane Disruption:**

- Cyclotides are known to have **membrane-disrupting properties due to their ability to interact with lipid bilayers**. They might interfere with bacteriophage assembly or release by disrupting the bacterial membrane events required for these processes.

5. **Enzyme Inhibition:**



- Some cyclotides have been reported to have enzyme inhibitory activity. If these enzymes are critical for the life cycle of the bacteriophage, then their inhibition could prevent phage replication within the bacterial host.

## The Central Command: Leucine Rich Repeat Domain

Central to our understanding of the immune system's response to pathogens is the Leucine Rich Repeat (LRR) Domain. This domain **controls all Pattern Recognition Receptors (PRRs)** [\[R\]](#), the sentinels of the immune system capable of identifying and responding to microbial invaders.



Leucine Rich Repeat Domain

Leucine-rich repeat (LRR) domains help "line up" pattern recognition receptors for proper communication like Mannose-Binding Lectin and Toll-Like Receptors associated with innate immunity and essential for recognizing all pathogens.

We'll cover pattern recognition receptors in depth later as they deserve their own module.

Therefore, including **N-Acetyl-L-Leucine** into a regiment will have PROFOUND effects!

### Leucine-Rich Repeat (LRR) Domains – The Key to Life

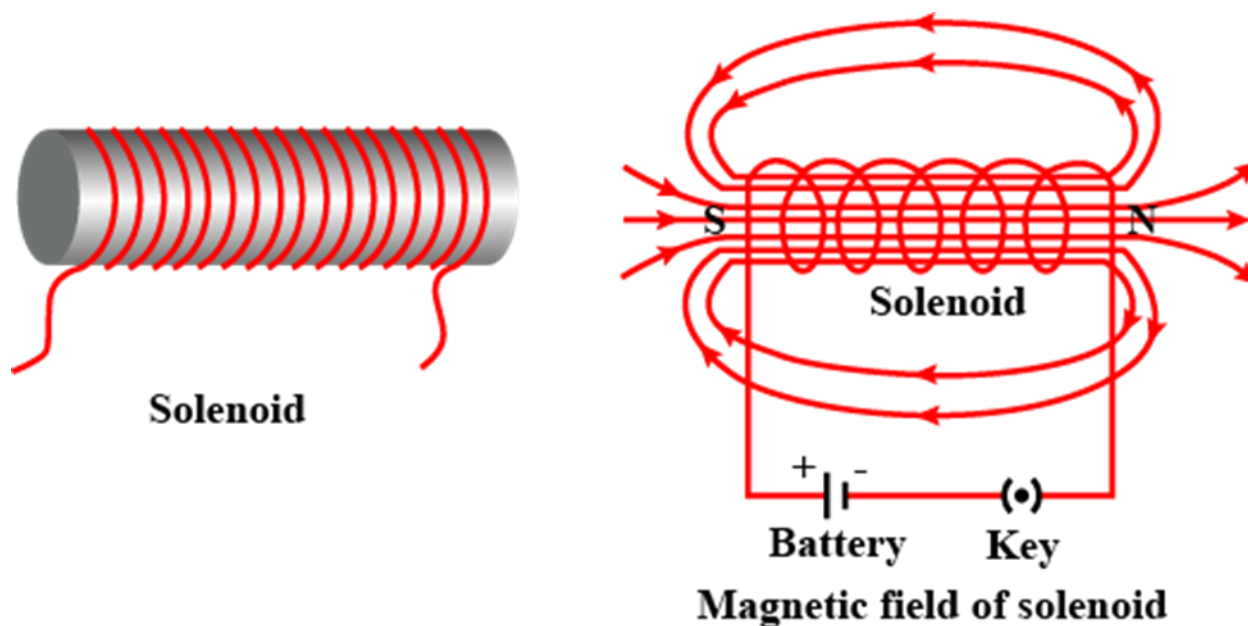
Leucine, an essential amino acid, has been found to **exhibit piezoelectric properties** in certain forms. The term "Leucine" derives from the Ancient Greek



word λευκός ("leukós"), which translates to "**white**". The white color refers to the appearance of Leucine in its pure, crystalline form. Thus, we can conclude that the term "Leucine" essentially describes a white crystalline substance, which is accurate considering its physical properties.

The Leucine-rich repeat (LRR) motifs are organized in tandem repeats that tend to fold together into a highly stable **solenoid structure**, often described as an  $\alpha/\beta$  **horseshoe fold**.

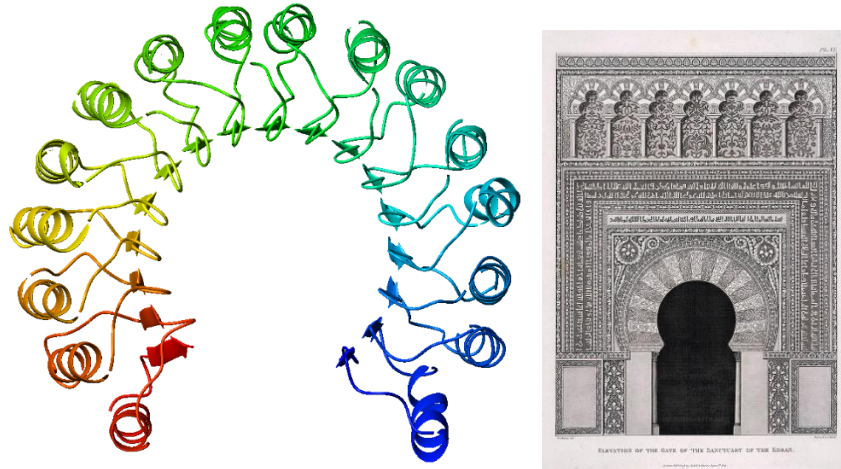
A solenoid is a type of electromagnet formed by a helical coil of wire whose length is substantially greater than its diameter, which **generates a controlled magnetic field**. The coil can produce a uniform magnetic field in a volume of space when an electric current is passed through it.



LRR's are involved in the **formation of protein-protein interactions**, often contributing to the process of **signal transduction and immune responses**. These domains consist of 20-30 amino acid stretches that are rich in leucine and commonly fold into a **horseshoe shape**, which can **mediate molecular recognition events**.

This horseshoe shape has also been called an **ARC**. Leucine rich repeats (LRRs) are present in over 60,000 proteins that have been identified in viruses, bacteria, archae, and eukaryotes. All known structures of repeated LRRs adopt an arc shape.





The Horseshoe Arch appears as a key hole. This type of arch-itecture is found all throughout the world.

Leucine-rich repeat (LRR) domains have a relationship with polysaccharides in the context of the innate immune system. **They play a crucial role in recognizing pathogen-associated molecular patterns (PAMPs)**, which include polysaccharides present on the surfaces of pathogens.

Some representative examples of LRR proteins with different roles include:

- **Mannose-binding lectin (MBL):** MBL is a soluble pattern recognition receptor that binds to mannose-bearing carbohydrates on pathogen surfaces, promoting complement activation and opsonization.
- **Toll-like receptors (TLRs):** There are many TLRs (e.g., TLR1-10 in humans) that function as pattern recognition receptors, activating the innate immune response when encountering pathogen-associated molecular patterns (PAMPs).
- **NOD-like receptors (NLRs):** NLRs, such as NOD1 and NOD2, function as intracellular sensors for detecting PAMPs and activating an inflammatory response.

Understanding the control mechanisms behind Pattern Recognition Receptors, including the pivotal role of the Leucine Rich Repeat Domain, is crucial. This knowledge forms the foundation for unraveling the sophisticated network of



immune responses, providing insights into both our innate defenses against pathogens like bacteriophages and the potential for therapeutic interventions rooted in the deep, symbolic connections to the **alchemical** colors "**Red & White.**"

Now, after everything that has been described above it is my hope that you now see the importance of this entire process of infectious disease and energy siphoning.

Just to clarify what the role of clathrin is once again...

## Clathrin

[Article](#) [Talk](#)

From Wikipedia, the free encyclopedia

**Clathrin** is a [protein](#) that plays a role in the formation of coated [vesicles](#). Clathrin was first isolated by [Barbara Pearse](#) in 1976.<sup>[1]</sup> It forms a triskelion shape composed of three clathrin heavy chains and three light chains. When the triskelia interact they form a polyhedral lattice that surrounds the vesicle. The protein's name refers to this lattice structure, deriving from Latin *clathri* meaning lattice.<sup>[2]</sup> Barbara Pearse named the protein clathrin at the suggestion of Graeme Mitchison, selecting it from three possible options.<sup>[3]</sup> Coat-proteins, like clathrin, are used to build small vesicles in order to transport molecules within cells. The endocytosis and exocytosis of vesicles allows cells to communicate, to transfer nutrients, to import signaling receptors, to mediate an immune response after sampling the extracellular world, and to clean up the cell debris left by tissue inflammation. The endocytic pathway can be hijacked by viruses and other pathogens in order to gain entry to the cell during infection.<sup>[4]</sup>

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## Summary: Pathogenic Energy Harvesting & Loosh Defense

The document reveals a critical framework: **pathogens are not merely biological agents**, but **energy siphoning constructs** designed to **harvest life-force (Loosh)**. This aligns directly with the operating premise of Loosh Defense—that trauma, infection, and fear-based manipulation serve as **hyperdimensional extraction mechanisms** for energetic currencies that sustain non-human or parasitic systems.

The book outlines:

- How **RNA viruses act as frequency-based keys**, triggering host responses that unlock intracellular stores of energy—effectively initiating "energy farming."
- The **geometry of pathogenic particles**, particularly viral capsids, mirrors Platonic solids—specifically icosahedrons—demonstrating their **resonant harvesting capability** through crystalline symmetry.
- It explains the **WBAN-like nature of the human field**, suggesting that external electromagnetic interference can be tuned to affect biological substrates and weaken immunological coherence—this is critical to how pathogens find and anchor to vulnerable tissues.
- Emphasis is placed on **neurological entrainment**, showing that cognitive and emotional states induced by pathogens are not incidental—they are part of the siphoning architecture.

Loosh Defense, in contrast, operates by:

- **Collapsing parasitic geometries** through botanical, mineral, and energetic harmonics.
- Reinforcing **cellular coherence and field integrity**, especially via nutrient channels associated with Clathrin, PIEZO, Actin, and RHO GTPase geometries.
- Delivering actives via **GENE™ tech**, which bypasses digestive degradation and directly interacts with the body's wireless field and intracellular architecture—restoring sovereignty at the bioenergetic interface.



Ultimately, the document validates that *energy is the currency of infection*, and that any truly regenerative formula must not only neutralize biological vectors—but **dissolve the invisible structures that harvest soul-force through them.**