Dave Aprey (00:00:00):

You are listening to the Human Upgrade, which Dave Asprey. This is an amazing episode about to happen. I'm down here in Costa Rica at a place called RMI with one of the luminaries in the field of aging. Someone who's practiced for 40 years and someone who was a founder of the American Academy of Anti-Aging Medicine a very long time ago. People say, Dave, how'd you get to be such a good biohacker? Because in my mid twenties I was learning longevity from guys like Dr. Vince gpa. And when you work with someone who's just spent decades on this, you realize what's possible. I had the great honor of learning from my elders when I was young, and I've had so many good conversations with Vince that I want to share some new information with you. I'm looking kind of beat up right now. I've got, I just had, I dunno, my 15th IV or something.

(00:01:00):

This week I've had my central aging clock reset in a brand new, groundbreaking kind of longevity technology. And I'm going to walk you through what I just did. And for years people have said, because I don't read the books, longevity is a game for wealthy people. And I've been saying, no, the price keeps coming down. It keeps coming down. And I've done a few episodes over the past few years where I spent about a hundred thousand dollars on just getting stem cells in certain parts of my body. And what I just did this week is unbelievable because it's way less than half the price and so much more potency and so much more longevity. And this is groundbreaking. So my expectation is that every couple of years, the potency and the price comes down. It's just like computer chips. If you're a nerd, you might've heard of Moore's Law and says every 18 months the speed or the density of processors, not the speed, but the density doubles. We're doing this with longevity right now, and Vince is an absolute leader in the field. Dr. Vince Jam Baba, welcome to the Human upgrade.

Dr. Vincent Giampapa (00:02:13):

Dave, it's my pleasure being here with you. And as you said, we've had some multiple other conversations about where this whole new specialty of medicine is going, and it's just a pleasure today to share with you some of my thoughts. And I'm really glad to have you here as our guest and experience one of these new amazing technologies.

Dave Aprey (00:02:33):

It's hard to know where to start with you, but I want people to know a little bit about your background. There are some names, people who've just recently written books. In fact, one guy wrote a book that says You can't extend human life. And he charges a quarter million dollars to tell people that they're just going to die at their normal age. And I scratch my head at that when I look at, you've written five books, right? Yes, yes. And what was the most recent one?

Dr. Vincent Giampapa (00:02:58):

Well, the most recent one is actually still in its final stages of being released. And that's all about what we're going to talk about today.

Dave Aprey (00:03:07):

Oh, no kidding. Alright, so

Dr. Vincent Giampapa (00:03:08):

That'll be out, I would say within six months. But the most recent one was an upgrade of the textbook Free aging physicians or people who want to practice anti-aging medicine. So that's the basic principles and practice of the anti-aging medicine.

Dave Aprey (00:03:23):

So you're teaching doctors how to do what you've been working on for 40 years, which is

Dr. Vincent Giampapa (00:03:27):

I want the information that I know to be available to as many other physicians who really want to do something that changes the model of medicine from a symptom treatment model to a preventive model. And it's really about how do we keep all of us healthier, more functioning longer as we grow older?

Dave Aprey (00:03:47):

Well, there are a lot of physicians, especially functional docs, longevity docs and healthcare providers who listen to the show and tons of people like me who just want to feel better, live longer, just show up all the way, and this probably isn't where I would've started, but cognitive enhancement is so in my mind, integrated with longevity. I've always been putting those as two pillars of biohacking. How do I live longer? I make my brain work better. And of course my body. What do you take every morning to make your brain work better?

Dr. Vincent Giampapa (00:04:21):

Well, I have a personal protocol actually based on a new version of MRIs that actually could look at how your brain is aging. And those new MRIs are actually put into a new software that literally can look at every segment of your brain. Wow. And actually tell you what your neurotransmitter levels are, what your SOD levels, your glutathione peroxidase levels, where inflammation is more prominent in certain regions of the brain. And so based on this whole new diagnostic way of looking at your brain in three dimensions and its function, there's for instance, there's supplements we use from prodrome sciences. One is a special form of curcumin, which decreases the brain inflammation. Another one is just designed to help enhance your glial cells. And another one is to help enhance different other portions of the brain.

Dave Aprey (00:05:17):

These are called plasm allergens, right?

Dr. Vincent Giampapa (00:05:19):

Plasm, allergen plasm.

Dave Aprey (00:05:20):

I always say that I take some of those as well. You have an enhancement stack that's more, more neutropic focus.

Dr. Vincent Giampapa (00:05:28):

So from the neutropic point of view, that's always been a tremendous area of interest for me. So I use a stack with n vigil or armodafinil at a lower dose, usually around 75 milligrams. I use centrif oxy, and I use

paracetam or no tro, no centine helps with memory recall. But piracetam helps with left to right brain hemisphere transfer. So that actually enhances your creativity. Now in vigil. It helps with in general multiple types of memory, short, long-term memory, but also reaction time, balance, and helps with both. Again, together with this cognitive enhancement stack, you see multiple aspects of memory enhancement along with creativity. So to me, the secret here is to be at the top of your game so you can absorb all the information, but still be creative and see how those new pieces of information fit together.

Dave Aprey (00:06:29):

How old are you?

Dr. Vincent Giampapa (00:06:31):

My age is kind of actually like my cell number. It's unlisted, but for you, I will admit it, I'm going to be 74.

Dave Aprey (00:06:40):

So you are the healthiest looking, most dialed in person over 70 I've ever

Dr. Vincent Giampapa (00:06:48):

Met. Well, thank you. That's a big conflict coming from you.

Dave Aprey (00:06:51):

And I take a similar stack of nootropics in the morning. I use Modafinil, which is the grandfather of N Vigil, which you talked about, and we were just talking, maybe I'll try and swap. I used to use Centro ine, but I tried it a long time ago when I was younger and it was too much for me, but I feel like I should be back on it. It also is a potent brain antiaging thing. I use a cousin of poam called Aniracetam, and I like that one because it's also got memory IO enhancement, and people say, Dave, how do you remember all this stuff? I've been doping for 20 years on memory enhancers. It kind of works and it also protects the brain. So we're both making our brains last longer that way. But those are tactical things compared to the aging things we can do.

Dr. Vincent Giampapa (00:07:36):

But I want to mention one thing that you taught me. This was back in Dubai, seven, eight, dihydroxy flail.

Dave Aprey (00:07:43):

I love this

Dr. Vincent Giampapa (00:07:44):

One. So that enhances BDNF. That is something I forgot to mention that since I met you a couple of years ago there, that's been part of the stack. Holly.

Dave Aprey (00:07:54):

This is a beautiful supplement, D hydroxy flav bone. It's something that does similar to what psychedelics do in terms of BD NF, but it doesn't make you trip, sadly.

(00:08:06):

Now that's just to get how is it that I'm sitting here with a guy who's for 40 years been practicing, who just is at the cutting edge of everything. We did some procedures this week, and I'm going to ground listeners in the type of stuff I've done before. So I used to, in the US it was about a hundred thousand procedure actually helped to co-develop it called a six 10 stem cell whole body makeover or something like that. But it was brutal, like a week of feeling like you got hit by a truck. I will never forget the feeling of having a hammer going into my iliac crest in my hip and that sound as they're getting into the bone marrow. Then that twice, one time I had a seizure, it sucked. So

Dr. Vincent Giampapa (00:08:56):

Not a happy experience

Dave Aprey (00:08:57):

When I came down here to your clinic in Costa Rica, guys, Costa Rica is a three hour flight from the US and it's so easy to get to. But instead of doing that, you had me take some pharmaceuticals for a few weeks before I came down, and then you just took the same stem cells out of my blood without having to penetrate my skeletal system.

Dr. Vincent Giampapa (00:09:19):

Exactly. Okay. So what you had done is what we call our procedures called it's a treatment. You're really first anti-aging treatment, but we also call it your bio insurance program. So why do we call it bio insurance? Is is we're able to collect the three most important types of stem cells that adults have that enhance, that are responsible for maintaining your immune function, the repair and maintenance of your blood vessels and your regenerative component so that your organ skin, muscle brains even and bone tissue, all can repair the damage that's occurring during the general aging process that occurs day to day. So this technique is unique and it uses an FDA approved compounds for over 40 years called Neupogen or GCSF. Now, that is a unique compound because it's used for the last 40 plus years for people who have to have their bone marrow ablated because they have cancer, then they get their stem cells collected prior to that so they can then get them infused back after their cancer treatment and grow a new immune system. Now, 15 years ago, I started to do that as an elective wellness procedure, but in the US you can't do that as a preventive thing. It's legal in the US to collect it store, but you can't get your cells back for preventive wellness reasons. Now that is kind of a little bit of an oxymoron, right?

Dave Aprey (00:10:48):

It's almost like someone thinks that they have any say over what I do with my own cells. They're wrong.

Dr. Vincent Giampapa (00:10:54):

Listen, I happen to a hundred percent agree with you, which is one of the reasons we're here in Costa Rica.

Dave Aprey (00:10:59):

Well, there's so many reasons that I'm blown away by what I've experienced this week because having fat taken out for getting stem cells is also really painful. And usually I get muscle cramps. One of my companies is called Wasabi method. We have this new form of pressure wave that I have to do that where I've had the fat taken out to get my muscles to relax again. So violating your bones and your fat to get stem cells is annoying and painful and expensive. So your procedure for that is better. And if you're listening to this and you're under 45, you can bank your cells when they still have some powers

that you lose after about 45, and then you have those cells for the rest of your life. So I've had mine banked unfortunately after I was 45. I have some of my fat cells banked from before I was 45, I think. And what's happening now though is you come down here, you get that done and you can do everything else you can think of, and we're going to go through all the stuff I did, but we're right on the edge of being able to edit our own stem cells. Tell me about that.

Dr. Vincent Giampapa (00:12:13):

Yes. So my original focus was to be able to collect and store stem cells when we are optimally healthy. So I have this reservoir of a regenerative potential in order to use as we grew older, and I've had my children's stem cells collected in their early twenties, and believe it or not, my son's now 40. He's starting to get those 20-year-old stem cells back so that he doesn't collect the damage that we have as we have grown older. But the whole secret here is that those stem cells that we've collected, which are the three major types of stem cells. Now when you collect fat, by the way, you only get mesenchymal stem cells when we collect from the blood or the bone marrow, which we get autopoietic, endothelial, progenitors for our blood vessels, and then we get the mesenchymal stem cells also. So why would we want to have to just traumatize our bodies to get just one type when we get all three types?

Dave Aprey (00:13:12):

I am planning to never have my fat or bone marrow taken again. I don't need to do that anymore because of the work that you've done here,

Dr. Vincent Giampapa (00:13:21):

But you don't have any fat left anyway.

Dave Aprey (00:13:23):

It's actually a problem. No joke. That's a good problem. Yeah, when we measured my body fat at the beginning of the procedures, I was at 4.8%, which was a low, and I probably need to put some fat on any techniques for that.

Dr. Vincent Giampapa (00:13:37):

You know what? I think where you are now is where you ought a step.

Dave Aprey (00:13:41):

So you mentioned there's three kinds of stem cells. Yes. Give me one sentence about each one and why we

Dr. Vincent Giampapa (00:13:46):

Care. Sure. Now, hematopoietic stem cells form the basis of our immune system, which is the most important component of that is your NK cells, which are really what protects you against cancer bacteria, and even senescent cells, which we'll talk about in a bit. Then there's the endothelial progenitors, which are what we need to maintain or grow new blood vessels as they perhaps get damaged or occluded. And lastly, there's the mesenchymal stem cells that are the regenerative cells that conform muscle, bone, cartilage, and even brain tissue. So keep in mind, you're born with a fixed number of stem cells and everybody's a little different, but once you hit 40, you lose both the number and function of those stem cells. So there's no wonder why we start to get more infections or we have

poor blood flow to our brain or our organs, or we can't regenerate those organs or we lose cognition. So it's directly related to the aging process. So this is kind of a new way of looking at things. It's been said that people who look at everything that everyone else has seen and don't see something different are really not looking hard enough.

Dave Aprey (00:14:54):

Wow. It is a new day for that because you can add cells back in, and I've been working on adding mine back in. It's just been a traumatizing and very expensive process, and the fact that you can just come down, get 'em collected and stored, and we're right at the edge of being able to edit those cells or upgrade them so that you can make them younger or even give them some special powers. This has been on my list of things for 20 years. What's coming? Well, a

Dr. Vincent Giampapa (00:15:25):

Lot of this might sound a little bit like sci-fi stuff or the born identity stuff, because they act. The last Born identity movie was talking about exactly what we're now at the brink of being able to do. So let's talk about that. So right now, I think the focus in the research, a component of stem cells has to do with reprogramming. That means taking the stem cells we've collected which have a certain gene activity profile and resetting them back to a 30-year-old or a 20-year-old. Now that sounds like, well, that's so far out. No, it's not. That's been done with the Yamanaka factors. That's been done with a whole host of things, and recently we've actually been able to do that with certain medications that have been FDA approved for 40 years. So we're at the verge of now actually starting clinical trials to document the safety and efficacy of that.

Dave Aprey (00:16:21):

In fact, I'm joining that clinical trial. Shocking. Yes,

Dr. Vincent Giampapa (00:16:23):

You are. But let me just tell you the other thing. In 2016, we looked at this model called hetero chronic parabiosis, where you sold the mice together, the old one and the young. Yeah, I wrote

Dave Aprey (00:16:34):

About that in Superhuman Longevity book. Right?

Dr. Vincent Giampapa (00:16:37):

Exactly. So what goes from the young mouse to the old mouse that makes that old mouse act and look and biologically be younger are specific compounds, which we now know what they are. Wow. So in 2016, I decided to try that not with sewing two hum together, but putting young and old stem cells together.

Dave Aprey (00:17:00):

Okay.

Dr. Vincent Giampapa (00:17:00):

So that was a technique we did at Rutgers University. And for the first time, we were literally able to reverse not only the gene activity, but the proteins and how those cells reacted virtually identical to the

young cells. And for the first time, we reprogrammed 70 and 80-year-old human stem cells back to 20 30-year-old stem

Dave Aprey (00:17:22):

Cells. Does that mean I can release the college student change under my bed for blood

Dr. Vincent Giampapa (00:17:26):

Maybe. Yeah, get rid of that stuff. There's easier ways to do it. The technology. Listen, I want to make this comment, and this probably should be something we repeat every three months. What we know about aging and related technologies doubles. So what does that mean three years from now for you and I? It'll be 6,000 times more information than we have.

Dave Aprey (00:17:46):

And it comes down to just knowing what to do. And at this point, the evidence is in stem cells are important, but in the US access is so limited and people are getting cells from eight different random women. It's not their cells. When I come down here, I like it because I can use my own cells or the only cells from outside my body I'm willing to use is what's called cultured umbilical cells. Correct. And that means that they take one line of cells that's very carefully tested and then they grow it versus just taking random people's cells because there are risks from getting lots of cells from lots of people in the us. They do it that way because of weird legal stuff, but it's, I think, not very safe. And I'm all over doing this. I'm down here in Costa Rica because, well, you can do much more.

(00:18:37):

So we've got stem cells. We also have what I call stem cell poop exosomes. So stem cells secrete anti-aging, anti-inflammation factors, and you can take those directly. So what we did, this is something I want to share with you because I know a lot of people reach out and say, Dave, I want to do what you're doing, and you can go to dave asprey.com/clock and you can sign up to get information about this stuff. And what we did is really groundbreaking because your team used focused ultrasound to open up specific parts of my blood brain barrier, and then I had stem cell and exosome infusions to reset my hypothalamus. Why would I want to do that?

Dr. Vincent Giampapa (00:19:18):

Yeah. So we're at a pivotal point today in longevity and regenerative medicine where we can start to do things that I believe, and I'm standing on the shoulders of people who have done this, done the research in animals. And one of those is Dr. Sheldon Jordan really need to get the

Dave Aprey (00:19:39):

Credit luminary in the field.

Dr. Vincent Giampapa (00:19:40):

Absolutely.

Dave Aprey (00:19:41):

I'll have him on the show soon.

Dr. Vincent Giampapa (00:19:42):

Yes. So we've worked together on this process and under his guidance, what we've been able to do is use focus ultrasound and target specific areas of the brain. The hypothalamus seems to be the central aging clock in the body. Now, this might sound a little far out, but there's real evidence in both a paper published in less than the last year in Nature Magazine that documents hypothalamus on the floor of that hypothalamus are neural stem cells. Okay. And there's multiple nuclei, the nuclei that regulates your sleep wake cycle, your sleep, how you sleep, your hormonal release patterns, a whole host of things that directly impact the peripheral aging clocks, which are our stem cells and body cells. So that's why we're targeting the hypothalamus because it's our belief now that if we can help restore the sensitivity to those nuclei, that they can sense the changes in the body more efficiently. Like when in your twenties and thirties, they help keep your peripheral aging clocks working more efficiently.

Dave Aprey (00:20:54):

The body's amazingly like a computer system in some ways and completely unlike in others, but people who don't come from Nerd Bill like I do, you wouldn't know this, but inside every computing device you have is a tiny little clock that makes sure everything in the system knows what time it is. Because all those components, if they're doing the right thing and they're off by just a microsecond, everything stops working. Our body has that central clock. And it also has individual clocks in each cell and in each organ system. Exactly. But they have to talk to the central clock, sort of like when you turn your phone on and it checks in and it knows what time it is because it talked to the cell phone network. It's like a central clock, and that's tied back to an atomic clock. That's how all of our human stuff keeps working, train schedules and whatever body's the same way. So we just told my central clock it's way younger, so it's going to tell all my peripheral stuff that they're way younger.

Dr. Vincent Giampapa (00:21:48):

Exactly. It's going to help sink those two clocks. But how does that focus ultrasound do that, and what do we add to that procedure to make that as efficient as possible? So focus ultrasound has always been known to help with certain components of cognition and other things because where it's focused in specific part of the brain, it causes vasso dilatation or opens up the local blood supply. So the hypothalamus is a pretty easy target to hit with an external focus ultrasound beep. So what happens is not only does the blood supply to that area stay more active or larger for a number of hours after a treatment, but it does two other things. The first thing it does is called what we call stickiness. So that allows certain proteins that we're going to infuse right after that focus ultrasound sessions over to stick right to the blood vessels of that area. The other thing it does is it causes what we call endocytosis or allows these pieces of genetic material, DNA micro RNA cytokines growth factors to go through blood vessels and directly into the neural tissue that we've aimed to be at. It's kind of like neurosurgery with no surgery.

Dave Aprey (00:23:03):

Wow. And for reference, this procedure, which is a really potent longevity procedure, is about $25,000 by itself. But what I did is I came down and I said, make me one with everything. So we created a stack and it's a stack. If you go to dave aspr.com/clock, I'll give you the full details and all there. But what we also did is my face, I'm looking a little bit ragged today if you can see that. It's because I did heavy duty stem cells, microneedling and CO2 laser on my face, and then we did a bunch of ortho work and injected stem cells and other things into my reproductive system. So this is the whole body approach, everything that needs it plus the brain. But we did something else that I think is groundbreaking. Every time I've had a stem cell treatment in the us, I feel worked over, I mean really bad. And it's for a long time and it's

worth it because I'm planning to live a long time. You do something on the first day, which is what I call blood washing. Tell me about plasmapheresis and why we need it.

Dr. Vincent Giampapa (00:24:11):

So plasmapheresis has also been around for quite a while. It's an FDA approved process. And again, as I mentioned earlier, it's not really readily available at all as a preventive treatment. But recently the research is now really supporting Dr. Kira. Dr. Convoys have published papers that document that by removing the plasma, that's the liquid part of your blood, 55% of your blood is this clear, supposed to be clear, a yellowish compound or fluid, and then the red cells and white cells are the rest. But as you age, that clear fluid, which is what surrounds your blood cells, including your stem cells with nutrients and removes their waste products, gets more contaminated year after year, not just from your cells aging, the environment, micro bacteria, vaccines. Everything that is suboptimal for the function of those cells is now surrounding them, limiting them from reaching their full genetic potential.

Dave Aprey (00:25:16):

It's like if you have an aquarium and you never change the water, it gets a little skunky. Well, your blood water is the same way. So you go through on the first day and you take all of those inflammatory factors out. Then when I had the orthopedic procedures, yeah, I was sore. We injected my knee. I've got substantial damage of both shoulders. This is why people tell you to work out two hours a day in order to stay young. Probably haven't figured out what happens when you do that, but what you're going to find out is if you do plasmapheresis and then stem cell work, your inflammatory response is so much lower. So I come down here now my blood's clean and you feel so much just so clear after that, then we treat the entire body, including all the reproductive stuff. I'm knocked out for all of that. So I have to feel it. And I've been awake for all those procedures before. Well, I want to do that again, but as soon as that's done, now I have clean blood and then we open up the blood brain barrier and we do the cognitive thing.

Dr. Vincent Giampapa (00:26:20):

Yes. See, the sequence of events with what you just had is really important. And lemme give you a major reason why plasmapheresis. We check your inflammatory markers, your H-S-C-R-P and some other cytokines prior to and after. And we've done this for a large number of patients. Your general body inflammation drops way below the norm ranges. This in itself is very positive for aging because inflammation is something that is a negative impact on everything. But also we've now seen with some of the work fight, for instance by Dr. Kipper off that multiple other biomarkers of aging are also decreased stem cell functions better. A whole host of body functions are better. So the secret here is that's a key component also prior to getting back any stem cells, because you don't want to give back stem cells either the ones you've already collected or the umbilical cord mesenchymal stem cells and put them into a pro-inflammatory environment that's full of other contaminants. So the sequence of events of what you had really make the final impact of all these things dramatically better for aging, your cognitive ability, your mental facilities are clearer, quicker. You have virtually no aches and pains in your body anywhere, which is like, I feel younger yet. So all of this is a whole new approach instead of just isolated pieces in the puzzle. It's like putting a good portion of the puzzle back together.

Dave Aprey (00:27:51):

Well, I know that a lot of listeners are saying, I want to do what Dave just did. So here's the deal. I put together a package of all the stuff I did, and you can save tens of thousands of dollars on it. And I want

to be straightforward. I'm not a billionaire. I've done reasonably well for myself. I drive a 2014 G, but I spend more on my health than I do on my vehicles or probably my rent because I think that's the most important investment I can make. And yeah, I do rent my house too. So this is what I care about. And so if you're interested in this, dave asprey.com/clock, and this is less than half the cost of the procedures I've done in the past, but we're resetting the central aging clock. We're washing the blood. You don't have to penetrate your fat or your bones. And it's so much more effective, I think in part because you stack it with hyperbaric.

Dr. Vincent Giampapa (00:28:46):

So hyperbaric chamber therapy is something that's been a therapeutic approach that we've known about for years, but more recently we're now starting to see that by oxygenating the blood, that in itself is a major help with cell function, cognitive impact, and a host of other just general metabolic processes that it's from a nutrition getting into the cells to the cells, waste products getting out. But also, we now know that hyperbaric oxygen actually releases stem cells. So in essence, it's kind of like a mini stem cell treatment as well.

Dave Aprey (00:29:23):

Wow. If you're listening to this going, that's way too expensive for me. This is coming. We're setting the standard for the future and for all technologies. There's always the ones that people over invests in the very first handheld video cameras for $10,000, and they barely worked, and only crazy people did. Those we're past that. I think that's what I was doing five years ago when I was injecting every joint my body with stem cells in the US with all the painful stuff. This is not particularly painful. The benefits are there and the cost has dropped substantially since then. But if you're saying I'm still not there, I've had Dr. Christian DPO from STEM Regen on the show as well. You can release more of your own natural stem cells with hyperbaric. There's supplements like that that can help you with it. The point of all of my work is, here's something we now know about human performance cognition, about aging. And since we now know this, what do you do that's free? What do you do that's very low cost? And what do you do that's expensive? And I'll do all three of those and tell you about them. This is the high end. And I like to

Dr. Vincent Giampapa (00:30:38):

Make a comment. People say, I can't afford it, particularly people in our age who are over 50, 55.

Dave Aprey (00:30:46):

I'm sorry. I identify as my measured age, not my calendar age. Well, that's what

Dr. Vincent Giampapa (00:30:51):

I,

Dave Aprey (00:30:51):

I'm feeling triggered.

Dr. Vincent Giampapa (00:30:52):

Good. What? What's, by the way, what is extrinsic age?

Dave Aprey (00:30:56):

Oh, man. My extrinsic age is 19 and a half years younger than my calendar age. So I'm about 31, 32.

Dr. Vincent Giampapa (00:31:03):

I beat you by just a few. Mine's 22 years. Damn. Below my s and your

Dave Aprey (00:31:07):

Chronological age is 22 years older than me. Yeah. Well, you're killing

Dr. Vincent Giampapa (00:31:11):

It. Well, listen, I use, I'm an advocate of all these therapies, so have access to them. And getting back to the key point is how do people do this for free? There's a way to do that. All right. What's that? Okay. And frankly, as to what I did when I first had started this, look at our age, we all have life insurance policies, which you could borrow money from it no cost. For instance, you could borrow 12, $13,000 to get your first treatment and stem cells collected to reinsure your future, which is what we call bio insurance. So my children are going to get $15,000 less 50 years from now when I'm gone. So what is that money really going to be worth? But I didn't have to really, I paid my premiums. I couldn't use that as an asset to buy myself more healthy time.

Dave Aprey (00:31:58):

Oh, that's interesting. Okay. I probably should get some health insurance for life insurance. I mean, whatever. That's

Dr. Vincent Giampapa (00:32:05):

A good idea. So that's one of the little, if you will, bio biohacks that you can use if you want to jump into this. And if you want to do the whole stack that we've now done on you, that's another way of accessing that.

Dave Aprey (00:32:21):

That's so cool. I like doing the stack, because you're going to come down here, you might as well just do everything. And I can't say enough about what happens on the reproductive side when you do the injections. And you guys are also using pressure waves,

Dr. Vincent Giampapa (00:32:36):

Shockwave search as the shockwave

Dave Aprey (00:32:38):

On it as well, similar to what the wasabi method is. And man, you feel very different and you see changes in size and performance, even if you don't have ed. It's also part of being young. So I've seen dramatic results from that.

Dr. Vincent Giampapa (00:32:56):

So that has really been one of our more popular procedures with, I would say middle-aged senior men who their sex life, and that's such an important component to a relationship, has dramatically changed. Yeah. And so why not? I mean, this is technology that wasn't available a decade

Dave Aprey (00:33:17):

Ago. It's not just men though. And you have the full procedure for women. Yes. And I've had a lot of women on the show talking about female reproductive longevity. So you do a similar treatment for women where you're injecting stem cells vaginally, and the results there are very similar. The thing, it just feels younger.

Dr. Vincent Giampapa (00:33:36):

Yeah, exactly. So my recommendation is if you're coming here as a couple, just don't do one couple, because there'll be probably a little mismatched, mismatched in activity levels.

Dave Aprey (00:33:48):

Wow. So you come down, you wash your blood, collect your stem cells for life, and those are ones that we can enhance in the future. And then you make your central aging clock young again, which is the part I'm most excited about, the most groundbreaking here. You get your hyperbaric, you get stem cells injected in anywhere you have pain or injuries, and everyone gets those because, oh, I'm going to play soccer when I'm 40. Yeah, it's going to be expensive to play soccer when you're 40, even when you're 30, it's expensive. Some of the things you treated are actually injuries from when I was 16. Yeah,

Dr. Vincent Giampapa (00:34:24):

Yeah. So one of the things, you mentioned something about central aging clock and cognition. Probably one of the most important things to keep in mind is as we grow older, probably the most important thing is to keep our mental acuity and our memory at its optimal level. Because so many people at our age are just peaking in their businesses or their creative writers or artists, and it took a lifetime to get there. So how do you maintain the mental acuity or mental abilities? This is, to me, the most important thing along with maintaining your general physical activity levels. But if you maintain your body in a young state but don't have a mind at its sharpest, you're really missing one of the most important components.

Dave Aprey (00:35:12):

Having a brain that just works effortlessly is one of the most precious things that I can think of, because I didn't have it in my twenties. I had chronic fatigue syndrome. I couldn't remember anything. I remember thinking I would fire myself, and I was a CTO type of person, had a big tech company. I'm like, why is it not working? And that feeling of helplessness and the fact you don't tell anyone because you won't be able to know. It's really common now, especially post covid. So getting my brain back has been the biggest gift of the longevity practices I do. And you're this example of someone, your brain is perfectly as good as it was, or maybe better than when you were

Dr. Vincent Giampapa (00:35:56):

30. I think it's better be honest with you, because thirties were tough, a tough time starting a practice, the stress levels. But yeah, honestly, and my goal is to continually enhance my cognitive ability so I can continue to learn and contribute and do the things I really love to do.

Dave Aprey (00:36:15):

It's one of the reasons that I'm such a proponent of neuroscience. I have a neuroscience clinic, and I spent six months of my life with electrodes on my head, training my brain because I mean, look, if I was

in a wheelchair, that would horribly suck. But as long as I have my brain, I can still do the important things.

Dr. Vincent Giampapa (00:36:33):

Well, reality, how you perceive reality is all based on how your brain processes what's coming into it. And the secret here is to allow your brain to not only perceive reality, but to look at it in a different fashion.

Dave Aprey (00:36:50):

I actually don't agree with you.

Dr. Vincent Giampapa (00:36:52):

You don't. No, go ahead.

Dave Aprey (00:36:54):

It's how your body perceives reality, because your body is pre-processing reality before it hands it off to your brain and your body's deciding which parts of reality it's going to show you. This is a distributed sensor system. It's our mitochondrial networks. They have a microsecond response time to the environment, but our brain doesn't get a signal for a third of a second, which means you have to have a healthy body to have a healthy mind.

Dr. Vincent Giampapa (00:37:18):

But those signals still have to go to the brain for the final perception. They do, right? Yes. So I think we're both right. We

Dave Aprey (00:37:24):

Are both. Right.

Dr. Vincent Giampapa (00:37:25):

That's an interesting concept. Interesting. And you're right about that. And frankly, I didn't think about it. So I like this because I'm learning,

Dave Aprey (00:37:32):

Oh, well, I think you're a very knowledgeable learning guy, so thank you. The models I've been working with more and more are how do I reprogram the body's perception of the world and the mind's perception of the world to have more peace, more focus, more consciousness, and something that was kind of cool this week here at RMI is you have to sit still and basically do nothing for an hour, twice a day while the focused ultrasound is, and we'll put a picture of that in so you can see what it is. It's shooting a beam in, but you can't move your head. So I've been meditating for two hours a day, sitting in a chair with focused ultrasound, and then I'm in the hyperbaric chamber, and you can watch tv, but I don't really don't want to watch tv. So I've been meditating for something like four or five hours a day because I've been doing longevity treatments that require me not to move my head, wow, I have extra oxygen, extra stem cells. My hypothalamus is working better and I'm just downloading things. It's been a really resetting week for me. Anyway.

Dr. Vincent Giampapa (00:38:34):

That's great. I, I'm a big believer in meditation. And as we discussed in the past, the Monroe Institute, CenterPoint Research Center, I've been involved with them and years ago in what's the real impact on meditation, aside from making you feel better, is it dramatically drops your stress hormones. It actually elevates your, for instance, your testosterone. It elevates your DHEA, which is one of the human body can literally reset itself from a hormonal point of view. If you change your mind state, which is really why a lot of these Tibetan monks or yogis live very longer. He lives because they're actually, if you will, biohacking their rain with the body's own ability to do this. And that directly feeds into what we're doing at RMI because we believe our bodies has, its an innate ability to regenerate itself if we just help it a little bit, because this is a regenerative system I talked about with stem cells at your late forties, you start to lose those stem cell numbers and function, and that's really the basis of your regenerative system.

Dave Aprey (00:39:47):

It is. And it's a challenge because I am not going to meditate for two hours a day. I have stuff to do. And that's why I can get decades worth done in one week. And I could also spend four hours a day on longevity practices that don't work very well per minute. Or I could come down to RMI and I could do decades of longevity work in five days, which is, this has been sort of the dream. I've been touring the world, doing all the longevity things, but to be able to stack it like this, especially because when you stack it, it drops the cost per procedure to make it much more accessible. I'm pretty blown away. It's been a very potent week for me.

Dr. Vincent Giampapa (00:40:32):

And so not only is the cost much more acceptable, but the synergy or the impact of those treatments together are so much more than if you did them separately. So it's really, I think this whole concept of putting this all together gives you a dramatically more effective impact on the aging process in your body.

Dave Aprey (00:40:55):

Pretty profound stuff, guys. Dave asprey.com/clock. That way you can reset your aging clock and do all this other stuff. Or maybe you're just learning about stuff that you can do that doesn't have anything to do with coming to Costa Rica. And it's, like I said, a three hour flight. So this was very accessible. Now, let's talk peptides, so much about peptides and longevity. What are the peptides that have you most excited?

Dr. Vincent Giampapa (00:41:23):

I'm going to go back to the story about hetero chronic parabiosis and young blood and young serum. We know that in young people, there's certain factors that really make older animals or older people supposedly de-age. So what are those compounds and what are some of these key peptides or proteins? Right. So the latest research really is about four key peptides. First of all, Foley Statin, we all know we hit our forties. We can't build a muscle. We used to do. We work out harder. We build less muscle. Now, Foley, statin inhibits myostatin, which is something we start to produce in our forties, which inhibits muscle growth, but statin does other things. It dramatically drops inflammation. It actually may be actively involved in some cognition enhancement, but we mainly see the muscle. The muscle loss is a big problem in older people because of what we call sarcopenia. Older people lose so much muscle, they can't even get out of a chair or be independent. So I think Fostin is going, and by the way, Foley Statin is

one of the few new peptides that's actually being approved in the US for now. Childhood muscle wasting diseases.

Dave Aprey (00:42:44):

Interesting.

Dr. Vincent Giampapa (00:42:45):

So that's now approved. It's not out at there as a treatment everybody can have yet. But we're going to talk a little bit more in a few minutes about how that might happen shortly. What's the other protein? Klotho

Dave Aprey (00:43:00):

My favorite. I wrote about both of these, especially CLO in my book, and

Dr. Vincent Giampapa (00:43:03):

You couldn't buy it anywhere. And so now that's becoming synthesized and clothe. Why do I love that? Is clothe is one of the most important things for neural regeneration cognition. And you and I are big fans of that, but it also enhances cardiac function, renal function, a host of other things. So these are compounds I'm sure are in that little young mix in the blood that is impacting older pigs. What else? Okay, so we're looking now at GDF 11. GDF 11 may turn out to be, and it's my personal opinion, one of the most important peptides, because GDF 11 has a unique ability to repair damage to your stem cells. Wow. So it can de-age those. The research is pretty strong to show it actually is restoring the DNA damage so that stem cell quality improves. Can

Dave Aprey (00:43:55):

I buy GDF 11? Now,

Dr. Vincent Giampapa (00:43:57):

There are certain places on the web that say they have it for sale. It used to be very careful. But yes, there are. And again, I don't know about the quality of those things, but assuming

Dave Aprey (00:44:07):

It's good quality, how do you dose GDF

Dr. Vincent Giampapa (00:44:09):

11? Well, see, that's another thing. And I'll mention one person who's been involved in that for the last few, a number of years, and actually been collecting data. Steve Perry. And you can go to YouTube and see his data, which will blow your mind away. That arterial elasticity is decreased, blood pressures down, cognitive functions better, A whole host of things. It's actually anti-cancer. Preventive. Wow. So this seems to be one of the things that we're looking at, at the research level. And by the way, I don't know if you know, I'm on staff at David Sinclair's lab at Harvard, at the Paul F. Glenn Center, and David and I have been, I guess for over almost 15 years able to have conversations about where the future may be going. Again, these are some of the things that I think he's very knowledgeable about.

Dave Aprey (00:45:02):

He's been on the show, I think a couple of times. Yeah.

Dr. Vincent Giampapa (00:45:04):

So what else? What other peptides? PGC one Alpha,

Dave Aprey (00:45:07):

Oh, let me take a, oh, does nicotine in pharmaceutically extracted raise PGT one alpha?

Dr. Vincent Giampapa (00:45:14):

So I hear not only does it raise that, but what does that do is now we're looking at the bioenergetics at the cellular level. So we all know that we lose our mitochondrial number and the ability of those mitochondria to make more amounts of a TP, which are what drive It's a cellular fuel. Right? And we know about n man, we know about nicotinamide riboside. We know those things help too. But PTC one alpha actually helps with mitochondrial biogenesis. Okay, so why is that important? Is because we now know that if we make less a TP, our stem cells and body cells aren't going to work. So when you put these four or five peptides together, we start to now open another whole doorway to where the future of longevity aging medicines going. The question is how might we deliver those instead from an oral pathway? How could we deliver those in a long-term manner? And perhaps how could we even enhance the level of those things that even a young person would have so we function even better? I'm going to leave that up to you, and then I'll give you my impression. It

Dave Aprey (00:46:21):

Sounds like a mini circle problem. And it's funny, mini circler. I'm an advisor to the company and a shareholder. This is the gene therapy company. And guys, I did a podcast about that. And I've had the fota and gene therapy, and this is one, a small injection to tell my body to make more of those. And if you go to dave asprey.com/clock, you get info on all this advanced thorny stuff I'm talking about. And I'm a huge fan of them because I am also registered to be in their CLO trial.

Dr. Vincent Giampapa (00:46:55):

Interesting.

Dave Aprey (00:46:56):

Which hasn't started yet, but I'll actually make my body create more CLO than it normally would, which is going to enhance my brain and make me younger. But you have a different idea, don't you?

Dr. Vincent Giampapa (00:47:08):

Well, and I've had the Yes, I do. And again, I'm always trying to think of if I was in the future, what would be available to me that's not available to now. Yes. So I kind of go into a state and kind of try to visualize what might be the next big thing. And I've had the opportunity and pleasure to meet the head of BioViva, which is the CEO is Elizabeth Parrish.

Dave Aprey (00:47:35):

Yep. And she's been on the show as well.

Dr. Vincent Giampapa (00:47:37):

Yeah, there you go. So I think what BioViva is doing is potentially going to be one of the biggest leap forward for wellness, extended health span and productivity for humans. But I recently have had a couple of conversations with her about how do we take what you're doing and make it better? So my initial thought is, which is gene therapy, and this is different than plasmids,

Dave Aprey (00:48:06):

Which is many circles.

Dr. Vincent Giampapa (00:48:07):

Yes. Now, and they're both very effective. Now the question is, what would be a potential way of putting this augmenting these key genes that we know are really effective in enhancing youthful function in many ways? Why wouldn't we put them in stem cells? Okay. So that's where my present thought process is. And I've had the pleasure to speak to Liz Parish about, gee, what are your thoughts are? And this is somebody who's open-minded, looking for the future. I love her focusing on humanity, focusing on what can we do to make life for human beings in the future better? So we'll see where that goes.

Dave Aprey (00:48:48):

Do you think it would be ethical to offer these treatments to regulatory authorities who are trying to stop us from having access to them?

Dr. Vincent Giampapa (00:48:55):

Well, I think it would be super ethical, but I could also, I can tell you this, they're not going to accept it. So there are places, a few places in the world that are starting to jump over or create legal locations where those people who want to be involved in cutting edge therapy that has some level of credibility and safety already to it to be the real first group of people that are going to try to help prove that these things are effective and safe. And I think that's what we need to look

Dave Aprey (00:49:26):

For. Well, Costa Rica is definitely putting itself on the map. Abu Dhabi has a great track record as well. Exactly. And what's going to happen, and I want world leaders to listen to the show, and there's probably a few. If you don't just stop getting in the way of the kind of work that thousands of longevity doctors are doing, the most successful people who pay most taxes and control industry in your country will leave your country because we can live longer. And why wouldn't you just allow this wherever. This is not for you to regulate there. That's from BSA.

Dr. Vincent Giampapa (00:50:04):

I'm glad you got your opinion. Now,

Dave Aprey (00:50:10):

What I'm seeing is in the future, I'm planning to keep doing gene therapy, and I know there's about 10 different targets with mini circle to make the existing cells in my body create more of the compounds. And I want the stem cells that you've banked for me to get edited with this new technology talked about, so that when I introduce those stem cells, they're going to be able to go in. And these are

pluripotent stem cells that can actually turn into tissues in my body that are built different, that can do things that my normal tissues wouldn't do.

Dr. Vincent Giampapa (00:50:41):

So let me tell you what my vision of this all may look like and highly likely to look like. So we collected your stem cells. You're at a certain age. I'm not going to still your age.

Dave Aprey (00:50:53):

No. Calendar wise, I'm 50 51, but I was kind of joking earlier. I identifies in my mid thirties. All my data says so. Yeah, but that's what the calendar

Dr. Vincent Giampapa (00:51:05):

Says. Okay. So now that you've got your stem cells collected, you could literally, after 50 ish, really the cutoff line where we're thinking we need to start giving you back your stem cells to kind of mitigate this deep line drop in quality and quantity, so that instead of seeing this decline, we're going to see this flatten out. The next step is, and this is what we're really working on to get clinically to patients very soon, and it's our hopes anyway, is that we can take those stem cells that now have the activity level of a 50 something year old person and revert them back to a 20 or 30-year-old. So that means those stem cells now are going to be able to repair. You're going to have a stronger immune system, you're going to have healthier blood vessels, and your organs are going to be able to repair the cells that have become nonfunctional more efficiently. Now, that's a major leap forward in keeping people healthier longer. But what's the next step is if we were able to not only reprogram your stem cells, but then add to them the key genes we're now seeing as being involved with the most important aging pathways, both Folio 10 PGC, alpha one gdf, 11 H Turt, which we didn't mention before. Let's talk about that. Yes. So Bill Andrews is probably one of probably the leading expert in telomerase activity and the effects of telomerase and a very super bright and dedicated individual to help us.

Dave Aprey (00:52:40):

He was on the show years ago. I knew him from when I ran a longevity nonprofit group in the late nineties. Right?

Dr. Vincent Giampapa (00:52:45):

Yeah. You may want to get him back. I'll get back on. The advances in this are also amazing. So what does H TURP do now? First of all, most people when they talk about telomerase or they take tablets with TA 65, you have to understand that there's only two pools of cells that make telomerase in your body, your stem cells and your germ cells. So the rest of your body cells don't make telomerase. So the secret here is it seems that nature knew what cells to pick that are most important. Your stem cells are your source of regenerative power. But every time your stem cells divide, your telomeres get shorter. So they get less and less effective, or they can make less copies. And then now they're accumulating DNA damage. Oh, didn't we talk about GDF 11? About repairs, DNA damage and stem cells? Oh, yeah. Now we're talking about H turt, which has been documented until the lengthen year telomeres because it enhances telomerase. So guess what? Now we can allow your stem cells that you have to make more copies longer. We can maybe fix the DNA damage that decreases their quality. But at the same time, we can even give you back greater numbers of what? Closer to what you were born with or had when you, your twenties. So the regenerative system might be rebooted.

Dave Aprey (00:54:07):

Wow.

Dr. Vincent Giampapa (00:54:08):

So each turt also is something that I think has already been documented to lengthen telomeres in humans.

Dave Aprey (00:54:15):

And do you think we're going to do that with gene editing?

Dr. Vincent Giampapa (00:54:18):

I think it's going to be's already been done with gene editing.

Dave Aprey (00:54:21):

Oh, wow. We just have to make it bill

Dr. Vincent Giampapa (00:54:22):

Early data early, not published yet, but early clinical data shows that that's already what's happening. So imagine where we are. We're learning the alchemy of aging. It might be title for a new book

Dave Aprey (00:54:35):

That's a great title for a book. And people who aren't students of this kind of thing, I probably wouldn't know. But the alchemists were not trying to turn lead into gold. They were longevity researchers. That was their goal.

Dr. Vincent Giampapa (00:54:50):

Well, can I take just a minute or two to tell you the secret about this? So why did the pharaohs thousands of years ago live into their eighties and nineties when the average lifespan at that time was in the thirties? Imagine you're a citizen. You live into your mid thirties, you die. You have your child who now is into in his mid thirties and dies. It's the same Pharaoh. So your grandchildren are born and it's still the same Pharaoh. Why do they think they were gods? Do you know They were taking the first anti-Asian supplement.

Dave Aprey (00:55:20):

They were indeed

Dr. Vincent Giampapa (00:55:22):

Onic gold.

Dave Aprey (00:55:23):

I was hoping you were going to talk about that. In alchemy, they would call the philosophers. Stone. Stone. Stone. Yes. It's also worth noting the pharaohs ate fish and meat, and they gave all the slaves grains and peasant food. That's also part of this. It's part of this. Yeah. This is an unusual form of gold that is, well, it's available from dozens of companies, but I don't think most of it's real. It's very hard to

Dr. Vincent Giampapa (00:55:46):

Find. It's very hard to find the real thing. But let me tell you, the interesting thing was in the 18 hundreds, so Sir William Flander's Petri was actually tasked to go back to Egypt and follow the path of Moses and try to document for the Bible.

Dave Aprey (00:56:03):

I love it that you know this stuff. This is cool. Keep going.

Dr. Vincent Giampapa (00:56:06):

But he didn't follow the path of Moses. He asked the local people, where do people here really feel Moses went? Well, he went to a place called Jebel Musa, the Mount of Moses. He went up there, and guess what? He found

Dave Aprey (00:56:20):

White powder

Dr. Vincent Giampapa (00:56:21):

At top of that mountain. He found this beautiful portal carved into stone, was able to get in and found room after room, what looked like a chemistry lab. And in the back of that, he found this large area, like a double basketball court, empty nothing in it. And one of his men happened to drop a coin, and it happened to fall in one of the crevices. So they opened up one of these blocks that's on the floor, and they found all this white powder, and he had no idea what it was. That powder eventually was shipped to the actual Royal Museum in London, where it sat there for years, decades, until they tested it and found out it was an extract of gold, which actually it was gold in what we call the high spin state, which means that it actually was able to change your genetic expression, your genes. So the Pharaohs were the first one who had the technology to epigenetically alter their stem cells and body cells.

Dave Aprey (00:57:24):

Do you take Monoatomic gold?

Dr. Vincent Giampapa (00:57:26):

I don't take it, but I've done research on it.

Dave Aprey (00:57:30):

I actually bought all the equipment to manufacture my own. Geez,

Dr. Vincent Giampapa (00:57:36):

How many years ago was this,

Dave Aprey (00:57:37):

This has to be, this is back when I made $6 million when I was 26. I'm about 26, 27. I lost it when I was 28. That was a problem. But it took so much time and also I thought I might blow myself up, so I never did it. But this has been an area of interest and I've met a few people who coin BA worked with

Templars and the recipe and there's a lot of mysticism around it, but I would like to find a good source. I would take Monoatomic Gold, but it would be

Dr. Vincent Giampapa (00:58:04):

Expensive. Have you ever contacted David Hudson? I think he's still alive.

Dave Aprey (00:58:07):

I don't know. David Hudson.

Dr. Vincent Giampapa (00:58:08):

Dave Hudson owns all the patents to make Monoatomic gold.

Dave Aprey (00:58:14):

So interesting.

Dr. Vincent Giampapa (00:58:15):

Now I actually met David and he had asked me to do a test and he sent me pure Monoatomic Gold in a liquid form. And so I did at that time, did some research. And did you take it with the small Yes, the small number of people, including myself. And the main thing that it documented was it dropped DNA damage rates dramatically. This was 20 years ago, and we didn't have the testing processes that we have today, the technology, but it dropped DNA damage rates. And at that time I looked into the literature, what did Mama Monoatomic Gold have? That's

Dave Aprey (00:58:50):

A lot.

Dr. Vincent Giampapa (00:58:51):

It's special impact. What it does is, you know about DNA and bio photons, these are energy particles that travel down the DNA strand every

Dave Aprey (00:59:01):

40 seconds, you make one bio photon in your DNA,

Dr. Vincent Giampapa (00:59:05):

This augmented bio photon energy by 10,000 fold.

Dave Aprey (00:59:09):

Wow. I've got to get some of that stuff.

Dr. Vincent Giampapa (00:59:11):

So I'll be happy to join in that search with you because I still think that's really a loss leader. But we have the technology now at a quantum level to start looking at what did those things do. But it's amazing that thousands of years ago, this technology was being used by this holy crew.

Dave Aprey (00:59:28):

Well, maybe one day we'll get that at RMI.

Dr. Vincent Giampapa (00:59:31):

Do you think maybe

Dave Aprey (00:59:32):

No promises there, it's kind of a walk down mythology, but if you really dig into the history of Western science, it started with something called the Natural Philosophers Association. Yes. And I have a painting from I think the 14th century in my house. It's a copy of a painting and it shows an alchemist having a conversation with Mother Nature and they're like trying to crack the code. And this is why back when I was running Bulletproof in the early days, all of my packaging had a little salamander hidden on it. So I'm like least egg because the salamander is a sign of alchemy. It's a symbol of it because I've been interested in that pad for a long time. And like I said, I don't have monoatomic gold. If I had some real stuff, I would totally take it. But in the meantime, the stuff we just did with focused ultrasound, I don't know if I could say it's better. I believe turning up mitochondrial function and the bio photonic stuff, it's the most powerful thing you can do. My brain book and my longevity book are mitochondrial centric, and anything I can do that's going to make mitochondria better or make cells younger, tissues younger especially the brain is step one. And then step two is how do I reset the clock? I want to do it in my brain and I want to do it in every cell in my body so that they're younger. And right now what you've put together is the most comprehensive way of doing it that I've seen. But it feels like we're on the cusp of so much more, even just over the next six to 12 months.

Dr. Vincent Giampapa (01:01:00):

I think that we have in our toolbox all the things we need to really make a major difference in extended healthspan and longevity. But one of the things you triggered I wanted to follow up on was nature. So why do human beings feel that they're smarter than nature? Is it the egocentrism of humanity in general? So one of my philosophies is look at what nature is, what's there that nature's taught us. And let me give you an example. And a lot of those things I've incorporated into the programs here at RMI, for instance, certain animals live over 200 years. The Bullhead whale is 200 years and shows very little signs of aging. Greenland shark can live up to 400 years, never gets cancer. The giant tourism lives over 200 years. Parrots live into their late nineties. Why do we live 75, 80 years of age?

Dave Aprey (01:01:56):

Probably bad gene editing 10,000 years ago. What do you think

Dr. Vincent Giampapa (01:01:59):

Could be,

Dave Aprey (01:02:01):

I'm just

Dr. Vincent Giampapa (01:02:01):

Kidding. But here's what I did. I looked at the literature and tried to find out what are the key things that allow, these are some are mammals to look, here's what it's, they have greater numbers of stem cells.

Gee, you just got your stem cells collected. They actually make less free radicals and have less and better DNA repair damage components. We use components here that have been designed for years that repair double shand, DNA breaks. They have a host of key biological factors. And each one of those factors we've incorporated into our cellular aging programs. So I think you have to respect what nature has evolved over hundreds of thousands, if not millions of years, and try to start using as therapeutic protocols, things that we know have worked for decades or thousands of years and incorporate them into your basic science.

Dave Aprey (01:02:53):

They're also proof of concept. Yeah. My upgrade labs, human upgraded franchise. We're opening about 28 of those across the country right now, or the US and Canada. And the logo is an ax lot

Dr. Vincent Giampapa (01:03:06):

Interesting.

Dave Aprey (01:03:07):

And the ax lot is a salamander from Mexico that it's like wolverine in that you can crush its whole spinal cord. It'll grow back. You can cut off any limb, it'll grow back. If any animal can do that, why can't we? And that's why it's our mascot in the logo.

Dr. Vincent Giampapa (01:03:23):

Well, guess what? One of the areas of research have documented, one of the primary reasons it does that is its stem cell numbers. And basically these are pleural potent stem cells way beyond what are normal. Interesting. So that's maybe the nature showing us another area to go. So this is why I think, again, coming back to your first treatment, bio insurance, why do you want to get your stem cells collected? Well, you can use them not only even now, but again, as I said earlier in the future, in the next year, two, three years from now, thousands of times more potential to use those collected cells to help keep you healthier

Dave Aprey (01:04:03):

Longer. And it's important to explain, we're collecting the cells, but then you regrow the cells in a lab. So it's not like I just took out these precious cells and I just get 'em back. It's that we took 'em out and we can amplify them hundreds and hundreds of times. So it's like having a new set of bone marrow outside my body that just makes stem

Dr. Vincent Giampapa (01:04:23):

Cells. Well, let me clarify that a little. Okay. So right now when we collect, we give you your first treatment and then collect. Okay, we have billions of stem cells, so we actually have enough stem cells to help restore that number that you're losing for decade

Dave Aprey (01:04:39):

Or two, three. Oh, interesting. Even without culture expansion. Okay.

Dr. Vincent Giampapa (01:04:41):

No, but we also have already done early separation of those mesenchymal stem cells from that sample, which we could expand. We're right at the point now where the hematopoietic stem cells are now something that the technology is seeing. We can separate and within the next few years, I believe we'll be able to multiply those. So once you get this sample collected the next few years, I believe the technology is going to be available to Yes, culture span, all of those. So now you never have to worry about, gee, am I going to run out of sales? So now we go into the reprogramming process, whether it's the technique we used originally, which is just culturing with young cells, or whether we use CRISPR Cas nine, whether we use Yamanaka partial reprogramming with Yamanaka factors or whether we find new ways to do that with repurpose drugs.

Dave Aprey (01:05:35):

That's the most interesting thing. There's so many drugs, including some that they barely use anymore and some that are just well known. And even a microdose can have profound longevity effects. And we keep right at the same thing where especially in the US, there are people who believe they have a right to restrict our access to longevity compounds.

Dr. Vincent Giampapa (01:05:58):

This is a major issue in not just the us but virtually every country of the country. And they create these dictates based on this, I believe, kind of false dictate that it's not safe. Okay,

Dave Aprey (01:06:16):

No, it's not safe is having a regulator tell me how to run my own body.

Dr. Vincent Giampapa (01:06:20):

Well, that's the whole point. The whole point is there should be some section within every government that says if you want to use yourself as a test subject, you have the rights to do that. And perhaps under specific sections or areas in the country with certain oversight, but not limit you from doing it. Yeah. So I think that's something that, and there is I think one country in the world who just started to do that.

Dave Aprey (01:06:46):

Which one's

Dr. Vincent Giampapa (01:06:46):

That? Honduras.

Dave Aprey (01:06:47):

No kidding.

Dr. Vincent Giampapa (01:06:48):

And in an area they call Prospera. So it's not quite completely up to the individual, but they are allowing, I say, cutting edge biotechnology companies to offer those treatments there provided they collect data with individuals who want to be the first to do that.

Dave Aprey (01:07:07):

Well, let's hope that the other weeding countries like Costa Rica, UAE, and if I was running a mid to small country right now, and I was saying, well, I missed the crypto window when I could have got all the crypto bros to come with all their

Dr. Vincent Giampapa (01:07:22):

Money.

Dave Aprey (01:07:22):

It's the longevity window. All you have to do is just let people do what they want to do and they'll flock. They're in droves, and they'll restore your economy and they'll make you and your kids live way longer because they're working with you. As a leader of a country, this is the simplest thing you could ever

Dr. Vincent Giampapa (01:07:39):

Do. I'm going to nominate you for president of Costa Rica the next time around.

Dave Aprey (01:07:45):

I do not ever want to be

Dr. Vincent Giampapa (01:07:46):

A government. You just have to learn Spanish. But what you're saying is it has a lot of credibility behind it. How do we move forward, the technologies that are already on the forefront that normally it takes up to two decades for a drug to even get to clinical use after it's gone through all these things. We have technologies that are available now that can make a tremendous impact on health span, but if the present model continues the way it is, it may be decades before if it even gets to use in the public. So this is a big, big issue. And the secret is how do we push things forward so people can actually have access to these technologies if they want to and are willing to sign a consent. It says they accept whatever potential averse events would be, but the secret is to have these technologies available in an environment where they're actually administrated with some guidelines. And the major guidelines are is it safe and is it effective to a point? Now there's plenty of things that are safe and effective to a point, but we are not allowed to use them because we can't meet doubleblind placebo control studies at multiple locations that costs millions of dollars. So it excludes all of these things.

Dave Aprey (01:09:02):

It's so confusing to me because the same people who are putting those things in place will allow untested chemicals in perfume, in lawn spray, and in your lawn furniture, in your clothing. And those are not tested at all, much less tested safe. But those are allowed. I have an idea. What if we make a longevity fragrance that would be completely unregulated?

Dr. Vincent Giampapa (01:09:28):

Yeah. So that's interesting. I mean, something that you could smell or inhale that would have a big look. And here's a big thing. Foley Statin is administered with an aerial nasal spray.

Dave Aprey (01:09:40):

So interesting.

Dr. Vincent Giampapa (01:09:41):

And the impact on that has been shown that it has a significant impact on dementia.

Dave Aprey (01:09:46):

Wow. Oh, maybe we could spray somewhere around the White House.

Dr. Vincent Giampapa (01:09:48):

Yeah, honestly, we might want to send that.

Dave Aprey (01:09:53):

Whoa. We need crop dusters. It's going to take a lot,

Dr. Vincent Giampapa (01:09:58):

I'm going to just stop right here.

Dave Aprey (01:09:59):

It's one of those things where there's a double standard where things that do cause harm untested and things that have a great potential for good and may have some risk. Those are somehow in a special class where anyone on the planet thinks that they have a right to say what I can do because responsible for my safety. And I'll just say straight up, I choose danger. And it's the same thing when you go surfing, you might drown, but you choose danger because it's worth it. Yeah. So longevity is no different than surfing. There's risk, but it's worth

Dr. Vincent Giampapa (01:10:29):

It. Well, I agree a hundred percent. I think the ultimate choice human beings have is to live their life as is knowing that every one of us have a fatal disease

Dave Aprey (01:10:41):

Being alive.

Dr. Vincent Giampapa (01:10:42):

Well, it's called aging. Okay. Being alive is great up until your mid forties.

Dave Aprey (01:10:46):

Well, being alive is a fatal disease.

Dr. Vincent Giampapa (01:10:48):

Well, yeah, because white aging is driving that, right?

Dave Aprey (01:10:51):

No. Eventually the planet will crack or something, even if you think,

Dr. Vincent Giampapa (01:10:53):

Well, I mean we're not going to extend longevity for hundreds of thousands years yet. But my point is, I'm dying.

Dave Aprey (01:10:59):

Let's raise. I might lose, but that's okay.

Dr. Vincent Giampapa (01:11:02):

And the who, the World Health Organization has now classified aging as a disease, once you recognize aging is a disease, your mindset is different. Oh, maybe we can cure it or slow the disease. So we're now at that point just starting in the medical community and most doctors who are now active today have never been trained to conceive of that. So that's why I think things are going to change. Also, because we believe that RMI, that aging is a disease ing, it's the process of aging that creates age-related diseases we'll suffer from. If we can slow aging the process of aging, lytics, seno, statics, stem cell numbers and function peptides, gene therapy, which is all now available, we're going to delay the diseases where you'll suffer from the master disease of aging. And maybe we can slow it or maybe even reverse it. So here's my big thing.

(01:12:02):

If aging, the things we know about aging doubles every three months, six years from now, we have 6,000 times more information, three years after that with AI and quantum computing down the line. The real secret is, and we should have T-shirts, don't be stupid and die in the next three years. Because I think if you stay healthy the next three years, you're going to have thousands of times more potential to stay healthier for another five to 10 years. And if you make that little break and stay healthy, you'll have even more. So we happen to be born at a point in time where no human being has ever had that option.

Dave Aprey (01:12:37):

That's a good point. And one of the least obvious longevity techniques is driving a heavy vehicle because you don't want to be in the Prius when a suburban hits you.

Dr. Vincent Giampapa (01:12:50):

Absolutely not. I might say you might not want to be the self-driving car for the next three years until they get that worked out.

Dave Aprey (01:12:59):

I'm kind of torn about that. I have no interest in a self-driving car. Yeah, I do look at the numbers, and it appears that the death rate per mile driven is lower already for self-driven cars. I just think that a car that could turn itself off based on the same regulators who told me I can't get basic pharmaceuticals that made me live longer. No, thanks. I'll keep my 2014 Jeep.

Dr. Vincent Giampapa (01:13:19):

Yeah. Listen, I happen to have a 2018 Jeep. There you go. But I think the secret here is to ride the wave of technology. And I think the technologies we're doing at RMI here really focus on extending your health span and opening the doorway to longevity.

Dave Aprey (01:13:35):

Yeah, don't say that. That's not even real.

Dr. Vincent Giampapa (01:13:38):

Opening the doorway to longevity. Why would you say

Dave Aprey (01:13:42):

Health span is boring? If you set your goal for health span, you might meet your goal. And anyone who's done goal setting knows you need to set big hairy audation goals. Peter di Mattis, moonshots, na. And Jane talks about moonshots as well, dear friend from ome. So look, let's extend human life and let's just admit that's what we're all into. And healthspan is a side effect of extending your lifespan.

Dr. Vincent Giampapa (01:14:08):

Well, the first step in extending healthspan longevity, I mean, is getting you staying healthier longer so you can participate in all the new

Dave Aprey (01:14:16):

Advances. That's totally true. You do want to stay healthy as long as you can because the tech is coming and it's coming really fast. In fact, it's already here. The stuff I just did this week is mind blowing even compared to three years ago. So I worry when I hear people say our goal, or even some people, you can't extend human life, but your goal is just to extend health span. If you make that your goal, you're literally saying, I want to die at 86. I just want to be healthy when I die. I'm

Dr. Vincent Giampapa (01:14:45):

Like, no, I didn't say that. Look, I didn't say that. And if you want to follow through with that, years ago, only a few hundred years ago, people said, won't ever fly. Oh yeah. People say, well, you get an infection, you're going to die. Penicillin came out and now we know we can collect a source of stem cells are on the fringe of having clinical treatment for reprogramming them or at the door front to enhancing even These were stem cells now that are younger functioning, but we can actually see the windows, how we're going to make those cells even function even better. And who knows what's going to come up in the next three years. Again, with, once AI and quantum computing meet, you realize we'll be able to do the research. It now takes a number of years that costs millions of dollars probably in a day.

Dave Aprey (01:15:37):

Oh yeah.

Dr. Vincent Giampapa (01:15:37):

What does that bring to us?

Dave Aprey (01:15:40):

It's going to be a whole new world. It's something where people have said for years, when I started talking about living to 180, that's unethical because we have a population problem. I'm like, guys, have you seen the numbers? The population is crashing because we're not having any babies because we sprayed all these unregulated chemicals around and lots of plastic that dropped fertility. So in most of the world, the population is shrinking right now because we're not having babies. That means our only choice to save society is to make our older people young again.

Dr. Vincent Giampapa (01:16:14):

Well, let me make a comment about that. So I believe also that it's not going to be the issue that a lot of these long-term thinkers feel that there's going to be overpopulation. Imagine a world where we had people who were in their eighties or nineties functioning like 55 year olds, the wisdom they could bring, right? Oh yeah. The fact that maybe there'd be a whole different perspective on living in peace and living in harmony with each other. And we don't have that now because the wisdom of the elderly doesn't get to be expressed to people. They don't live long enough to say, look, we've been to that. We've done this before. It doesn't work.

Dave Aprey (01:16:53):

And their brains are cooked a lot of the time. Also, we have Alzheimer's and we have all these diseases of aging. So a world full of our elders who have wisdom and the energy of youth that will stop dumb things from happening. I

Dr. Vincent Giampapa (01:17:08):

Agree. Hundred.

Dave Aprey (01:17:09):

I've learned so much from people in their eighties and nineties when I was in my twenties. That's one of the reasons I'm wearing 'em today, because, oh no, that's not going to work. Here's why. Because they've already felt the pain.

Dr. Vincent Giampapa (01:17:19):

I agree. So let me ask you this. How old do you want to live to be?

Dave Aprey (01:17:23):

Well, I always set the goals to at least 180 because it's 50% better than our current best. And if we can't do that with all the stuff we just talked about, I think it's very conservative. But my goal, I want to die at a time and by a method of my choosing.

Dr. Vincent Giampapa (01:17:38):

See, I think that's a really good answer. Yeah. Yeah. There's been a number of movies who have kind of played that scenario out. But here's what I think think the most important thing in life is to get up each morning and have a purpose, and you have to have passion about your purpose. And then the third thing is to surround yourself with people that are like-minded to help the accomplish your purpose. And I think that's one of the things we know that allow people to live longer, people who stay in their jobs, to do something they love to do, live longer.

Dave Aprey (01:18:13):

I interviewed Eric Kendell. He was 94, the guy who won the Nobel Prize for neuroplasticity. This was the most vibrant human being. He's in his lab off Central Park, actively doing research and loving his life and asked him what his most important advice for living a long time was. And he said, have a really good wife. Well,

Dr. Vincent Giampapa (01:18:36):

That's also been shown to help like the lessons from the Blue zones and Dan But's research has shown that if you have a companion or a significant other in your life that adds to the quality of your life, that enhances longevity, pets enhance longevity. Yep. So why do you think that is?

Dave Aprey (01:18:54):

I think it has to do with stress hormone modulation.

Dr. Vincent Giampapa (01:18:56):

I do, but I am going to go out in my limb. I think that there's more to aging than molecules. I think it has to do with an energetic interaction. The emoto's were,

Dave Aprey (01:19:10):

Oh, with waterers

Dr. Vincent Giampapa (01:19:10):

On the power of water and the information that your consciousness can actually register. Water has a big difference. And there's something really going on here. But imagine you have somebody you're living with who you not only are not in love with, but may be creating an energy field or body at least 70% water that those thoughts or that energy field that's interacting with your energy field. So if you're not in a, and this goes again back to relationships or even with a dog, there's energy fields that interact and I believe are an important part of our, not only our quality of life and health span, but our longevity. So, and there's been a number of studies I've done that show your actual thoughts can interact how your DNA expresses itself. So I believe that we haven't reached a quantum therapeutic trials yet, but I think we're going to see in the near future that the energy also, look, we're starting to use radiofrequency. We're starting to use other energy scaler energies to interact with DNA. But I think getting back to where we are now, relationships are probably one of the most important things to add to your list of longevity must-dos,

Dave Aprey (01:20:29):

Having a view of those energy fields in humans. This goes back to anything you learn in India, the stuff I learned in Tibet and Nepal and traditional Chinese medicine. And you can actually, once you do the training, you can feel those things and you can consciously manipulate them. And they're real. And I believe that a lot of them emerge, if not all of them emerge from our mitochondrial networks. Because I've worked with so many gurus, spiritual master type of people, and I feel honored when I get a chance to do that. But they take mitochondrial enhancing supplements or they use other biohacking techniques and they say, my powers are stronger. I can do more. So we turn up our biological power and it turns up our energetic fields ability to do stuff in the world. That's why once you go down the path of biohacking and longevity, don't be surprised if you end up doing some consciousness work, because it's inevitable when you make enough energy that you'll want to evolve your consciousness.

Dr. Vincent Giampapa (01:21:33):

There's no question. But let me, you just again stimulated a thought. So getting back to cell therapies, here's one of the things we know, and you've experienced this this week, is when we give umbilical cords, stem cells, the mesenchymal stem cells, which we produce at RMI in our ISO seven GMP facility lab, you know that the young mitochondria in those cells produce tremendous amounts of a TP. Do you know that you've actually now become a chimera? Because there is to multiple publications that show

that the young mitochondria get transferred into your cells and your cells were making more mitochondria?

Dave Aprey (01:22:14):

One of my goals in my twenties when I realized I had a serious mitochondrial problem, it's a major part of chronic fatigue,

Dr. Vincent Giampapa (01:22:20):

Chronic fatigue,

Dave Aprey (01:22:21):

Absolutely. So I learned mitochondrial biology very early on, and the goal has always been how do I edit my own mitochondria? And it turns out, if you get safe culture expanded umbilical cells, you are increasing that. And when we are able to edit our own stem cells, which is very, very short timeline, then we'll actually be able to have mitochondrial upgrades. There's no reason that my mitochondria have to have the certain metabolic pathways they have. I think they could be upgraded.

Dr. Vincent Giampapa (01:22:48):

Absolutely. But also you're looking at some of these peptides like G DF 11 seem to impact that.

Dave Aprey (01:22:54):

Lemme go get some of that stuff. So

Dr. Vincent Giampapa (01:22:55):

Those five groups of peptides I think are going to become another area of big focus in the immediate future. But right now, if you want a mitochondria upgrade, you just have to get high quality umbilical cord stem cells, mesenchymal stem cells to benefit both your stem cells and body cells. So that actually is available now.

Dave Aprey (01:23:15):

Well, you want the culture expanded. Very well tested ones. And that's why in the US I have all these concerns because you and I both know people who've had really strong reactions. Yes, a lot of the cells aren't alive. And so I have concerns about the cut rate. Let's just collect cells from random people. I don't think that's the path and I would be uncomfortable injecting

Dr. Vincent Giampapa (01:23:35):

That. Agreed, a hundred percent. And that's why when I first set out, we have to have at RI, one of our first things is build our own lab that is the highest quality lab that is available in the states, but also make sure the source of those cells are tested for viral genetic defects. Probably very few of the 10 cells, maybe 10 cords we get a month. Not all of those cells do we use because they don't meet these strict standards. And it's not just that. It's the manufacturing process that has to be monitored to make sure those cells are clean, viable, there's no contaminants. And like you said, I know who there's certain people we know have had really bad reactions. And probably the most common reaction, even with very good cells is a shivering and a shaking. And it's not life-threatening, but it's very unpleasant. But that's easy to avoid. So there needs to be a medication pre protocol to give. We use H one, H two blockers and

a mild dose of steroids right before the infusion to avoid that. But also we find out that that protocol actually helps those stem cells home to different areas.

Dave Aprey (01:24:46):

Interesting.

Dr. Vincent Giampapa (01:24:47):

All of this whole science of stem cells isn't about grab a stem cell and infuse it. It's about understanding where it starts from the beginning of if you're going to use them, collect them, store them. When we take out your cells that have been stored at minus 80 degrees centigrade, we don't just unfreeze 'em. They have to be brought up slowly at certain temperatures at certain minutes so they don't rupture. Okay. Then they have to be cleansed and remove any of the preservation components, which can elicit that reaction has to be washed and cleansed. Then they have to be counted again to see how many are viable to make sure we're giving you cells that are going to do something. Now, that's not an easy complex or process to put together, but we have people that over 20 years experience doing that here. So when people come here, I personally can assure them they're getting the absolute best that they can get anywhere in the world.

Dave Aprey (01:25:42):

Wow. I believe that. I'm pretty careful about the things I'm willing to do at this point. I've had some pretty uncomfortable reactions from earlier stem cell treatments in the us. They were probably worth it, but the difference of resetting the central aging clock and doing it with all of the supportive therapies here, it's so much smoother experience and more effective and more cost effective. Guys, Dave aspr.com/clock, if you're thinking you just want to do the full stack, I just did. Like I said, we put together something for you, it'll save you tens of thousands of dollars off of just doing everything. And it works better when you do it all together. So you come in and do all the spots in your body that have injuries, do the reproductive system, do your face, do your brain, wash out your blood, collect your stem cells, the entire thing, and just put it all together for you and Dave asper.com/clock, and I will hook you up with all the good stuff.

(01:26:43):

One of the things that frustrated me when I ran the Longevity group in Palo Alto in the nineties, I couldn't get anyone under 60 to show up. I'm like, I just turned my brain on. I have all this new abilities. And I thought about it for so long, and it was on the side of Mount Kash in western Tibet where it's the holiest amount in the world. I was just really struggling with this, and I said, I'm just going to have to make up a new word. Because even longevity back then wasn't something people would follow and antiaging made people think of plastic surgery. So I said, it's biohacking and it's taking control of my own biology. And the pillars have been cognitive enhancement, longevity, and then having the body you want. And it could be you want to be lean, you want to be muscular, whatever you get to pick, and just having your energy back consciousness maybe would be a fourth pillar. Where do you see longevity and biohacking coming together? How are they different? What's the

Dr. Vincent Giampapa (01:27:42):

Future? It's funny because biohacking, initially when I heard the phrase, I'll be honest with you, I said, well, that's what we do with anti-Aging medicine. I guess it's synonym.

Dave Aprey (01:27:54):

We had to make it cool.

Dr. Vincent Giampapa (01:27:56):

But not only that, it really opens the doorway for people to again say, I want to have the choice for my body. Whereas when we talk about anti-aging, it's more of a controlled thing. So I believe biohacking has really helped push anti-aging stem cells and regenerative medicine forward quicker than it would've on its own

Dave Aprey (01:28:17):

Mission accomplished. I literally set out to do that after, I think it was after six years of running the anti-aging nonprofit group. And I'm like, why is it stuck? And I thought it was a branding problem.

Dr. Vincent Giampapa (01:28:29):

No, it's not a branding problem. I think it was first of all, anti-aging. Like you said, longevity in the main science community. It's still considered science fiction, but biohacking has attracted a group of people said, we don't care what they think. We're going to go ahead and do this on our own. And yes, there's been a lot of those initial attempt at biohacking where data was collected to show that, hey, it not only did work, it's safe. So that kind of opened a mind to some of the research that's in more conservative mindsets. Well, let's see it. So it's been to me a help with pushing forward. And so I want to have to congratulate you on being one of the few people with the courage to do this and really help push the movement forward. This is about helping people and giving them the choice and giving them the choice. I didn't

Dave Aprey (01:29:21):

Want anyone to go through it. I went through, in my twenties, I felt like I was old. I had arthritis early 117 fasting blood sugars. So diabetes, I had the brain fog, I had the joint pain. All this stuff you're supposed to get in your seventies, this sucks. And I started out saying, well, if five people follow this, it's going to help them so much. But when I realized that I could actually use this to make people think, to change our consciousness about what's possible, man, I took a lot of hits in the early days and people were so outraged. But what's funny, the functional medicine doctors are like, oh, thank God we so need this. And so many of them go to the biohacking conference, but we had 3,200 people last year and it's become like CES and there's hundreds of vendors, and we're reversing aging and we're giving people superpowers. And this is what I was dreaming about.

Dr. Vincent Giampapa (01:30:15):

Well, listen, I was at the biohacking conference the year before, and that was the first time I went to the biohacking conference. And I think you remember we were there as a company and I was amazed. I was amazed that the technologies that I didn't know about. So that opened my mind to also, and I think that it's really important to have a conference that talks about cutting edge things that are coming in the future. Because the secret to really living optimally and longer is a mindset. If you don't have an open mind to this, you can never even, you're not even going to be aware of what's happening. So you have to have an open mind to the new information. I think meetings like you create these vacuuming meetings help people actually, it forces a door. Their minds open when they see this or they hear what's going on. And I heard some amazing scientific presentations that would've been kind of really, really kind of difficult to present at some of the medical meetings, but with real data. So again, my congratulations on taking the woes and arrows and hatchets, and you're back initially to get to the point

where you're able to help with companies that have new ideas, doctors who have done research that's legitimate to be presented in a format they would not have had before.

Dave Aprey (01:31:31):

Thank you. It's amazing. And I look at all the longevity conferences, you now be at Rad Fest, and I've presented at a four M multiple times, and these are my people. We're all working on the same problem and at different areas on the curve. Exactly. And a lot of the biohackers that come to the Biohacking Conference, they're not medical professionals, but they've done their research, they've done their reading, and they're willing to spend time and energy on living longer. And they'll put the work in. And I mean, in medical school, you're like, okay, you're going to have to change your lifestyle, but we don't even know what to do to tell people. And then for me, I did all that in my twenties. I worked out 90 minutes a day, six days a week. And when it didn't work, after 18 months, I finally stopped being stubborn and said, I'm just going to do what works. And I started measuring it. And when we have a bunch of just individuals saying, Hey, let's all do some stuff that's kind of similar, and let's compare notes. I feel like that's where progress happens. And then we need the data Sinclairs, we need the work you're doing to go out and validate it and do the lab data. And I don't know that we really need a lot of epidemiology to do that.

Dr. Vincent Giampapa (01:32:45):

So what you're creating is, or showing is the value of community.

Dave Aprey (01:32:51):

There you

Dr. Vincent Giampapa (01:32:51):

Go. And to me, that's one of the most important things that we need to do with people who are out of the box thinkers. And I think biohacking creates a big community. You've obviously seen that grow. Oh yeah. Longevity followers are growing. Those two communities together can really help really push a future together, forward much quicker than we would normally do. Well,

Dave Aprey (01:33:15):

You'll be at the Biohacking conference in 2025, right?

Dr. Vincent Giampapa (01:33:18):

I have every intention of being there, and I'd be more than happy to share some secrets that I've even let out here today.

Dave Aprey (01:33:24):

Well, how about I put you on stage? I think that's a good idea.

Dr. Vincent Giampapa (01:33:26):

It would be an honor.

Dave Aprey (01:33:28):

Well, thanks for all of the upgrades you just did here at rmi, guys, dave aspr.com/clock. If you just are at that point in your life, you say, I want to do what Dave did, just tell me how to do it. We put together a list of everything I did and why I did it. And you can have a reset aging clock in your brain, which I don't know how to do that anywhere else, and you get a bunch of the other stuff that's also just so cutting edge with a luminary in the field. I hope to see you down here in Costa Rica.