

# PHYSICIAN GUEST BLOG #2: THE INVISIBLE SUN IN THE GULF SOUTH

See one, do one, teach one

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“Sometimes you just have to step off the ledge and grow wings on the way down.”

Dr. Jack Kruse, Dec 2014



I've been a member of Dr. Kruse's site and forum since 2012. I'm not going to rehash all the details of the journey that I have made thus far, suffice to say that I came to Dr. Kruse's website from the Paleo Community, had an amazing first consult with him about my ailing father (it was too late and we both knew it), was blown away by his compassion, thoroughness, and the things that he told me. I had tremendous (unbelievable!) success with his protocols over the first 6 months then suffered a personal thunderstorm and some setbacks from which I have yet to recover entirely – now I know I can. Part of my failures, I now attribute to low frontal lobe dopamine levels

(that sounds so technical... and what a great excuse), a demanding job, and being "too busy" forgetting to pay attention to the details that are so important. My mistakes. I know most of the "why" at this point and I have made substantial progress on the right track since the Kruse Cruise (20# down!) and now rereading some of the early blogs, paying closer attention to the details and looking with an entirely new set of eyes and understanding, I can say that I'm expecting great things to continue and accelerate. I have seen (and am continuing to see) the light as one might say. The purple light even.

I was fortunate to be able to take my family on the Kruse Cruise. It was the first time I'd met Dr. Kruse in person, and I have to say he made quite an impression on my family and myself. He has a personal magnetism (despite a sometimes "salty" choice of words – New York heritage apparently) that is undeniable. He made a tremendous impression on my wife and kids – especially my oldest son, and we are working at home to diligently follow the necessary directions and protocols to continue to optimize our family's health. Things are getting better all the time!

As a practicing physician, when I saw his work the first time I recognized there was something different there, he was someone I needed to pay attention to and learn from. Every day I see the de-evolution of the population, with rapidly increasing rates of cognitive and neuro-degeneration, cardiovascular disease, cancer, autoimmune disease, infectious disease, bone disease, psychiatric disease, etc. Our current compartmentalized medical system has no answers to most of these issues, and nearly every physician I know just puts his / her head down and keeps working as hard as they can to keep with the volume of illness (and let's face it, there is a

financial incentive – not saying there shouldn't be) but very few question “why” and then take the time and expend the effort to search for the answer. They do the procedure or treatment they know how to do (or answer the easy questions), then they move on to the next patient, leaving the hard questions for somebody in another specialty to answer – and the patients rarely get an answer because most physicians in any specialty don't even know what they don't know.

That is what differentiates Dr. Kruse—he is the most curious person I know – and in fact the answers that he has found weave a truth that is both discomfoting and yet provides enormous hope. No matter how inconvenient that truth may be, we can't solve our problems and improve our situations without it, and half-truths can be dangerous when they lead to dogmatism (and “whole lies” – as Dr. Kruse says.) If he hears something he doesn't know about he seems to note it and actually later researches it – always asking “why” and trying to understand the heart of the matter. He has a prodigious (I suspect photographic) memory and an ability to connect dots across multiple seemingly disparate fields. This is what sets him apart.

I recently had the opportunity to travel to New Orleans and spend a little time with Dr. Kruse, both in his clinic and in the French Quarter. I wish I'd had more time and been able to go to the OR with him, as I know another physician member recently did. As a physician, I really wanted to see just how he interacted with patients, how he practiced the type of medicine, within the system and yet outside it, that he is espousing on this blog. I wanted to spend a bit more time questioning him and trying to understand him and what makes him tick, learn more about myself, and of course wanted to hang out in the French Quarter! I am grateful for his

hospitality and the time he spent with me, value incalculable to me. By the very nature of his profession, he knows, as do I, that all our times on this earth are limited, and the gift of your time to another is not to be taken (or given) lightly.



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### **First we CT ....**

NeilBB from the forums, a neurologist by trade although on vacation, was kind enough to act as my “Uber” driver in NOLA and pick me up from the airport. While enroute and between flights to NOLA, I had jokingly texted Dr. Kruse asking if I could CT in the Mississippi river. To my surprise he replied “Neil will take care of it” and in fact Neil did. Shortly after arrival at Louis Armstrong International Airport, Neil took me to a nearby health club whose claim to fame (at least from my perspective) is a 50F pool. It was the smallest pool in the place, but surprisingly well used, although most folks we saw only stopped in for a short (couple minute) dip. While Neil and I lounged in the pool and discussed various salient theories of quantum biology, etc., an elderly lady stepped into the pool and went down the stairs so the water was just above her knees. She watched us for a while and when Neil stepped away, she asked me “how much time do you spend in here?”

I explained that I was just visiting friends but that I was enjoying my time in the cold pool quite a bit, and I’d been in for about 20 minutes. She then explained to me that she was in the pool for her knees. She’d seen an orthopedic surgeon a few months before who had recommended a knee replacement in one of her arthritic knees and wanted her to schedule it. A friend

had suggested that the cold pool might be helpful so she bravely gave it a try. She reported that after 3-4 months of twice weekly sessions in the cold pool the pain in her knees was no longer present. She had recently gone back to the orthopedist who had ordered more x-rays and told her that she didn't need a knee replacement anymore (asked her what she had been doing) and to come back if she had problems in the future. Neil returned and we all talked for a while. We explained that cold was actually very good for her and was likely benefitting far more than just her knees. She was interested and planned to recommend to her friends in similar situations. She spent about 10 minutes standing in the pool talking to us, then did a quick dunk to her neck and then went on her way.

Serendipitous encounter? Quantum entanglement indeed!

Neil, if you're reading this, thanks so much for the warm welcome, the cold CT, and your company!

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## **2 1/2 days with Dr. Jack Kruse**

We spent a morning in one of Dr. Kruse's outlying neurosurgery clinics, seeing new patients that were being evaluated for possible surgery and others that were returning for re-evaluation. I was able to sit in on and participate in a few of the member consults over Skype that he had scheduled for the weekend (thank you to all of you and, nice to meet you!) We spent some time prowling around the French Quarter and I got to see him doing a few impromptu "consults" – it was a

tremendous experience – wish I had them on video! It helped to me to understand some critical points about what we all are learning here and how to apply them, both at work and outside work, and I'm writing this to share some of them with all of you. I'm not going to even try to go into the science here – I'll leave that to Jack's head-splitting blogs and the likely several million words he's written out there about biology and physics, but I will try to give you the basics from a very high level, eschewing too much medical terminology and trying not for detail level accuracy, but directional accuracy!



## **Analogies**

While seeing patients in clinic, Dr. Kruse uses simple but effective analogies to get his points across about the main things he wants his patients to take away from the visit.

- “Look out at that tree. You are like that tree.”

If you plant a tree in great soil and give it plenty of water and sun, does it grow and thrive? Yes. If you plant a tree in great soil, water it, and cover it with a tarp, does it grow? No, it dies! If you cover various parts of your “tree” with “tarps” – clothes, sunscreen, and most importantly, eyes with UV blocking sunglasses or glasses or contact lenses (or implant UV blocking cataract lenses), will you thrive? NO! I

saw him explain it in that way to several patients and watching the looks on their faces was fantastic. They thanked him effusively, and nearly all of them said that nobody had ever told them anything like it. This simple common sense message resonated with people – all of them could relate and intuitively understood it. Half the people in the clinic came in with sunglasses on their heads or hanging from their shirts, and he would frequently start the conversation explaining that was the perfect place for sunglasses but they should never put them over their eyes. Naturally, this drew protests from several, telling him that their eyes were too sensitive or that they watered when exposed to sun.. He would, in turn, explain that after 4-5 days without them, and a lot of blinking (which helps cool the surface of the eye – the cornea – and helps absorb more UV) that their eyes would stop tearing and that they would be able to go without sunglasses.

People are receptive to this message. No healthcare provider they've met has ever taken the time to explain anything like this to them (especially in such an intuitive way). They listen, rapt with attention, and ask questions. Most of them have heard about photosynthesis (one brought it up!) Mostly they've always been cautioned to wear sunglasses, sunscreen and sun resistant clothing (witness the "slip, slop, slap" media campaign, and yet, when the message is explained with simple and intuitive analogies their eyes are opened (literally and figuratively) and they are very grateful. Instead of asking for prescriptions for painkillers (which is oh so common in my work world) they walk away, armed with information and hope, and moving a little closer to the light.

- "What do you mean by battery, doc?"

Think of your brain as a battery. Is that strictly true? No, but it's close enough. What charges the battery? Morning UV light – through your eyes. If your eyes are covered with sunglasses or prescription glasses (which block UV), or contact lenses (which block UV and gleefully advertise as such) or behind artificial UV blocking implant lenses, your battery will never charge. Why is important that your battery charges? Because the battery in the amazing human brain is what synchronizes (think clocks), controls, and charges everything else in your body. Why do people get neuropathy in their feet? The charge in the brain is weak and it can't make it all the way to the peripheral nerves in their feet. Why do most people get lumbar (low) back pain and the first degenerative bony changes in their spine in the lumbar region before anywhere else? Because that part of the spine is farthest from the battery (brain – and it is connected by the anterior and posterior longitudinal ligaments (ALL and PLL) – electric wires.) If the charge in your battery is weak due to wearing sunglasses or spending all day inside behind glass or in a building which blocks UV, or due to having UV artificial lenses implanted in your eye (because of cataracts) then you will get these disease sooner, and worse. What disease you will get will depend on the weakest links (bad mitochondria) in your body and the rest of your environment (epigenetic factors.) Things get even worse when you realize that not only are most of us lacking that critical UV factor, but we are killing off our retinal cells with an excess of blue light from our devices and our indoor light sources.



That battery in your brain is critical to your health. It runs the master time-keeping organ of the body, the Suprachiasmatic Nucleus (SCN). There is a complex system of proteins and enzymes and vitamins and the photoelectric effect that makes all this happen (not to mention DHA in the RPE cells) but most people don't want to know or hear it in that level of detail –

the battery in the brain, charged by the light in the eye, works for most. I have no doubt that, if queried, Dr. Kruse could explain all this in a dizzyingly complex, head-splitting level of detail to any of his patients! Certainly he has on the blog. But they didn't ask and he didn't need to. Just his sincerity and simple analogies seemed to make sense to most and they walked away armed with critical information. Fascinating!

- "Batteries need water"

Most everybody there understood that car batteries need water to function optimally, or actually at all. Even those who don't do their own car maintenance know that you need to add water – the right water – distilled water – to your old style lead-acid automobile battery every once in a while or it gets weak and won't hold a charge (no, we didn't get into the details of new-fangled sealed batteries or Absorbed Glass Mat (AGM) batteries, etc.) He didn't get into the details of exclusion zones (EZ), structured water, or water absorption and proton flow with his patients. Rather, he explained to his patients that batteries need good water to function and that they ought to make sure to drink lots of either spring water or purified (by reverse osmosis (RO)) water to make sure their batteries were in top condition. He didn't talk about carbonated water, but definitely made it clear to his patients that drinking adequate amounts of water is very important to optimal health. By way of example, he is a prodigious water drinker himself probably consuming at least a gallon a day while I was there.

- “Electric wires”

He explains DHA and the need for seafood to his patients by talking about electrical cords. The example he cited was if you scrape the insulation off the electric cord to your refrigerator then the light bulb will flicker as the copper wires inside short out with themselves or something in the environment. DHA is like the electrical tape that one might use to cover the denuded cord and fix the short. Dr. Kruse used this example with a patient with a compressed nerve root and explained that although he could go in and do the surgery to fix the compressed area of the nerve, only the patient, through increased consumption of the readily available local Gulf seafood, could actually put the tape back on the damaged nerve and repair it. This was a simple yet effective example that worked well for that patient and drove home the importance of the Epi-Paleo diet. I learned that although he shares incredible nuances of these things on his blog, in his forums, and on his webinars, he is able to give the most basic description of all these things and answer most people's questions in just a few minutes, and probably hits 85% of what is most important for any given person. Is there more than what he has time to recommend in a 5-10 minute encounter with patients? Of course – we never went into areas of nEMF mitigation, the best water, what brand of coconut oil is best, which spices / herbs to use, the increased oxygen levels around pine trees, redox potential and how to improve it, resveratrol content of chocolate and wine, how often / how much CT (more = better), etc, but I think the bottom line is that if most people can get the high level details right, the rest of the picture can be discussed later. And the biggest thing appears to be AM sunlight, through the unprotected eyeball. And keeping your eyes safe from the blue light we are now bathed in constantly.



It was very exciting for me to see Dr. Kruse use these analogies in action and particularly their effect on patients. It really helped me to understand how he distills down what is a tremendously complicated and seemingly overwhelming volume of material into some simple, actionable, and very effective lessons for his patients. Could he have gone into even more detail – oh yeah he certainly can and we all know it – mind bending detail – but the bottom line is he has figured out an effective way to get most of his message across, quickly, efficiently, succinctly, and in a way that seems to make a significant impact on all the patients we saw that morning. Despite his authoritative tone he comes across to his patients as sincerely interested in their well-being. He looks them in the eye, physically touches and examines them and talks to them. He doesn't chart at a computer in the room, and he reviews each patient's chart and imaging studies before he goes into the room so that while in the room with them he can focus on them and their family members. Nearly all went away exclaiming "Thank you doctor, nobody has ever told me that before!" No prescriptions for narcotics or any pain killers were written.



## **Patients**

We saw a bunch of really interesting patients that day in his clinic. Many were illustrative of the points he makes and the things he talks about. I got to see several biologic

mismatches and I believe I now have a much better understanding of "Quantum Medicine" and a different way to think about the diseases I see and treat everyday. Examples:

- A well-tanned 50ish year old women with a vitamin D level probably in the 20s or less based on the tibial compression test – said she worked outside and used a tanning bed (she was brown!) but ALWAYS wore sunglasses due to sensitive eyes. She complained of chronic neck and musculoskeletal and low back pain. Dr. Kruse explained to me that no matter how much light you get on your skin, if you don't get it through your eyes also you will have a biologic mismatch, which can lead to situations like hers (and a whole lot of Neolithic disease, including skin cancer. He explained to the patient that if her eyes were sensitive to sun that she should blink a lot (which cools the surface of the eye and aids in UV absorption) and that after 4-5 days the photosensitivity would diminish and go away. He is trying to avoid operating on her and would rather see her fix herself (what? A surgeon who tries not to operate? Say it isn't so...)
- We saw a late 50s former offshore oil worker who spent a lot of time around fluorescent lights, both past and present. He came in for low back pain and might well have needed a surgery to fix some of the damage in his low back. Turns out he as also going to get cataract surgery done the following week. After Dr. Kruse discussed some of the options with him, the patient elected to up his seafood intake, concentrate on getting morning sun, and cancel his cataract surgery. He will be seen for re-evaluation.

- We took care of mid 50s gentleman with all the hallmarks of modern neolithic disease – obesity, sleep apnea, type 2 diabetes with neuropathy, coronary artery disease, carpal tunnel syndrome, and cervical (neck) disk disease causing shoulder pain. Come to find out... he's been a night shift worker for years (hmmmm... Sound like a problem?) Of course he had lumbar pain also – chronic pain all over really – but when the “charge in the battery” is really low then the disk disease in the neck starts also. Dr. Kruse recommended morning sun (even after his night shift) a black light for sleeping during the day, seeing if he could get on a day shift, and getting a sleep study and getting treated for his sleep apnea. He will operate on his carpal tunnel and consider a neck operation in the future if that patient doesn't improve.
  
- Saw a nice 60ish year old lady wearing sunglasses even in the clinic. She was there for severe chronic lumbar pain and had a compressed nerve root and desiccated discs on the MRI. She explained that she's always had some back pain, but it had gotten worse in the last 6 months or so. She had her bilateral cataract surgery about 2 months before that and since that time had been told to always wear sunglasses for her sensitive eyes. He gently explained his analogy of the tree to her and she took her sunglasses off. Her eyes lit up and her daughter, who accompanied her there effusively thanked him with the same thing I heard so many times that morning: “Thank you so much, no doctor has ever told me anything like this!” I guess it's not clear to me how much taking the sunglasses off now will help with the UV blocking lens implants, but apparently the cornea and associated peri-orbital tissues can transduce some UV

light also. This is a function of a new light sensor in the eye called neuropsin. There is another one called encephalopsin that appear to tell the retina and brain that light is present to set the metabolic rate in cells deep inside us. The disease in her back is far gone enough to warrant an intervention, but maybe alerting her to this new science could help avert a surgery?

These are just samples of some of the cases we saw. Although they seem hand picked to illustrate certain points, everybody was some variation of this or another. To a spine surgeon that makes a living placing hardware in the spine, every one of these cases would be an opportunity to ply his/her craft (and keep a steady income stream). In fact, what I learned is that Dr. Kruse, while clearly capable of performing those types of surgeries with 25 years of experience, he tries hard to let nature work its magic first. Moreover, in some cases, moving ahead with them surgically would have been considered evidenced based by any physician because things were too far gone to an easy reversal, ironically he tried very hard to counsel his patients about the big things which they could do and might help them avoid surgeries. He works in a different type of practice now than he used to, and understands the set of rules evidence based practice requires, but nonetheless he's working hard in his patient's behalf to give nature a chance to regenerate before tattooing their neck or back.



Many neurosurgical spine procedures involve the placement of various metallic parts into the spine – usually when a disc goes really bad a surgeon will place metal (titanium) pedicle screws above and below the affected level, and connect them

with a rod to help stabilize the spine while a bone graft or something similar helps to fuse the vertebrae in place of the disc. I learned that Dr. Kruse tries his best to avoid placing metal in the spine unless there is no other option. Why? Remember the refrigerator cord? If you put a big metal screw right through the middle of that cord, what happens? You short out both the conductors to each other and usually blow the breaker or cause other problems. Bone healing works via the photoelectric effect and the generation of a DC electric current as Robert O. Becker pointed out 50 years ago. Metal implants can effect normal bone physiology because of this.

Over the years in practice, he observed that routinely putting implants in the spine often leads to degenerative disease at the adjacent levels (above or below) – it is “shorting” out the current and causing problems (job security for spine surgeons I suppose.) He tries to work with non-conductive composite materials when he can to avoid this problem for his patients (PEEK). This is well within the standard of care in neurosurgery and he has the latitude to decide what kind of materials to use when he operates, so he does the best he can to minimize the harm while fixing the damage he finds from years of neglect. Most other neurosurgeons, I know, place a lot more metallic hardware, for a variety of reasons. He tries to avoid that. I also found out this costs him a lot in lost revenue.

Dr. Kruse is relentlessly efficient – he knows the ins and outs of the matrix in which he works. He understands what the issues are in terms of getting folks access to care. He is quick, effective, and thoughtful in how he creates his clinical documentation. He documents important clues to the patient’s primary care physicians he works with, hoping to encourage them to educate themselves when they have to deal with findings that he records. When he doesn’t have to be in the clinic seeing patients he is outside standing in the sun,

glasses off. I found out his real office is his back yard or the local coffee shop where there is abundant sunlight and a patch of grass where he grounds and suns daily. The moment he is finished his job in the clinic or hospital – he leaves to get into the environment. Once again, sans glasses, fleeing to the sunlight as quickly as possible. He eschews the mindless administrative work that plagues physicians in all specialties (a lesson I need to take to heart from him.)

Lest you wonder about the importance of UV light and does he really walk that walk – he's got a big black light (UVA) attached to the dashboard of his car for when he gets called in at night. He also has a blue light visor protector in addition to special glasses he wears to drive at night. He wants to keep the charge in his formidable battery as freshly topped off as possible when he has to be out in blue light at night. He does in fact have black (and infra red) lights in his house and that is preferred over the overhead lights (LED) anytime of day or night. LED light do not come on when he is indoors. During the daytime we avoided turning on the overhead lights in the house, made the most of natural light through the windows, and when inside it was by the light of the black light (part or item number is a Duracell CFL 10028B)



Dr. Kruse has UV lights everywhere indoors.

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## **The Consults**

I want to thank all of the members who allowed me to sit in on their consults that weekend with Dr. Kruse. It was wonderful to “meet” folks over Skype from around the world – Singapore, Canada, Sweden, the United States, etc. I won’t flatter myself by thinking I could add anything to the time you spent with Dr. Kruse, but to me the opportunity to see the commonality of our struggles around the world with similar neolithic disease was priceless. I’m deeply enmeshed in the American medical system and know it well (at least my little part of it). The bottom line here is that we are all suffering from the same maladies, the same hormonal and circadian derangements and degenerative diseases, some more than others depending on their immediate environments, and that there is a common thread of hope and methods of treatment that Dr. Kruse is pioneering. If you can fix your light environment, you can go a long way to optimal for your context. Ultimately, you may have to change your environment in ways ranging from minor to huge (moving closer to the equator) but there is a way to help each and every person. Most can change their immediate environment considerably just by changing their beliefs and behaviors, and for very little cost.



This is the IR light he uses indoors when using UV; caveat: only uses when he got no sun that day

### **In the French Quarter**

The NOLA French Quarter is an awesome place. It bustles with activity and music and it seems that the party never stops! Brass bands are frequently found marching down Bourbon Street celebrating weddings, conventions, birthdays – or I think just

because they can. There are amazing street performers on nearly every corner. The locals seem friendly, unhurried, and happy, and the tourists are really there just to wander around and enjoy the experience and take in the sights.

Jack is one of the friendliest and most extroverted people you will meet if you happen to be on the streets there simultaneously, but he is truly mission-driven. He takes the time to stop and talk to tourists (well, anybody actually, locals too), give directions, and give restaurant, sightseeing and gallery recommendations. He is a local and he acts like one – he wants to show off his great city to all who visit.



He takes his goal of spreading the word about light and optimal health seriously, and nary a conversation did he strike up that eventually the importance of full spectrum sunlight didn't come up. Once he slyly turns the conversation to health and light (usually by mentioning that he is a "brain surgeon" and commenting on their sunglasses) he takes the opportunity to gently but passionately educate about the importance of full spectrum sunlight, both to the skin and especially to the eye. He explains that the only place their sunglasses should be is perched up on their heads or hanging from their shirt (better yet, I think, save your sunglass money and buy another few rounds of oysters or a can of sardines!) One one couple visiting from Seattle he ended up doing tibial compression tests right there on the streets of the French Quarter, demonstrating clinically low Vitamin D levels despite them just having finished a Seattle summer! Both of course had sunglasses on.



He doesn't take everybody down the full quantum pathway, but he does try hard to spread his message, and he does it in a way that is engaging and innocuous (and doesn't seem at all out of place in the somewhat outrageous and raucous French Quarter!), and his personal magnetism is such that most people listen, rapt with attention, ask a lot of questions, and walk away curious and resolved to learn more. A few times we handed out cards and referred people to his blog.

I had the pleasure of meeting and spending time with one his favorite artists, Danny Delancey. Danny is a wonderful soul whose work is all about light and hope, and exudes optimism. Danny, now educated by Jack, frequently tries to educate the folks who look at his work about light, and hands out lots of Jack's cards, referring people to the blog and the forums. You can see some of Danny's work here: <https://www.facebook.com/DeLanceyArt>



If you would like a piece of art that expresses the optimism of walking towards the light, striving for optimal no matter what your circumstance, and will personally connect you to the message, then I would recommend you take a look at Danny's art – better yet go find him in the Quarter. He's got art in 65 countries around the world and his work is absolutely masterful.



This is the painting Danny did for Dr. Kruse office explaining his Quilt document for his blog.

The weekend was made even better by visiting with Neil, Ruben, Jeremy, and lovely Lilly and her husband Robert from Majorca. What a wonderful bunch of friends, a diverse group all brought together by one man, with common interest and purpose. Here is Jeremy Thomley's art

I loved spending time with all of them. Here is Jack and Neil on a balcony waving to Danny below painting Jack's painting for his office.



What a great time it was to roam the byways of the French Quarter with Jack, sans glasses (I can actually see without them! A little fuzzy but very doable), listening to his street corner consults, taking in the sights and sounds, and dining at some of the amazing restaurants I've ever tried. Pretty sure I had some of the best raw and grilled oysters on the planet there (the grilled oysters at Drago's are spectacular!) And, as you can imagine, we would periodically stop at one of the local grocery stores and clean out their supply of carbonated spring water (in glass bottles), but ate very little (who needs it, we were eating the sun I think – was never hungry.) In fact, mostly we ate one great meal per day and needed no more.



I came away from that time understanding more about Dr. Jack Kruse and his mission. He truly cares about spreading the hard-won knowledge he has gained, and does it in a multitude of ways. His blogs can be downright scary for some and require time and persistence to navigate (I'm not saying they're too

hard here, Jack! Just that not all of us have the same horsepower (oyster-power?) between our ears!) However, in person, it is a very different story. He has developed his “pitch” in a way that allows him to share critical and relevant bits of that knowledge in just a few minutes with anybody he meets, and uses simple but effective analogies to do it. He comes across as (and in fact is) sincere, knowledgeable, and compassionate. And more than a bit irreverent. And a whole lot of fun!



He is courageous, not afraid to go against the flawed conventional wisdom and call out the half-truths, and he is at his best as a Socratic method teacher. He asks question after question of his students (the teacher in him arrives when the student shows up), leading them from a superficial to deeper level of understanding, and forcing them to make connections and come up with answers themselves. His command of metaphor, simile, and analogy is formidable. I am certain he’s a very skilled surgeon also (I wish I’d had a chance to see him operate) – but he knows he can touch a lot more lives with his knowledge, his blog, and his forum, than he ever can with his scalpel, and he has taken on that task gleefully, with dogged determination and seemingly endless energy and passion.

## **Personal**

I’ve detailed some of my own personal issues on the blog in the past and won’t dive deeply into the details now. Suffice to say I’ve had tremendous success in the past following Dr.

Kruse's protocols, but had a few setbacks that caused me to slip nearly back to where I was before. Despite sincere attempts to reconnect with that success over the last couple years I haven't quite achieved it for a variety of reasons. I am embarrassed to admit that, although I've read all his blog posts, I haven't always studied, dissected, and cogitated upon them in the detail they deserve. When busy at work or at home, when beset upon by other problems and just "living" I would skim them looking for actionable details. Now when I go back and read them I do so through an entirely different set of eyes (and I have to squint more 'cause I'm outside without my glasses on...) I can see that he always talked about light. He frequently mentioned the importance of light (UV even) but, coming from the "paleosphere," I was constantly looking for actionable details about food and supplements and then CT. Yes, he clearly stated (in the last couple of years anyway) that it really isn't about food, and implied it many times before. Having spent some time with him, having seen some patients with him, I now feel like I have a much better understanding of what he has written and why.

Taken together, his blogs represent a PhD level course in the relatively new field of Quantum Biology and I think more importantly in the yet to be recognized, but critically important, field of Quantum Medicine. They are treasures that need to be read and re-read – each time, something new jumps out and my understanding and retention increases. His blogs deserve to be read actively with pencil and paper in hand, taking notes, drawing diagrams, and looking up unfamiliar concepts and references (at least that is how I learn best.) It is in that way that the information can be internalized. It is true though, as he often says, "You don't need to speak Chinese to like Chinese food." – it isn't necessary to understand every detail of electron spin, the retinohypothalamic tract and RPE, melanopsin, methylation,

biological semi-conduction, quantum tunneling, SIRT1, NAD+/NADPH ratios, triplet oxygen and the EZ water, etc. to be able to apply this information. Simple things, paying attention to the physics that dictate our biology as shaped by nature, understanding what details are important and how to weave them into your life, will get one a long way!

Since returning from the Cruise, and more so this trip to NOLA, I've rearranged my life (and will continue to do so) to live as much as possible on the pathways he has detailed. I take my glasses off all the time when outside (only figured that one out a few blogs back and again – embarrassed to admit that but it's true, and it is making a huge difference) and have tried to unearth the buried sunlight. I make the time to watch the sunrise, and I can barely stand to spend the hours inside on my computer so now I work outside squinting at the screen when possible. For less than two hundred dollars we've got black lights widely spread throughout the house and we're trying to get as much UV indoors as we can also. (By the way, black lights are really cool in the house!) Next to my indoor computer is a reptile light also, and I've got BluTech lenses on order for daytime use when I have to be under artificial lights on non-F.lux'd screens. I wear my blue-blockers at night and will be getting prescription versions. I'm doing more CT than I've done in months and as the seasons change here I've changed my eating habits and patterns accordingly, to the best of my understanding on how to do so – I'm starting to live again in the Ancient cold-adapted pathway, ketogenic and hibernating when possible. I really did pay attention to more sleep that first time around, and I'm starting to do that again. Winter is coming and it is getting colder. A few fall fruits are being harvested here but carbs are going away for a while. My new personal mantra since the Cruise, "DHA, every day" is has served me well. Of course there's more and details matter, but overall I can say I'm looking forward to

eating like a great white shark and living like a polar bear!



I'm seeing results. Weight is coming off easily again. I'm not hungry and I've been able to cut back on eating without any effort. I feel great. My energy levels, ambition, and productivity are improved. My resilience and ability to deal with job stresses has improved considerably. I want to connect more deeply with friends and family. I feel happy and actually, elated, most of the time. I'm looking forward to what lies ahead!



I've always loved nature, and as a teenager and in college I spent most of my free time backpacking, climbing, hiking, mountain biking and just generally outside. Over the last 20 years I have become progressively more disconnected with nature (and more connected to indoor life and technology) and I can feel it as I age. Reconnecting feels great and intuitively and intellectually I know that Dr. Kruse is right – the connection back to that nature and the circadian cycles built into our biology is the most critical factor in health, and that signal is carried to our bodies by that ever present light that we take for granted, and the wrong light at the wrong time we don't perceive may well be the doing the most harm. Those are the some beliefs we must change that Dr. Kruse speaks of. It is a challenge to resynchronize with nature in our modern lives and with all the expectations thereof, but I believe the closer we can get to that the better we will be.

I would be remiss here if I didn't write a paragraph to

express my gratitude for the most important person in my life. I am fortunate to be married to an intelligent, caring, and gorgeous woman who has been more supportive of this ongoing journey than I could have ever hoped, and in more ways than I can count. Although she doesn't have nearly as far to go on the road to optimal as I do, the years of long hours and non-optimal work and home environments (I shudder to think of all those years we had Wi-Fi 24/7 and cordless phones and I insisted on having every light bulb in our ceiling as bright as possible in the house) are starting to wear on her too.

My wife has far more intuition than I, and would rather spend her time barefoot raking leaves in the yard or snorkeling in the ocean than staring at a computer screen. To think that I made fun of her for going barefoot outside when we first met! She recognizes the wisdom and the truth in Dr. Kruse's work and we are working together to make the necessary changes that will help both of us improve our health and that of our family. She, too is a physician, and spends her days taking care of those ravaged by diseases that most of modern medicine really has no answer for, but pills to hand out to alleviate symptoms.

Thank you, wonderful wife, for all of your love and support!



## **Professional**

This is the hard part. I'm Board Certified in Emergency Medicine (EM). I have wonderful partners both locally and

around the country that work hard at all hours of the day and night to take the best care of patients in extremis as possible. I work in an efficient, well-run Emergency Department and we take pride in the “safety net” service that we provide to our community every day. Anybody seriously injured or ill in our area will eventually end up in our ED, and we work hard to make it the best it can be. Emergency Medicine is a specialty with a lot of instant gratification. There may be nothing more instantly gratifying than a great “save” – that thirty- second to ten-minute flurry of activity when you know that you made a real difference in somebody’s life and maybe kept them from dying today. That is by far not most of our patients, but it happens often enough to keep us coming back. Although we may not be so good at managing, preventing, and understanding chronic disease, I’m happy to say we’re pretty good at managing acute problems, serious injuries, and critical illness, at least in those critical hours at which someone is hovering at death’s door.

As exciting and gratifying as EM can be, there is another side to it. As a close knit team working together in a very trying job, outside the range of most people’s experience, witness to horrific things and often great suffering, we often defensively bury our feelings and sometimes develop a dark sense of humor and often cynicism. Imagine the challenge of unsuccessfully working as hard as you can to snatch back a mangled life from the jaws of death, spending time with the grieving family explaining their loved one has perished from their heart attack, stroke, or injuries, then moving to the next room where you must put on a happy face and examine a child with a cold. Then the next patient is one who you’ve seen a dozen times in the last year for their chronic complaint for which you really have no answer, and all the tests are negative – again. All this in less than thirty minutes, played out repeatedly during our shifts. All

physicians and healthcare providers, to one degree or another are tasked with the necessity to put on our professional face and move on to the next one. We build a shell around ourselves and bury our feelings, much as we bury the sunlight by the nature of our 24/7/365 schedules.



We are tasked with seeing and managing patients with chronic problems for which there is no answer other than symptomatic treatment (usually medications for pain and nausea.) These patients often have the same labs and imaging studies ordered over and over again, and eventually, when nothing “objective” turns up, the staff in the ED develops a sense that they are “faking it” or have “secondary gain” or are “drug-seekers.” I believe we attach these labels out of frustration and a defensive and well-buried sense of inadequacy at not having answers (face it, few doctors now really know the “why” of what they are now seeing.) It’s often easier to write off somebody, as being “crazy or drug-seeking” then it is to admit to ourselves we have no idea why they are sick. We need to work hard to prevent such “compassion fatigue” and it takes a large amount of energy and a continuous effort. Although trained in the acute resuscitation of the critically ill and the management of severe injuries, we really don’t know what we don’t know when it comes to why patients have what they now have.

I’ve often wished I could intervene 3 or 5 or 10 years before I see somebody in the ED. If only we could turn some of this chronic illness and neolithic disease around, or at least slow it down, we could save incalculable pain and suffering (not to

mention health care dollars.) I wish I had answers (other than the same pills) for those patients to come in over and over for their abdominal pain or back pain or recurrent headaches, numbness, tingling, dizziness, general malaise, weakness, mental illness, or whatever else we EM docs really don't like taking care of because we don't really have the answers. Since I started actively practicing EM 17 years ago there has been a very notable increase in diabetes, hypertension, cancer, heart disease, dementia, chronic pain, mental illness, weird neurologic complaints, etc. I am now seeing these things more frequently and in a younger population than I did in my residency. A 2 year old in the US was recently diagnosed type 2 DM. This is a real thing happening around us now.

Now it is not uncommon to see a 25 year-old come in on 15 different medications to manage all of these problems, but without a unifying principal that allows one to understand why they suffer from what they do. They might be seeing 3 different doctors and each one just prescribes the medication they know how to prescribe and hopes the patient will feel better enough to move on or find someone else that has the answers. That is not to say that all those physicians aren't well meaning and doing the best they know how to do, but the effect of physics on our biology has largely been and still remains in the blind spot of most medical practice and education.

Can I live and work successfully in this environment? Yes, I do now. But is it Optimal?

I believe the practice of Quantum Medicine will offer both answers and treatments. You can only think that if you'd been able to get the patients aim a little closer to the right

target 10 years before, perhaps today's heart attack, sepsis episode, stroke, dementia, or brain tumor diagnosis might have been prolonged a few years (or decades). This is the promise of what we all are learning here on this site, a unifying theory of health, closer to nature, that will have both answers and ways to help people optimize their lives and improve their well-being.

An old axiom of medical training is **"See one, do one, teach one."** This is basically how residency, which is an apprenticeship in medicine, works. We stand at the side of the more experienced physician (or resident physician) and watch, we get the chance to try the procedure or the intervention ourselves, and we are then expected to pass this knowledge and skill on to the next generation of physicians.

I feel blessed at having had the opportunity stand by at the side of Dr. Kruse and begin to learn the principles of Quantum Medicine from a pioneer in the field. I am under no illusion that I have any expertise in this field, but rather am just beginning my apprenticeship. I know I have lots more study and review to do, much more to learn. I will work hard to internalize and incorporate that knowledge into my practice, hone it, observe the results, adjust it, fine tune it, and strive to be the best physician I can be. I will apply it to myself and my family and friends as best I can. I will learn to look at disease not as just the conventional pathophysiology we all learned in medical school, or give the hand waving "it's your genetics" explanation to patients, but as a combination of physics, epigenetics, environment, and quantum biology. Someday maybe I can carry on the tradition of educating the next generation of physicians and patients about some of the intricacies of this field. It's going to be challenging. I know that.



One of Dr. Kruse's goals is to change medicine, from the grassroots level, from the patient's level, and to change the way physicians view illness and infirmity, and this doctor is going down that pathway.

I've sought additional training in what is known as Anti-Aging or Age Management Medicine. Currently, this is viewed as a bit outside the mainstream of medicine, almost with suspicion by many "conventional" and "mainstream" physicians. I can say that I now view even much of that as just another part of the spectrum of "conventional" medicine (but closer to the truth I think), and the next logical place I must go in my training and practice will be Quantum Medicine and Biology. For now I'll be starting with a conventional Age Management medicine practice and extending my practice in Quantum Medicine (or whatever it ends up being called) as I learn more and more. I want to help change medicine and the way people view their health in a positive way, much as Dr. Kruse does.



Knowing what I know now, seeing what I've seen, I know that I have to do better. I want to work closely with patients and their families to improve and optimize their health now and for the future. I want to learn and study more about Quantum Medicine until I understand the physics behind many of the diseases that we think understand the pathophysiology of, because my intuition, such as it is, tells me that this path closer to the nature that shaped our biology, is the right

one.

Of all the paths I might take, I think it would be the easier of paths to stay where I am, rest on my laurels, so to speak (inasmuch as I have laurels!), and not “rock my boat.” But when I look at the dimly lit path ahead, I see this guy with a purple flashlight waving to me from a different direction, trying to show me another path, a path less traveled but a promising one nonetheless, a path leading towards a beautiful dawn and bright sunny day, and I have a strange compulsion to follow the pathway he illuminates instead...

Someday I will be reciting Longfellow’s words to myself:

“Two roads diverged in a wood, and I –  
I took the one less traveled by,  
And that has made all the difference.”

—

Today, I’m stepping to the edge, facing the rising sun (glasses off), I take a deep breath and gather my courage, and step off. I can already feel the feathers starting to form as I grow my wings....



*With heartfelt gratitude to Dr. Jack Kruse and his lovely wife and daughter for lending his precious time to me. Also to my wonderful wife and children for sparing me (probably happy to see me go and not hear about oysters for one weekend!), and Neil, Rub, Jeremy, Danny, and Lilly for a weekend well spent in New Orleans.*