



THE

FATIGUE

SUPER

CONFERENCE

Circadian rhythms and why they matter

Guest: Jason Prall

Alex: Welcome to The Fatigue Super Conference and for this conversation I'm talking with Jason Prall who has got a fascinating insight into health and wellness. To give his background Jason is a former mechanical engineer turned entrepreneur, filmmaker, health educator and practitioner. Over the last 10 years Jason transitioned from working in the integrative disease care model to a model of health optimisation and lifestyle medicine.

In May of 2018 his independent research experience as a practitioner was used as a basis for the creation of a 9 part documentary film series called 'The Human Longevity Project', which uncovers the complex mechanisms of chronic disease and ageing and the true nature of longevity in our modern world. He's currently working on his next film series that explores the ancient method of healing mind, body and spirit from indigenous cultures around the world.

This is going to be a fascinating one because I think sometimes we can get very caught in on fatigue, how we fix that, how we work with that, how we understand that. What really draws me to Jason and his work is in a sense he's been looking at this from the other flip side of going out there and studying people which have optimised kind of fantastic health, wellbeing and not because their spending their life focusing on trying to be optimised in their wellness but that's the way that their living, so that's some of what we're going to come into.

Jason thank you so much for making the time, great you have you.

Jason: Yeah thanks for being here.

Alex: I'd love to start just by getting a bit more of a sense of you. As I was reading out in your biography you've had a bit of a journey in terms of your own interest and seeking in this area. What inspired you to become fascinated by human longevity?

Jason: Well it really started with my own health issues and things that I was dealing with in my journey, in my 20's and 30's and really not finding answers from the traditional medical community and back then, 15/20 years ago the internet was really not a huge help in this sense. So it was sort of trial and error but eventually I found my way and as the Internet became more of a resource and a tool that really propelled me to discover more and more about

the origins of some of these chronic diseases that we particularly face in the west.

Then I went into the integrative practitioner healthcare model using things like functional medicine, integrative medicine and some of the testing and tools and the theories and the practices and that was a really beneficial training for me and I was able to help a number of people with a lot of things. I did find that it fell short in terms of reaching and resolving some of these really chronic conditions that I ended up working with. Multiple autoimmune conditions, cancers, some of these really difficult things and really what I found was missing was the health component. As you mentioned we get stuck in this disease care model and trying to figure out disease, resolve disease, understand disease and in that process, which I do think is an important part of the process, but we forget about trying to understand health. So what is it that makes us healthy? Where does health come from? Those are important questions and that's really where I started to veer off and this allowed me to look at things from a new perspective.

So I think this is really the focus of my work and really what I enjoy doing is trying to teach people and remind people really, because we all know the things that make us healthy it's really about remembering some of these things, getting back in touch with them and removing the stigmas around some of the aspects of lifestyle that facilitate health as opposed to contributing and leading us towards a path of disease.

Alex: When you were filming 'The Human Longevity Project' I think you visited something like 50 locations in 9 countries, that's kind of a mission of filmmaking and research. I guess I'm curious as to what were some of the key things of those people which were living, not just long lives but healthy long lives, I guess we can all be terrified about is the idea of living to an old age with increasing disability and kind of misery in that process. But the people that you discovered, what were some of those key lessons and insights that you took from that?

Jason: I mean there's a lot there but I think at the end of the day they live in harmony with nature, more so than we do. They live a simpler life, they live a slower life, they live a life of balance, of community of connection of meaning. At the end of the day if you look archetypally, humans are just story and meaning, that's really all we are and what we create. If you just think about that for a little while I think you'll see what I mean and they're stories and meaning tended to be more in harmony and in balance and so their life was more in balance and the way they lived was more in balance. The way that they lived and thought and felt, everything they did had more of a balance and rhythm to it that was more in touch with nature.

And this is what you find in indigenous cultures, this is what you find in much of the rest of the world that is still in touch with that. For us in the West we've removed ourselves from that way of living and we've created a lot of really cool things, we've helped a lot of people, we've raised people out of poverty, we have

saved many, many lives, we have new standards of living, we have more time and ability to create. So there are a lot of good things about the Western way of life but when it comes to disease it does contribute to more of the chronic disease than I think what we see in some of these indigenous cultures.

So it's really just a shift that we've seen over the course of history, we're not dying at birth as much, we're not dying of deadly infectious diseases as much, we're not dying of traumatic injuries as much but we are now dying and suffering in a chronic way more than we ever have before. And now I think what we've seen is that we've reached a peak of this in our civilisation, we have now seen life span start to kind of peak and health span in my opinion has peaked a little while ago and we're now seeing people on drugs and medications and needing assistance at the age of 30 and 40 and 50 like never before.

So we're just not starting to see a shift in things and I think if we want to resolve those chronic issues and bring back a healthier way of living, less suffering, more happiness, more meaning, more purpose, more gratitude, all those things then we've just got to shift our thinking and adopt some of those principles that we see in these indigenous cultures and of cultures that we saw in our Human Longevity film in Okinawa, in Sardinia Italy, in Ikaria Greece, in Costa Rica. We need to adopt some of those, bring those with us and combine those with some of the big, cool things that we've done in the West.

Alex: I really like the way you're talking about it in a sense that there is much which is great about the privileges we have of Western life but as you say there's a kind of sense of increasing disconnection from nature, but I think that's also mirrored by a disconnection from ourselves, right.

Jason: 100%

Alex: We get so used to being defined by what we do, by what we achieve being constant action that I think often it can be hard to know who we are that's not that and I think one of the things that often happens with fatigue, particularly on the more severe end of that spectrum, is people are kind of forced to really ask these questions and in a sense you can no longer be that character where you just define yourself by your accomplishments because you can't achieve anymore.

Just getting through the day and getting out of bed is it's own battle, it forces people I think to really look at these pieces and I know that before we started recording you were talking about some of the differences between what kind of ancient traditions would call the yin and the yang energy. I'd love to open that up a little bit and get your thoughts on that?

Jason: Yeah. You've hit such an important part of the discussion, to me it's actually the entirety of the discussion and we just break it down into parts from there. I'll first state we don't tend to see chronic fatigue in these sort of blue zone or longevity cultures, we don't see it in indigenous cultures to nearly the degree, if at all. In fact sometimes I'd ask the people in Costa Rico or in

Italy, in Sardinia, and I would ask them about cancers, about autoimmune diseases and fatigues and sleep problems and digestive problems and they'd look at me like I'm crazy. They don't have a reference point for some of this stuff.

So it's very fascinating when you ask these people, which doesn't mean it doesn't exist it just means that it's not enough to really be a part of their awareness. But you mentioned it many, many times actually in that lead up questions, we're doing too much. We are, in the West, a culture of doing and we forget to be and so really what I see as the primary fundamental, archetypal problem with chronic fatigue and many other chronic diseases is that it's too much masculine energy, it's too much yang energy, it's too much of the doer. It's not enough of the feminine, of the being, of the relaxing, of the creating and so this is to me what is underlying the entire aspect of these diseases and particularly with someone has chronic fatigue.

We need both and this isn't a male, female thing this is not that at all, this is an archetypal energy. So the yang energy is constantly doing, it is fire, it is masculine, it's going out there constantly doing. You know in terms of the body we can think of this as the mind and the being and the yin is more the heart or the gut even where we operate from a sense of knowing, a sense of feeling. So we're too much in our mind, we're too much doing, we don't rest, we don't listen to our intuition.

The other aspect when you look at the nervous system, the masculine, the yang, the doer is the sympathetic nervous system, this is the fight or flight, this is the thing that saves you. Thank god we have the sympathetic nervous system. Then the yin, or the feminine, would be the parasympathetic, the rest, the digest, the creation, the being, the relaxing. This is really, really important. This is where we have sex right, if you think about creation and the feminine, that's the place we have sex from, this is the place we digest food from, this is the place we recover and repair from. So we don't have the balance in those two states, we are too much in the yang, in the masculine, in the doer, in the sympathetic. We need to balance this out and not only do we need to balance it out we need the polar extremes.

So we need to be fully on and fully off as much as we can, this state of middle ground is not a good place to be. It may seem counter intuitive but we need more stress, we need more hormetic stress, right, the heat and the cold, the sunlight, we need exercise and movement. But we also need to compensate that with the shutting off, shutting down and so we need both of those things, the dark, and that is an important aspect of where we need to be. We're too much in this middle ground. Imagine, just to give you context, I don't know if you remember the Seinfeld episode, for those that do it's a great episode for those that don't I apologise for this example, but Kramer actually has this theory that he was going to sleep 15 minutes every hour or every two hours, and it's a hilarious episode. And imagine that, where you never really fully sleep for a long period of time but you're never really fully awake, you're

constantly in this zombie state. Well that's I think what we're finding ourselves in, we're not really stressing ourselves enough and we're not really relaxed enough.

If you look at the cultures we visited in 'The Human Longevity Project' these people are moving like crazy, they would walk 30 or 40km a day sometimes, they would work their tail off on the farm, herding sheep or whatever it was. They were constantly working and then they were shutting off, sleeping really well, shutting down. Usually you would have a siesta in the middle of the day where they're completely shut down and/or they would have the Sunday where they don't do anything except be with family. So we're not doing enough of the extreme, we're too much in the middle ground, we're constantly going and we're not going hard enough and we're not stopping.

Alex: It seems to be in particularly in cities like London, where there's that real kind of doing, kind of pushing attitude that even the things we do to switch off end up getting hijacked. Like I remember, getting on for 20 years ago, going to yoga classes in London and it would be kind of a full exercise to go and to slow everything down and kind of restore and then I went for a number of years and then 10 years went passed and I didn't go because I was doing the gym or I was swimming or I was doing other kind of forms of exercise. Then one day I was like I really fancy doing some yoga so I went back to this yoga centre that I had gone to a number of years before and the whole thing had changed and the class was like doing an aerobics class and I was like what is this.

Jason: Yes, we have hot yoga, we're bringing weights into yoga now and what I've noticed that is actually kind of cool I think in response to that we're actually seeing something, at least in Southern California pop up quite a bit, which is yin yoga. So they're actually having to redefine yoga because we just pushed it to the extreme and the masculine yang, in the doer mentality too much. I love that you hit that because it's totally odd and ironic that we did that.

Alex: There's this point you were making around having these polars and these extremes, it's fascinating and it makes intuitive sense and it's something I see in my own life, that if I have a day where I work from home and get up and I'm at my desk and I'm busy but I'm not moving my body it's really hard to switch off properly in the evening and sleep well at night. If I go and take some kind of proper exercise or I change up and move then I'm more physically tired and I think often what can happen is that we mental, using a lot of the yang energy, but actually we don't use the physical and so it doesn't switch off. Is that how you would see it in terms of needing to move energy to then be able to have the deeper rest?

Jason: Absolutely and I think we can see this across many systems, right. One of the 98 year old gentlemen in Greece I believe he said when I was young the body was busy and the mind was still, now what I see is the problem is the mind is busy and the body is still. So I thought wow, just brilliance from 98

year old dude. And he's totally correct. So right now entrepreneurs, people like you and I, I mean I don't know about you I struggle with shutting off my mind when it comes to the business, I can't stop thinking about what needs to get done tomorrow so that is my problem. I've got to fix that I've got to find ways, tools, methods to shut that off. Whether that's meditation, whether that's a walking meditation, whether it's a sauna, whether it's having sex, I don't care anything to shut off my mind from that over drive.

So we've got to find those tools, that didn't use to be a problem because a lot of the people were living in rhythm with nature so you couldn't hurry the growth process of the squash, it's like the season dictates that, the weather dictates that. You couldn't worry about the weather, you couldn't worry about the climate, you couldn't worry about the way that the soils are operating, you just had to take action in the moment and move with what nature was providing. So we've now created situations where we're not shutting off so we have to shut off the mind because the mind is constantly going.

But then also as you mentioned we've got to move our bodies, we've got to move them more often. And our bodies really are designed to do that and so I think when we look at working out sometimes we're over doing when we're working out because again if we're constantly in the mind space, constantly doing then sometimes actually working out can be too much. When we think about hormetic stress the idea, and I'm sure you've had people talk about this, the idea with hormetic stress is that there's this certain goldielocks point where if we don't do enough we're not optimised, if we do too much we're not optimised. So there's this nice hump somewhere in the middle where the right amount is optimal for us, and it's different for everybody.

So if we're over stressing ourselves in some fashion then exercise can be too much. So walking is a fantastic way of exercising, moving the body, where it's not too extreme and then if we have the capacity then we can move our bodies a little bit more physically and push ourselves and the idea there with these extremes is to build up resiliency.

You know this, you and I both white guys, if I get too much sun immediately I burn it's just not good. But if I build up a tan with the seasons, right if my skin slowly adapts and becomes more resilient to the sun, then as we get into peak season my skin can tolerate more sun, but it can't right as I'm coming out of winter. So this is a great example, it's the same thing with exercise and lifting weights, if I go in and try to bench press 400lbs it ain't going to work, it's not going to pretty and I'm going to hurt myself. But if I get stronger over time and I build up resilience so that my frame can execute on that then all of a sudden pushing that 400lbs can be beneficial.

But it's different for all of us so we've got to find out sweet spots and we've got to keep pushing ourselves so we can be more resilient but not push ourselves past the limit to where we're causing damage.

Alex: Yes. And I think one of the real challenges that can happen when fatigue starts to get more severe is people's capacity to exercise and move their body

get's increasingly depleted and then people can end up in this state of being tired but wired, they're depleted and there's not the energy and capacity to exercise but then there's this kind of on edge with the nervous system which then makes it very difficult to switch off. I think it's almost an extreme version of that middle ground in a sense that you were talking about where you don't have the on and therefore you don't have the off.

Any thoughts of how people can start to rebalance and start to kind of shift that?

Jason: So yeah, you know, when the system is to that point where you don't have much energy and but you're also really tired and you can't work out and you can't seem to get anywhere, there's something in your system that's depleting you. It could be a virus, it could be your mental and emotional states, could be traumas that have dictated the constant on of the nervous system if you will, it can be a lot of different things, you've got to figure out what is running your system hot. And it can be historically, so this actually could be something in the past that you have not been able to recover from. So for some people you can switch all that off and get results in term of shutting everything down but you haven't been able to build up the recovery process. So that need to happen and it's just like if your house burns down you can't just go and move into your house because you put out the fire, you've got to rebuild, right. So there is a process of rebuilding that you have to respect and this often times, especially with chronic fatigue, has to do with mitochondria. You know mitochondrial biogenesis, creating new mitochondria, mitochondria that doesn't have damaged DNA, mitochondria that's not producing reactive oxygen species or free radicals at exorbitant rates and causing further damage and DNA damage and poor gene regulation, and all these things that happen when you have poor functioning mitochondria. So rebuilding our mitochondria, getting rid of the old, bad functioning mitochondria through autophagy and some of these other cellular mechanisms that takes time. So we have to figure out first where the problems are in our system and try to get some resolution around that so, you know, shutting down those things that are running our system hot. The other aspect I think is really getting more rest. If we look at chronic fatigue, what are we talking about? We're talking about a system that has basically run itself into the ground, it doesn't have the capacity. So the body, sometimes its because the system is not able to function, and often times that is, but a lot of times too we see down regulation of things like your thyroid hormone and some of these other systems that are trying to slow us down on a system level. It's like hey too much, slow the hell down, we're going to down regulate some of this stuff, we're going to produce some more Reverse T3, whatever it is, to give you a sense of hey dude the bodies speaking to you. So if it's telling you to slow down it's probably a good idea to slow down somewhere. You've got to figure out what in your life you've gotta slow down and this is where I think sleep and when it comes to exercise, walking is the only exercise that's been

demonstrated to actually have beneficial effects on longevity over the course of your life.

Alex: Is that right? That's really interesting.

Jason: It's the only one. It doesn't mean that you can't do other things and that they're not beneficial but it is the only one.

Alex: People in those cultures are not going to gyms, right, so there's no research on that I guess.

Jason: Right and why would you really ever need to physically exert yourself over the course of an entire lifetime? There's periods when we're in our 20's and 30's maybe when we really, really thrive on that type of activity but really we are walking machines. So anyway I think that's really what we've got to figure out, where is the system running hot, get some resolution around that and then also find out how we can rebuild, regenerate and repair the system and almost always that is through slowing things down, reducing stimulus, simplifying things, getting better rest and getting better sleep. Those are the methods by which our system rebuilds and regenerates.

Alex: Yes. I'd love to also explore a bit around, we were talking a bit around the yin and the yang energies and obviously both exist within all of us but we have different kinds of ways that we're balancing those but also how about nature's rhythms and how our circadian rhythm is kind of in tune with that. I'd love to hear more of your thoughts around that?

Jason: Yeah circadian rhythm's huge. This is an area of study that now science is really, really digging into in profound ways. In fact the Nobel Prize was given to a man that centred his study around this topic and the idea of circadian rhythm is really just this rhythm of the sun, right, the light cycle. Of course there's light cycle changes, depending on where you are in the globe, you know if you're in the North of in the Southern regions, South Africa or Australia, it's going to be different than Equatorial regions. Equatorial regions tend to have more of a 12 hours on, 12 hours off, but in the polar extremes we have seasonal aspects that really, really change.

But it's really us and our biology synchronising with the rhythms of the sun, with the light and dark cycle, and it's funny because our whole biology's dictated on this cycle. So you know if we're not synchronized with our natural light cycle in our given region then we're a mess. And we all know this, anybody that's ever travelled across time zones knows this. This is what we call jet lag, right. The idea of jet lag is simply the fact that our biology's on, let's say, Los Angeles time and when I fly to London now all of a sudden the light cycles on London time and my biology's like wow, wow hold on this ain't right, what's happened here. And it takes days or weeks to reset that and that's if I'm doing the right things.

So we all inherently experience this idea but the problem that we see now, with technology in particular driving this massive problem, is that we're watching TV at 11pm or midnight, we're on computers or cell phones, and this

artificial light is not only is it not sunlight it is not synchronized with the light cycle and it's driving our biology crazy. And every cell, every organ, is guided by this light cycle, you know. And what we see is the light is primarily the driver of this circadian rhythm, right, so light enters the eyes, a signal is sent to the hypothalamus and the pituitary glands of the brain and that sort of the major cascade that we tend to see. It also occurs on the skin as well, that's another receptor that we see with from light.

But what we find is that all our hormones, all our cellular functions, in fact we have clock genes and period genes, and they're called clock genes and period genes because they are responsive to this circadian rhythm, this light cycle. And those dictate function of our organ systems, of our cellular systems. You know just looking at an organ system, for example, the thyroid has over a thousand genes that get regulated by the light. So they might turn on or turn off depending on the time of day, at 9am 500 and some odd genes relating to the thyroid may turn on and 400 turn off and then at 5pm we see this things shift and switch.

So if we're looking at light cycles and rhythms and daily rhythm's and seasonal rhythm's then we have to recognise that we have to get back in touch with that light cycle. And it has to do with the feeding cycle, when we eat food, when we exercise, all this is dictates how our biology functions at the fundamental level every single day, every second, every part of the seasons, throughout our lives. So it's really, really important.

Alex: Yeah and I guess the further away we get from those rhythms in a sense it has its own stress on the system, right. That if our system it's instinct is towards rest, digest, calm down, switch off and we're pulling in the opposite direction we're causing stress by doing that.

Jason: Absolutely and so when you see somebody, and this is classic, people for a long time and we're starting to get out of the paradigm but we talked about adrenal fatigue and we had Hans Selye and the five stages and all these things about adrenal fatigue and it's more complex than I think everyone originally thought. What we're seeing as people run cortisol tests and the rhythm of cortisol and you find that they're not producing cortisol at 6am, 7am, 8am like you're supposed to. You're supposed to see a huge spike in cortisol in the morning and then it slowly, slowly reduces at night and the idea there is that our bodies are meant to turn on in the morning and during the day and then it's supposed to go to sleep.

But what we see is in inverted cortisol rhythms, in inverted melatonin rhythms, flat lines, we're just not seeing the rhythm and I've done this so many times with clients that if I get them on the circadian rhythm all of a sudden these cycles come back. And so if we're looking at chronic fatigue circadian rhythm is so fundamental to resolving chronic fatigue issues that you can't not look at it. Because at the end of the day that's really what we're talking about, we're talking about the circadian rhythm, we're talking about the day and the night, and it is the yin and the yang. The yang energy is

during the day, this is the sun, this is the light, this is where we do everything, the yin is at night where we repair, where we rest, we have darkness. And if we're not getting those polarisations then we have problems. And so we need our biology to reflect that, we need a really strong cortisol, adrenalin, noradrenalin response in the morning and midday and then we want that to shut down and essentially be non-existent at night, we want melatonin to surge at night. Melatonin is a fundamental hormone that is not only a sleep hormone. This actually is one of the most powerful antioxidants in the system, it turns on a whole host of processes at the cellular level, it is so critical to mitochondrial function, repair, regeneration, that we have to have lots of melatonin. But the idea here is not to just douse ourselves with artificial melatonin supplements but rather produces it internally. It is absolutely critical that we produce a lot of melatonin at the right times so that our systems can shut down, repair, regenerate and so either just on a cellular level, on a system level, on an operational level, and on an experiential level these rhythms are fundamental to our health.

Alex: One of the challenges that can happen in the more severe chronic fatigue cases is, and particularly with younger people that don't have families where the day gets punctuated by certain things, is that you notice that their sleep pattern gets more and more skewed. So there are people where despite the fact they are suffering from severe fatigue they're not sleeping till 3am, 4am, 5am, 5am and then they're sleeping for kind of 8/10 hours from that point and there are some where I've seen literally they get to the point where they're sleeping at 7/8 in the morning and they end up having to almost flip it to kind of try and start again. And it just seems that they just lose any sense of being in rhythm with nature and it has its own kind of stress and its own also increased social isolation that goes with that.

I'm wondering what some of the ways are, you know as you're kind of outlining how important this piece is, what are some of the practical ways that people can start to rebalance and get closer to a more natural rhythm with this?

Jason: Yeah that's a good question and just to pair back on what you mentioned there we see this a lot with shift workers or swing workers or nurses, anybody that's working at night, flight attendants, and all these things. They have a huge increase in chronic fatigue and many other diseases. So it's not to say that this is the sole cause of chronic fatigue but it is a major contributor to and it helps persist chronic fatigue to where you can't recover from it without getting this dialled in.

So part of it is that we have to get back in touch with the very simple aspects. You know they took people that couldn't sleep, these people had legit insomnia, diagnosed full on insomnia, took them out camping for two weeks or something like that, and at the end of two weeks they were all sleeping. This is not rocket science you just got to get back in touch with nature. So

what do we do in the West when we have jobs and kids and school and all these things. First thing is when we get up in the morning we've got to go outside, go outside 30 minutes ideally in the morning, get the light in your eyes. It doesn't have to be sunny, I live in San Diego so the suns always here but I used to live in Seattle and there was nothing but clouds, same things as like London.

Alex: We haven't seen it for six months here (laughs)

Jason: (laughs) I feel you, I really do feel you. But the end of the day it's light, right. When you go outside it's not like it's pitch black you know midnight. So in the morning even though the clouds and the rain and whatever might be there, there is still daylight. So your eyes are very, very sensitive to the natural light and really at the end of the day the sun is so powerful so even through clouds it's very, very bright. So we just need to get outside and get our eyes strewn to that light. That will set our clock, our biology that recognises oh it's morning, turn on these genes, turn on those hormones, turn this off, it's doing all of this. So it is critical that we get that, how many of us actually get outside in the morning, very few. But if you have chronic fatigue, if you've got any chronic disease, it is fundamental that you do this, you make this part of your practice. As soon as you wake up grab your coffee, grab your tea, probably not coffee if you have chronic fatigue I highly recommend against that, but whatever your thing is grab that, your newspaper, your dog, whatever, go outside and get that sun.

The best thing to do is walk for 30 minutes, that is the best thing you could ever do is get up in the morning and go for a walk. The second best thing would just be outside and relax, whether it's yoga, meditation, sit there and read the paper whatever, go outside, critical, critical, critical. That will actually help your sleep at night by you getting that night in the morning first thing. Ideally we get lots of light throughout the day, so windows are great, opening windows are even better, getting outside is the best. But getting that natural light and shutting off of the artificial lights and you're not relying on those so much as a light source for us. So sky lights are beautiful, whatever you can do to get natural light during the day.

Then at night as the sun sets, and again this is going to be different for everybody depending on where you are in the planet, but as the sun sets we start shutting off these artificial lights that we have all around us inside. So this is overhead lights, this is lamps, this is computer screens, this is cell phones, this is TV's. Some of these things we've got to work with past sundown, right, computers in particular become fundamental to a lot of our work. So we can use blue blocking glasses, orange glasses, red glasses, we can use filters on our computer, Flux and some of these other things, Iris, they can shut down the blue spectrum of light because the blue spectrum of light is the most critical when it comes to waking us up.

If you want to wake somebody up use a lot of blue light, if you want to put somebody to sleep this is where the red light is more effective. You can actually see this right there, that's actually a red light device, infrared and red light device. So I'm using that to offset some of the excess blue light that I get. There is a balance with everything and the sun has perfected this balance for life. So at night we want to skew more towards the red or no light, right, and that's really what we want to do.

So those are the key factors and then the other things are abiding by the rhythm of the day. At night we should not be working out, we should not be exercising at 10pm in a gym with artificial light, pushing our systems. This is the time our system's starting to relax and get to sleep. So it can be beneficial to do like a 4pm workout for something but the middle of the day is really where we want so much of our activity. At the beginning we want to ramp into our activity and then we want to ramp out of it. So its just following the rhythms, I mean it's so, so simple if we just listened. But again, you mentioned at the very beginning of this conversation, that we're just not listening to ourselves enough, we're not getting in touch with ourselves, we've lost that connection to ourselves. So getting that connection back is so critical and just listening to our bodies in this regard.

Alex: It strikes me that there's a kind of correlation or a kind of link between being in tune with nature's kind of rhythm and being in tune with our own rhythm. That in a sense the two are kind of related, right, and in a sense the more we're in nature the more that's going to support being in touch with our own emotions, our own bodies, but equally the more we're in touch with our emotions and our bodies the more we're going to be able to feel the contact and the support that nature gives us.

Jason: 100% and we think that we're separate. We think that we've created a separation, we haven't created a separation, we can't be separated from nature we are nature. There's no arguing this point, we are just out of balance, out of rhythm, out of tune with nature. We are it so we're just not playing by the rules and if you don't play by the rules then two things happen. Over time life will actually adapt and modify, this is just what we see, but in the meantime you're gonna have disease, sickness, death etc. and suffering. But you're 100% right the more we get out and into nature and operate by her rules and play her game we just start to see so many beautiful things happen. I've seen people with chronic diseases, eyesight problems, you name it, weight issues, fatigue issues, and they just get in touch with nature more and play by those rules and those laws all of a sudden their diseases start going away. We have more room for creative thought, we have more room for rest and relaxation, this has been scientifically demonstrated we see our nervous system shift, we see brain waves shift, it all shifts once we get out and into nature in a more real and direct sense.

We get in touch with our feelings more, we get out of our mind state more so it's really about bringing this balance I think and that's critical. It doesn't

mean that we can't do things like this where we're having video conferences and chats and summits and these are beautiful things and in fact a lot of these conferences the reason that I really, really love them is because it gets rid of some of the ignorance. But we have to also remember that as beautiful as these summits are don't just sit here and consume them, don't just operate these things in your mind, you've got to put these things in action and start to embody these things. Be the change. And when you do that, because this is getting rid of ignorance but we have to put it into action, and sometimes action is actually non action, it's a state of being and stopping so that's really, really important.

Alex: One of the things that we often say is that people which are achievers and driven it actually takes a lot more discipline to stop than it does just to keep on going even when one feels terrible and one feels crap, right.

Jason: This is the big life lesson for me, in fact if you look at the Ayurvedic and Chinese medicine I am actually the triple fire, I am just like go, go, go, my body, my system, my whole biology is all fire, fire energy, which means I have excess inflammation if I don't slow down. And because of the traumas I experienced in my development and my childhood I actually learnt to do and to perform and to execute and to succeed as a way to get love, to get all my needs met. And so as I understood my own traumas and as I understood my own patterns and my personality that developed from those traumas, and my natural state of fire, all of a sudden it starts to make sense and my big balancing act is to slow the heck down, to quiet things down. To slow down and this means shutting things off, less notifications on my phone, deleting things, getting on social media less, getting out into nature more, trusting more, doing more yin yoga, walking more.

Even though my natural tendency is to work my tail off, go to the gym, do interval training, like I love pushing myself, I really, really do, that is my natural state, that is my fire energy coming out. But if I do that too much I'm going to burn myself to the ground in every sense of the word and so there becomes this balancing act and as I become more in touch with myself and as I get to know myself more and listen to myself more, I start to hear these things coming through, slow down, relax, take a nap, go for a walk, get out in nature, go into the ocean, ground yourself. It's all these sort of yin, feminine slow the hell down type of things and this is the dormant aspect of most of the western culture just I happen to exacerbate it because of my traumas and my natural system energy.

Alex: Yes. One of the challenges that we had in the early years of The Optimum Health Clinic was part of my recovery from chronic fatigue had been this very yang attitude of I will figure this out, I will conquer this and reading hundreds of books and even when I was doing things to calm my system I was 'doing' things to calm my system.

One of the things as we were talking about the circadian rhythms and being in rhythm it struck me that for those which are more comfortable in doing it's

going to, as you were saying, consume information or cut things out of their diet or take supplements than it is going to be to go and sit outside and have sunlight first thing in the morning. Or to go for a gentle walk where they're much more likely to want to go and push themselves and then spend three days recovering from the process.

Because I was going to ask you around what you've kind of learnt from these cultures that you've studied in the role of trauma and emotion, you were just touching from it from your own kind of experience, of in those places and some of these fascinating people that you've spoken to, I'm guessing some ways they probably are exposed to less traumatic things but there are still natural disasters and there are still bereavements and crisis and what do you see supports them in either not being traumatised in the first place or digesting and processing difficult life events more effectively?

Jason: Yeah I think there's three main components that we need to focus on when it comes to our own disease, our own issues. One is the ignorance, so when you don't know something you don't know something and that's a problem. When you don't know you are doing something bad that's a problem. The other one is the environment, the environment that you're in actually dictates so much and the other aspect I think is mind and this is where trauma comes into play. Personalities, our safety mechanisms, these patterns that we develop because of trauma that keep us safe and god I'm so thankful that we have these, right. I'm so grateful for my patterns because they saved me, right, my whole life, and what's cool is once you resolve the trauma and you get an understanding around trauma they become your greatest gifts. Like for somebody like you, the doer, when you're in pattern it can be a problem because it's leading the way and it can be driving the process, but when it's in balance, when you have it in your back pocket you can pull out the doer and you've got to get something done oh my god what a gift. So it's really, really beautiful but when we see these cultures that we visited they certainly don't have as much trauma and the reason is they have more connection. They have more family connection, so at the root of childhood which is where almost all trauma is really happening, is between 0 and 5 or 7 or so, and that's where so many things happen. They have so much better a connection and the family units are stronger and the community is stronger that they have less trauma in that developmental sense.

But you're absolutely right they do have traumas in their life and because they have better connections, better attachment systems, better community support, they have better ways to deal with it and understand it. So it's really about learning what the traumas are, how they're affecting you in terms of your personality and your patterns and then working to undo that or balance that. So they don't deal much with that type of stuff but because they have stronger connections and attachment systems they're systems able to naturally calm down and not get into pattern as much.

So trauma in my mind is probably the most fundamental and critical aspect in the West that we have to focus on when it comes to all disease. It dictates the constant state of our nervous system, the constant state of the messages that we're sending to our biology. We get into Bruce Lipton's work and the 'Biology of Belief' and we talk about the belief systems and the stories and the meanings that we attach to things. My dad left therefore blah, this is a story that I'm running in the background, in the subconscious, constantly until I understand it and get that resolved and get that balanced. So until we get to those beliefs systems and those stories and those meanings that are caused by traumas and things that are indoctrinated within us then we're going to have these programmes running in the background that are going to be disrupting our biology in a way that's actually brilliantly designed but it's out of balance, so we have to get that back into balance.

So it's not that it's a mistake, it's not that it's a faulty programme, the programme's actually running perfectly the programme's just designed to save you and constantly be in this masculine, yang, sympathetic overdrive and this is the adrenalin, this is the cortisol. So all the things that we're talking about, this is not a biology problem this is a belief system problem, a subconscious problem. So the trauma has really caused the underlying foundational energies to manifest and then that manifests in biological function. So we can't look at biological function and say that's the problem, no that's the response to the problem. The problem is the belief system, the subconscious, the mind space, that's what we've got to fix when it comes to trauma. You can't undo the trauma, the trauma has been done, right, so we have to fix the belief systems in the mind around that trauma.

Alex: And I guess also one of the things I think is very important in digesting trauma is emotional comfort and support. To be able to talk about something which was difficult and that be met in a loving kind gentle way. There's a kind of healing, soothing, kind of impact with that and I suppose I'm kind of imagining in these indigenous cultures that there's a sense that there's a lot more community, there's a lot more talking about things and shared experience which has it's own healing impact as opposed to in a doing, yang, pushing kind of way.

It's like something difficult happens, we feel some impact but we feel unloved so we think the solution is to go and get a promotion at work or go and drive ourselves to achieve or go and lose weight so we become more loveable. So we think there's something we have to do to get the love, which is what's needed to resolve, but then we're just getting further away from it.

Jason: Absolutely, that's the perverted masculine yang energy that's there to save us because we're unable to cope with, deal with and process the hurt, the emotion that's caused by whatever event it is. So if we're sexually abused at four years old, I mean for crying out loud a four year olds not going to know how to deal with that. A four year old does not have the tools to emotionally process that because what we're talking about is a system. We're talking

about an energetic system, an emotional system so it can't, it doesn't have the tools to cope with that, to deal with that and to process that in a healthy way so it develops personality. It develops a pattern and that pattern becomes a great gift but it is there and it is there to circumvent, to avoid the thing that they were unable to process.

So the thing that they were unable to process, the process never goes away, it's still in the mind space, it's still in the system and it just has not been digested, it has not been processed. So this is what we need, we need people, we need an environment, that are able to assist us because we never learned how to process that emotion. Now if you had a healthy childhood, I mean find somebody that does.

Alex: (laughs) I'd love to meet them.

Jason: Yeah I haven't met them yet. I think this is part of the process of spiritual development and consciousness evolving if you will, awareness growing is going through these things. But if you were to hypothetically have somebody that had a perfectly healthy childhood and that developed all these amazing systems that were able to deal with all this stuff then yeah when something happens at 22 their like oh yeah I've got a system for that, I know how to deal with that. Boom processing it, digesting it, then it's not a problem, we clear it through the system but most of us have these things happen to us and we don't have the systems and the tools to be able to deal with them and they get stuck.

So we develop all these other tools and systems and parts and pieces to deal with anything as we move through life. So again those become our great tools so we don't lose them, that's the beautiful part, we just have to go back and find a way to process these things and that's where environment and other people really can help us do that. And other tools too, things like meditation over time, and these things may take lifetimes to be honest, if I'm really serious about some of these real deep emotional traumatic wounds.

Sometimes it may take 40 years of meditation and work to draw these in, sometimes it may take two. But we do have the self-healing tools.

But again think about meditation, I mean we're talking about slowing down, it's all the stuff we've been talking about so you can't resolve those traumas by doing, you just can't. Especially if it's the doer that comes on that is the part of you that saved you. If it's the thing that's in response to the trauma then you can't turn that on and resolve the trauma. You've actually got to turn that thing off and learn how to process whatever emotion, whatever issue we were unable to deal with is.

So we have to have support systems and I'm seeing that more and more and we have more tools for that. We have things like EMDR, we have hypnotherapy, we have cranial sacral therapy, we have family constellation, we have neurofeedback, we have plant medicines that are coming about, so many tools coming online for these things, partially because they are such a huge problem in the West.

Alex: I'm mindful of time, I could talk all day about this. I want people to find out more about your work but perhaps as part of that give us a kind of tease around the latest docu series you're working on as well.

Jason: This is going to be amazing, I'm super, super excited about this docu series. We've already been to Nepal, it's taking an Anthony Bourdain 'Parts Unknown' style. So I'm sort of the subject going and exploring these ancient methods of healing mind, body, spirit and so we went deep into the Himalayas at 10,000/12,000ft, met up with Buddhist bone healers and done amazing healing methods exploring those things. We're going to be going to West Africa to be working with the Sharman's of West Africa and exploring plant medicines like iboga and other amazing healing tools that the ancient shamanic practitioners use in West Africa. We'll be in Peru in the Andes Mountains with wachuma, which is a San Pedro type of cactus and they do egg healing and all kinds of other healing techniques and tools. We'll be working with the native American tribes hopefully, looking at sweat lodges and vision quests and other tools that they use for exploring these very things, these things like traumas, these things that we're dealing with in the west. These archetypal energy systems, how to find balance, how to get in touch with nature.

What they work with in indigenous cultures is they work with balance they work with nature. They learn from nature the secrets of our biology, of the way we are. When you look at things like Ayurveda, we'll be working with the Ayurvedic practitioners, yoga in India, so we're going to be going there, it's the same thing they're working with balance. So how does nature operate, what are nature's rules, let's play by those rules. So we're going to Russia to work with some of the Sharman's in Russia.

So I'm super excited about this, it's going to be a film series that explores these indigenous and ancient cultures and what's cool is that if you look at a lot of the prophecies in these cultures they're actually pointing to this period of time as a time of sort of rebirth. There are all kinds of stories about the concho and the Eagle that ate fire, the rainbow warriors, all these different myths and prophecies about this time in humanity where we are coming together. The indigenous, the feminine, the ancient ways, combining with the West and breathing this new form of humanity, this golden age where all these problems that we have that we see right now become non-existent.

So it's really cool to think that, that might be the case, that we are in that period where this starts to merge, this starts to happen and I'm hopeful and I'm excited that that's exactly what is happening because it's what I see. We can all look and look at the world through our own lenses but that's what I see when I look at things.

Alex: Yeah and what a fascinating to go deeper rather than just getting books and reading research papers to actually go there and meet the people because I'm sure you get a different depth of insight and different nuance on that insight by actually hearing it from those people.

Jason: Absolutely. They have their own way of thinking about this, which isn't to say it's right or wrong or better or worse than the West, but what if we try to understand that perspective and their tool and their essence of how they look at these things and we combine that with the Western model. To me this is the beautiful aspect of what we can do and to me that can amalgamate into a new form of understanding, particularly because I don't think you can fully use those tools in the West. In other words you live in New York City or London, sorry that's a different environment than the indigenous cultures. You cannot use only their tools and operate successfully in a place like New York and London you have to use other tools as well and I think if we can borrow from them and also understand the way we do things and operate in a new way I think that's how we succeed in a Western world.

Alex: That's very, very cool. That's a preview of things to come, for people that want to find out more about your work at this point in time where's the best place to go to do that?

Jason: Yeah they can find us at humanlongevityfilm.com, we're actually going to be re-launching our film series, actually for the last time we're going to be making it free and available for everybody in June. So they can watch our whole series, it includes probably many people that you have in this series. Ari Whitten I'm sure is part of this, he's a fatigue guy, Niki Gratrix is involved, so there's lots of really amazing experts that cover a ton of topics on mitochondria, on the microbiota and trauma and community and circadian rhythms and hermetic stress and all the things basically that chronic fatigue is really involved with. So we're going to be launching that again in June, they can go to humanlongevityfilm.com to sign up for that and we'll send them notifications of when we do that.

And again it's the last time we're going to be showing that and it is free so we want to make it available for as many people as possible because we find that it really is important for the way the West is operating and so that's really what we're focusing on right now and we got more things to come as you mentioned. So we'll focus on that in the back half of the year.

Alex: Awesome, very cool. Jason thank you so much I've really enjoyed this conversation I really appreciate your time.

Jason: No thank you for having me, it's always a pleasure.