

UBIQUITINATION 10: BIO-HACKING ROS AND RNS

READERS SUMMARY

WHY ARE WE BUILT THE WAY WE ARE?

WHY DO WE YAWN?

WHY DO WE HICCOUGH?

WHY MUST YOU UNDERSTAND WHAT A LOSS OF NEGATIVE FEEDBACK CONTROL IS?

HOW DO NITROGEN AND OXYGEN MEET IN A QUANTIZED ECOSYSTEM?

Any competent engineer would never build a pipe that's smaller than the material that's supposed to go through. But nature, apparently, has done that. Some of the capillaries are smaller in diameter than the red blood cells that pass through them. Why? Pressure stimulates quantum gas release in the absence of oxygen. Hello, H_2S , NO_S , and CO . These 3 gases are used when nitrogen and oxygen are uncoupled in your cells.

Why should you understand part of a quantum reversal is tied to pressure, free diving, and the 3 quantum gases linked to the mammalian dive reflex? Cold allows your mitochondria to work for a time in the absence of the oxygen. How does Cold thermogenesis works in you? Cold is a synonym for magnetic field strength in your mitochondria because it creates an energy sink in water to create energy flows without any energy inputs needed.

Why would your gut be designed with all the weird bends it

has? Ask any doctor about how the gut rotates in development; they all learned about it but never thought to ask why this was the case. They should have. Why would evolution build a fattened baby and try to fit it through a small hole? For the very same quantum reason: pressure can stimulate gas release to offset a hypoxic passage from the womb to the environment. It is based upon how nitrogen couples to oxygen properly to control carbon cycling in a pseudohypoxic environment. When environment change, you begin to use different physics in that environment to organize how atoms can function and collide with light. All life forms left the water behind in their evolutionary past, but they have these biologic tethers in them even when they become air breathers. Your job is to understand how to use this wisdom nature built into your body to manifest when your ill. This is what Jack Kruse is trying to give you, for free.

Air pressure certainly affects the freezing temperature, doesn't it? The higher the pressure, the lower the freezing temperature. Since it will take water longer to reach the lower temperature, I'd expect that it would freeze more slowly. It does. This is how you can simulate supercooling in water to get it to carry more energy within its hydrogen bonding network to live longer and remain well longer. This is why drowning in cold water is a tougher to accomplish than in warm water. Any google search will show this is right, yet clinical medicine can't explain why it happens.

There are two ways that the higher pressure lowers the freezing temperature. One is direct. Ice occupies more volume than liquid water, so squeezing harder favors the liquid over the ice state. The second is less direct. At higher pressure, more air (nitrogen and oxygen molecules) go into solution. The way nitrogen and oxygen couple in different environments is the key to life's mystery. How light frequencies interact with these two atoms during these environmental shifts was instructive to me on how to reverse illness. The more molecules dissolved in the water, the

lower the freezing point. This is why free diving is possible in human. and its also why mammals are resistant to decompression sickness when they don't take oxygen tanks to the ocean floor. Ask any sperm or bowhale how good this stuff works in mammals. Their quantum gas mechanisms becomes hypertrophied in their tissues because of how they now live in the ocean full time.

Humans only live in that environment for 9 months. Humans deep ancestors stopped living in this environment long ago, but we remain deeply connected to our watery past. Our tether to the relationship is tied to the coupling of nitrogen and oxygen gas. It is built upon DHA's ability to capture and move electrons around and generate specific light frequencies we can use in cells. It's physiologic function is also tied to how the mammalian battery is created based upon latitude because sunlight's inclination. It is all about the zip code we choose to live on in Earth. This is why the mammalian battery responds to seasonal temperature changes and seasonal light inclinations as it does. Nitrogen and oxygen atoms quantum dance together are effected by these two factors most.

These two atoms are deeply affected by gravity and viscosity developing energy flows when oxygen is not used in mitochondria. Cold stimulates this effect. This is why believing temperature is hormetic is a joke; temperature alterations affect nitrogen balance in a deep way. In fact, a clinical clue ubiquitination rates are off slightly occurs in two behaviors in humans. Hiccoughs and yawning. Hiccoughs don't occur because you're scared or stressed. It is due to altered nitrogen and oxygen coupling in your diaphragm, causing myoclonus of the the muscle. The more stress you have from your environment (positive charge) the longer the effect sticks around. It is a deep sign you are "light mismatched" on the nitrogen side of the equation. Yawning is associated with cooling down your mouth to cool the CSF around your brain to recouple O_2 and N_2 . On the other hand, yawning does not always necessarily mean you're tired, it also means your body

needs more oxygen, because you have too much ubiquitin marking going on in your proteins. The answers are in us, if you look for them, few do. I have a friend Jeremy, who taught me this lesson big time. I love him for it. That lesson took the breath out of me and left a hole where my heart should have been. Failure teaches us best. I have another starfish in my life and on my team. Let me introduce you to him.

I have a brilliant young member on my website named, Yew. Listen to his intuition in this arena. He says, "Sick people get sick in many different ways, but the path to recovery is always the same.

Being a software developer has shown me empirically that a complex system with many simple rules will fail in completely unexpected manners if you tweak those simple rules even just a little bit.

The body fails the same way, and sick people look uniquely sick with non-deterministic symptoms that seem to appear out of nowhere."

I could not have said it better myself. He just described the essence of a Rayleigh Benard cell that loses its negative feedback control. Yew is now listening to the doctor within him. He also happens to live on a beach, eats a lot of DHA, and relocated close by the equator. Do you know why he left Melbourne, Australia and moved to equatorial Australia? Because I told him long ago the wisdom built into this blog.

Your results might vary but his was spectacular for 23 year old with a gut issue that would not go away. His leaky gut afflicted by SIBO just vanished. He finally realized that his zip code was more important than his genetic code. They was to look outside of him, inside of thinking he was defective in some manner. He gave up on all the ancestral principles and came over to the dark side of science. Come on the forum and meet him and speak with him. He is a **true starfish** in my community and I am proud to call him a friend.



Within 4 weeks of his move all his medical issues vanished. Hard to fathom, huh? Quantum biology is like that; the body is designed to act in this fashion, having to coordinate multiple processes all at once. If the timing information from one process is screwed up, everything is lost. This is called loss of negative feedback control. **This is what this series is all about.**

Consider what oxygen and nitrogen coupling are tied to that too few mention: ROS and RNS. No one seems to understand how they work in unison coupled together in ubiquitination. Superoxide is a molecule used to send information to various parts of the body. That information is buried in electron spin. In the beginning of an uncoupling state or an early disease state, too much superoxide is always the major issue the literature points too. This side tracks peoples perception because they don't understand there are simultaneous other effects going on simultaneously elsewhere inside our quantized ecosystem. Moreover, this ROS change is nothing more than a quantum indicator that your body doesn't have the energy needed to cope with signaling particles because something is awry with nitrogen and oxygen. Temporally and spatially, once this environment is allowed to persist for longer time scales, ROS and RNS levels drop. So do NAD⁺ levels at cytochrome 1.

It is ironic how no one makes that nitrogen connection, huh?

What does this imply in a quantum ecosystem? It turns out too little superoxide is always an issue, and is an indicator that your body can't communicate properly between its components, resulting in a loss of energy flows and transport leading to usage inefficiencies. You saw some of that reflected in my recent podcast done at www.selfhacked.com.

You must not rely on wikipedia for your knowledge. That site

has cool facts that by themselves, mean little. Why? They are disconnected. You need the context and coupling to make sense of your quantum ecosystem built into you. In this way, you can see why medicine got off the rails. **A half truth becomes a full lie.** When you realize you are dealing with a coupled quantized ecosystem, all of a sudden you realize that 'too much' or 'too little', is defined by environmental constraints and not by your genome. ***Zip code trumps your genetic code for 99.9% of modern afflictions, in my opinion.***

If biologists and clinicians have ignored how coupling within a quantum ecosystem built in ability to be self-organizing, it is not because self-ordering is not pervasive and profound. It is everywhere in nature. It is because we MD's and biologists have yet to understand how to think about systems governed simultaneously by two sources of order. This tells the astute, that loss of negative feedback control can extinct predator and prey in a system. The predator/prey combo can be an animal, gut/mircobiome, or two chemicals with different spectral footprints. Loss of negative feedback control extinctions both sides of the system when they de-couple. This series is about the main coupled system in biology: Ubiquitination.

Think about those who seeing the snowflake, who seeing simple lipid molecules cast adrift in water forming themselves into cell-like hollow lipid vesicles, who seeing the potential for the crystallization of life in swarms of reacting molecules, who seeing the stunning order for free in networks linking tens upon tens of thousands of variables, can fail to entertain a central thought: if ever we are to attain a final theory in biology, we will surely, have to understand the comingling of self-organization and selection. We will have to see that we are the natural expressions of a deeper order. Ultimately, we will discover in our creation myth that we are expected after all. That myth persists because biology fails to realize we are quantized by design. If you read, Life at

the Edge, by Jim Al Khalili you will leave your bad ideas behind. It is time to see something special in us.

WHERE DOES COLD THERMOGENESIS COME TO PLAY?

Temperature also has a huge effect on nitrogen coupling in our tissues and our quantized ecosystem because of the effect it has on water. Sunlight is the jumper cables for our water battery. Sunlight has to prescribe the proper dose and frequency of blue light to our cells during daylight and night time. No one seems to realize blue light is the most powerful drug nature has in her compound pharmacy. There are specific proteins in your retina, gut, and in your mitochondria at cytochrome one that all pay attention to this frequency. All these of these places connect to circadian clock genes too. Each clock gene contains a cyptochrome protein that also has atoms in them that only pay attention to the spectral release of blue light and its dosages. All have to be coupled properly to the environmental signal.

Why did nature use blue light and not any other color? It is the most rare frequency found naturally on Earth making it the ideal signaling frequency. Few things in nature use blue for anything because this brand of light is rare. This is the same reason we use cysteine as a signaling amino acid. It is also rare. Blue light also carries more force in it. Force is a function of the frequency of its wavelength. The more momentum that is transferred to the photon, the more energy the electron transfers to the released photon. The photon become filled with force to do work. That force is what your brain uses at night to do the work of regeneration in sleep and this is why melanopsin using blue light to force the onset of sleep.

This is why cysteine coupling is directly tied to how well or poor the mammalian battery holds a charge as a capacitor or a battery. This is why the DC electric current in you is

coupled to how well glutathione is coupled in you. This controls the sulfur cycle in proteins that reflect bad frequencies of sunlight from being absorbed in you. Taking exogenous glutathione is a really bad neolithic practice.

Nitrogen also happens to be rare in nature. It has to be processed by microbes for animals to get at it. Today modern corporations (Potash and Monsanto) are making it available in record numbers on Earth. This all has effects on the quantized ecosystem on Earth and in you.

When abiotic atoms on Earth are recycled into your biologic system, are not "recycled naturally" they become de-coupled from nature's effects, and you get ill. This is very counter intuitive to most. We need nature to "de-tangle electrons" in atoms we use in biology to reuse them. The amount of uncoupling and level of de-tangling of electrons, determines the diseases you get.



Moreover, what light **FREQUENCIES** you allow your brain, mitochondria and gut to sense simultaneously must also be coupled properly. Why? Light is how life entangles electrons in free radicals like ROS and RNS. Most people in medicine and ancestral health are missing the key piece of data with respect to nitrogen coupling, in our quantum ecosystem. The eye, gut and first cytochrome must all see the same frequency of light to tell time correctly? Why? All three tissues use blue light frequency to properly recreate timing mechanisms to signal cells what to do and when to do it. This is why circadian biology is the master of biology. Anyone who tells you otherwise is not wise, in their wisdom. So why does life use blue light for this purpose, specifically? Simple, it is because blue light bends most under the force of gravity so it can be used as reference, for an atomic clock in your SCN to tell circadian time. When you change the dosage or the quantity of the frequency disease manifests because of one reason: When you change the clock timing mechanism and it does

not run faster than all the other peripheral clocks biologic cycles uncouple. Disease soon follows. What sets this atomic clock? The amount of DHA in your retina does. This links DHA to another blue light activated protein called melanopsin.

OUT THE BOX BIOPHYSICS: So why is DHA the critical piece to all EUKARYOTES? The DHA double bonds consist of a sigma bond and a pi bond. By subtracting 80 kcal/mole (the sigma bond energy) from 145 kcal/mole (the C=C bond energy) we can calculate that the pi bond has a dissociation energy of about 65 kcal/mole. This is much less than the sigma bond energy, and therefore pi bonds are more reactive than sigma bonds. This means that, all things being equal, the pi electron bonds of DHA are more likely to undergo activation by light. Your brain is just like a star. It works optically and photonically. This is why optokinetics works to change neural circuits. The brain is all about light because 35-40% of all lipids in membranes in the brain are DHA. Förster resonance energy transfer (FRET) is a mechanism describing energy transfer between two chromophores.



In the conjugated chromophores like DHA, the electrons jump between energy levels that are extended pi orbitals, created by a series of alternating single and double bonds. A conjugated system is a system of connected p-orbitals with delocalized electrons in compounds with alternating single and multiple bonds, which in general may lower the overall energy of the molecule and increase stability. The largest artificial conjugated systems today are found in graphene, graphite, conductive polymers, and carbon nanotubes. The most important ones on this planet exist in your brain. It is time for you all to realize why I am pounding the table for a marine chain laden template, the more our world becomes microwaved and lit up with blue light 24/7. Most of these artificial chromophores are now being used in quantum computer design and

in artificial intelligence with helium as their light emitting atom. Helium is now the one element all governments on Earth covet. Why? Its spectrum allows massive control by optical resonance and it can be used to create artificial magnetic fields. All physics changes the way we can control chemicals with different spectral features. **This is why the environment you live in dictates the biochemistry you can use and innovate your life.** NASA better realize life on Earth will never be found on another planet, as it is here. Going to Mars is a Rx for human disaster, in my opinion. That journey will take 2.5 years and the astronauts will age the astronauts 165 years in that time frame. Time speeds up on a relative basis for living things that leave this planet and disease come fast and furious. This is why tall people die sooner and this is why living in a high rise in a city is a bad idea.

SUMMARY

The wisdom of the universe is crammed into you.....remember it, because that really is my core message to people who listen to my thoughts. Society's current paradigm will teach you all disease manifest from genes and from within.....what I have learned from physics, taught me this relationship is 100% reversed. All disease manifest from outside us, and our genes have to keep up with the pace of environmental change spatially and temporally. When this ability is lost, diseases manifest. The quantum ecosystem within us suffers a massive mis-timing issues; it proceeds to ruin the space/time relationships built into the proteins at cytochrome 1. These proteins are linked to your retinal melanopsin proteins and your microbiome, to properly yoke nitrogen and oxygen levels with light cycles to tell accurate cellular time. In your future, when you are faced with your own challenging case that no healthcare practitioner can answer.....you'll know where to look for your answer. Look outside yourself in your environment not inside your genome. **Your genome is designed to respond to environmental signals, not control them.** I do this all the time in the ICU and my co workers just marvel at

how a simple ideas can make a huge difference; they often ask how did you know to look there at the monitors, turn them off and open a shade, and stop us from taking vitals signs every hour waking them up? I say why do you persist in beliefs continuously making you rely on technology relying on something humans made and not what the Earth provided naturally? Bad thinking and behaviors leads to sick humans. It is not hard to understand when your perspective changes.



Electron density in tissues is a function of the DHA concentrations. DHA acts as a CIP antenna in our bodies. It collects specific frequency of sunlight to be absorbed and reflected by tissues. DHA is a quantum molecular sorter of solar radiations and it is designed to hand selected proteins it plays well with in your cell membranes. Those proteins have to have specific and special spectral arrays. When the system is working as designed, you make a DC electric current from the atomic set up in your skin and gut. Your cell and its water is a capacitor to hold this charge to distribute and use as the environment dictates. An increase in your DC electric current allows you regenerate and develop strong sleep cycles. A decrease causes it to drop and you get ill first and die sooner. A higher DC current allows you to repel cold easily from your environment in winter and photons from solar radiations in skin and fat, naturally. This is why animals tolerate equatorial sun and polar cold, because they are innately coupled to their quantum ecosystems. It is a function of the redox potential built into their cells. Wild animals are naturally coupled to the natural cycles and humans decouple themselves and fell they need advice on food and environment. All humans need to do is get out of nature's way, but modern humans can't.

The Rx for healthy life is built in and our brain has created that ability to uncouple us from light water and magnetic cycles on Earth.

No human being itself should be considered impaired innately, instead there are environmental shortcomings that cause the impairment. Thus, it is incumbent on the on the clinician to recommend treatment of the environment their patient is in.

People react to an inferior environment. We must stop counseling others on their weakness and begin to equip them with wisdom to help themselves. "Good bye" is a 'good' gift when you wave it, because now I refuse to give bad advice that we gave out freely in the past. Wave it at me and I will show you the door. That is Jack Kruse 101. If you have a problem with that reasoning, I can add nothing to your database. Ignore me at your peril. If you think I might be on to something, stick around because the blog is just warming up.

CITES

My thoughts and ideas over the last decade.