

The Science Behind the World's Most Elite Athletes • Dr. Marcus Elliott | Under the Number S2 E6

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SUMMARY

Dr. Marcus Elliot, founder of P3 (Peak Performance Project), discusses the intersection of sports science and athlete performance, emphasizing the importance of biomechanics and data analysis in understanding human movement. He highlights how P3 utilizes advanced technology to assess athletes, predict injury risks, and enhance performance, showcasing examples like Nikola Jokic and Luka Doncic to illustrate how unconventional metrics can reveal hidden athletic potential.

- P3 focuses on unlocking the secrets of human movement to improve athlete performance and prevent injuries.*
- The organization assesses athletes using advanced technology, collecting thousands of data points on their movements.*
- Dr. Elliot emphasizes that traditional metrics like jumping height do not always correlate with success; versatility in movement is often more crucial.*
- Athletes like Jokic and Doncic demonstrate that unconventional traits can lead to exceptional performance, challenging traditional scouting paradigms.*
- The rise of data-driven sports science has been accelerated by the increasing financial stakes in professional sports.*
- Dr. Elliot advocates for athletes to take ownership of their health and performance, using data to understand their unique biomechanics.*
- The upcoming book "Ballistic" by Henry Abbott explores P3's impact on sports science and includes insights on optimizing athletic performance for non-professionals.*
- P3 is considering expanding its reach into collegiate sports and potentially developing consumer versions of its assessments to benefit a wider audience.*

All these good things that athletes bodies can do, all these competitive advantages and all the bad things that can happen to their bodies, they all telegraph themselves. This is really about unlocking these secrets of human movement. So when an athlete shows up at P3, we ask them to run fast, to jump high, to cut hard. We're interested in how their systems work. Where does the force come from? How can we keep this athlete healthy? What things are he at risk for? We put a ton of resources, ton of data scientists, ton of engineering talent into understanding human movement in these sports. If we're smart, we can see those signals. How movement affects risk of injury, how it affects longevity, how it creates competitive advantages on different areas of the court or field. And we can use those signals, those insights to create advantages for athletes.

Today's guest is Dr. Marcus Elliot. Marcus is a Harvard trained physician and a pioneer in the world of sports science. He's the founder and director of P3, the Peak Performance Project with facilities in Santa Barbara, California, and Atlanta, Georgia. P3 is a company that uses advanced sports science technology and data to improve athlete performance and prevent injuries. Marcus and his team at P3 have trained countless athletes across the NBA, NFL, MLB, and the Olympics. Prior to P3, Marcus served as the team physiologist for the New England Patriots and is the director of sports science and performance with the Seattle Mariners.

So P3, if I am up to date, has assessed roughly 70% of rostered NBA players currently in the league. And I also heard in another interview and just preparing for this episode that you said Nikola Jokic was the worst jumper that you have ever assessed at P3. This is the same Jokic who has won three out of the last four NBA MVPs. How does that work? Yeah. 17 inches.

And my my my my 15-year-old daughter the first time she assessed, she jumped higher than the best basketball player in the world. How about that? Unreal. yeah, 17 inches. I will tell you though that Jokic, I mean this actually points at this really interesting concept and I think a lot of people know P3 for our injury predictions, being able to assign risk based on movement quality to your risk of being injured and looking for those signals before things break, which is the way we'll all do it in the future. But I'm just as interested in these second order performance metrics. And so Yic although he jumped 17 inches which was lower than the I don't know 1,200 NBA we've assessed besides him we our data loved him. It loved them. In fact soon after we assessed Yokicage we have this thing called the principal component analysis where we take all of this granular movement data. You know we capture all this movement data.

thousands of data points on how you how you slide, how you cut, how you second jump, how much flexion do you have in your ankle when you're when you're sliding, what how how fast you accelerate into maximum acceleration. Like we we have all these second order derivatives that we can look at. So we get a ridiculous amount of data in on movement. We know everything about these guys movement when they get done assessing with us and we put it all in a computer and the computer sorts athletes in this principal component analysis based on similar movement qualities. All of your nearest neighbors end up in a cluster together and and after we assessed YIC it started a new cluster for us.

We'd always had seven clusters and after Yokic there was an eighth cluster and that eighth cluster was for guys that are incredibly long and can do everything. He is a Swiss Army knife of a of a movement machine. and our most successful NBA players, they're not the guys that jump the highest, not the guys who run the fastest. They usually don't do anything that's u really remarkable except they can do everything. And I just I love this idea that and it it kind of flies against the eye test. but I love this idea that if you're a Swiss Army knife and you always have the right tool for the job, you can be incredibly successful as a professional athlete. You don't do one thing that's better than everyone else.

You don't do anything that's incredibly striking. That was a pure god-given gift. but you can do everything. You can slide left, slide right, rotate off your left leg, second jump, jump off your left, jump off your right. you can jump quick, you can back pedal and rotate your left to your right. All these different movement elements are in

your in your Swiss Army knife. And you take exactly the right tool for every situation. That that's what Jokic does.

And the the the the movement cluster of guys that that are also Swiss Army knives, but aren't as long as Joic, those guys have the highest win shares. They have the longest careers. They are by far the most successful NBA players in all of our clusters. And they're oftentimes guys that went to small schools like CJ McFollen. He's he's he's he's he's in the middle of our our kinematic movers we call them. so these are the type of things that we learned from collecting data. And as I said your eyes lie to you and they lie to you all the time. They lie to you all the time and you don't know it unless you have the data. and and we're able to identify a lot of things, Brent, that and you know this, but we identify a lot of things that traditionally people have said, you know, you just can't teach that. He was he was born with that because they can't see the the physics and the physics are a little they're a little bit more obscured, you know. when we assessed say Luca Donuch, Lucas started coming over to see us when he was 15 years old. He'd fly over from Sylvania with his mom and spend summers with us. You might have met him. You might even have been here when he was coming over. It would have been a similar time frame. I never met him, but it would have been a similar time frame. Okay. I mean, he just looked like a Santa Barbara High volleyball player. but, you know, he he's turned into a pretty nice basketball athlete. but when he was going in the league, NBA GMs were were suggesting he wasn't athletic athletic enough to go play with these guys. to be successful in the Euros in in the Euro League as a youngest ever Euro League professional, but everyone was saying he wasn't athletic athletic enough to go play in the NBA because he doesn't jump high and he doesn't run fast, but he did some things better than almost any NBA player we've ever assessed when he was still in high school. Like his his stopping ability was at the 95th percentile, like his his ability to put the brakes on as a as a 17-year-old was at the 95th percentile for NBA players. And so we know we know that'll play that physics against other players physics, his great breaking against the average NBA players breaking will win every time. And so it's amazing for us to watch when he gets in the league and he builds this whole game around his braking system, his ability to stop.

Also the fact that he's so big, you know, he just he gets in the lane, he just takes up space. He's he's enormous. but his his breaking is is better than basically anybody else that will be matched up against him. And so he can always create space by stopping and and so you know we predicted he'd shoot the step back three which he has and and you know he's not the best defender but he can stop away from everybody when he has a ball. Physics allows to see what's going to happen before it happens. It'll allow us to see matchups before matchups happen, which is for us, you know, we everyone loves sport that works at our works at our place, all these all these biomechanists and data scientists and so on. And so being able to predict outcomes before they happen is is is really fun. No, I was that you answered my question. I was going to say what was something that you knew about Luca before anyone else? And you you answered it. You know, I remember I've also read or or maybe listened, maybe talked to you in person about it, but was it James Harden who jumped out as a the only other like most kind of outlier decelerator or breaker in that set? Do I have that right? Yes. I I think that was kind of what got the conversation about breaking started is as we assessed James Harden. He also doesn't run that fast, doesn't jump that high. He's not he's not like Jokic. he does okay, you know, he jumps okay. He's like 28 inches or something, you know. but for an NBA player, it's not it's below average. And the one thing he did, he did better than any player we've ever looked at. And and it was remarkable for us as as as data scientists because as you look at all his data as assessment data, you look out at this sea of average. Everything is average.

He's the 50th percentile, 48th percentile, 50th percentile, but then he's 100%. And then he's 50th, 50th, 38, 48, 100 percentile. And every one of these giant peaks were related to his ability to stop. He, for whatever reason, is this incredible stopper. The year before he won his MVP, he was the best stopper we'd ever assessed. It's fallen a little bit in the last few years, but it's still, you know, better than 90% of the players in the NBA. A player learning that about themselves, like when Harden was in there and you say, "Hey buddy, come look at this screen. We've got your clusters here, and we've got your the way that you're falling in each percentile." and you're absolutely the definition of off the charts here in your ability to stop. Was he saying, "Okay, tell me more. How can I craft my game around this?" Or was he like, "I've kind of always known that. That's why I already play the way I do." Was he saying, "Please speak to my coaches so that we can my trainers so that we can further craft my game around this one crazy advantage that I have in the most, you know, competitive level of sport imaginable." Yeah. So he a little bit of the last thing like he wanted to he wanted us to let people know around him that he's you know because he he tends to he likes his living quite a bit you know so he sometimes put on a couple pounds and didn't didn't used to do a whole lot of really hard off course training I think that's changed some and so he wanted his coaches to know that look you know he is a specimen you know he is a specimen he's not just a genius with the basketball he's also a specimen they just can't see how is his specimen. But but that's always an interesting moment when we when we see something that's remarkable about a player and none of these guys have ever gone through an assessment like this.

You know, this is almost always the first time for him. And then you and then you show them what's what's remarkable. and I I can tell you with James, he had a sense he said that yeah, that that checks out. That checks out. like he he kind of knew, you know, his game wasn't vertical and it really wasn't going by people. It was it was that. So he he'd already he was well on his way to to to optimizing that that that special power he had. So all this talk about Jokic, Luca, James Harden, there are a couple more we could think of, but it leads me into my next thing that I have for you, which is that you have a real perspective on dad bods and the phenomenon of the dadbod in professional athletics. At least you were made to have a perspective in the New York Times. I guess the athletic story that that ran on it looking at people like Jokic and Mahomes and Josh Allen. These guys are not ripped, you know, 5% body fat absolute classic, you know, traditionally what you would think of as specimens and yet that's the exact word that you were just using to describe Harden. So talk a little bit about that. I mean, I think that the Dadbods concept that they they got a lot of leverage out of that article.

Yeah. You know, I saw saw they just actually just republished it. But I mean, to me, that was just a that was a marketable take on the thing I told you I was interested in before, and that's these second order performance metrics, right? That there's things that our eyes lie to us about. we have a sense that we can see what a great athlete is and and and oftentimes we're so badly mistaken. I mean, we get this, you know, we're we're engaging with quite a few teams now around pure sc scouting activations. because we we can see what these we can see how these these systems like right now we have you know probably half of the top 10 picks are out with us in the in this next NBA draft that'll happen in a couple months or out with us here in Santa Barbara. And we can see where these systems have holes. We can see where they're going to excel. We can see if a guy has a physical tools of an elite elite perimeter defender. you know, you have some great vision with the with the physics of of these of these of these bodies of these systems and and you know this you've you've watched it as you were growing up playing sports is we tend to we carry on these historical paradigms and and we tend to overly rely on our eyes. You know, if you're a baseball pitcher that's 6'4 and you know wide shoulders and you're throwing

78 miles an hour, people call you projectable.

You know, oh he's projectable. you know, they think that that body is going to throw really hard. if you're that that same guy and you're show you're throwing 5 miles an hour faster and you're 5'10", that that's just not projectable, right? But there's there's plenty of guys below six feet that that just throw bullets, but our eyes want, you know, somebody as bigger, long arms, strapping, and and so, you know, we just as a business of sports have gotten as big as they as they have. we're going to have to discard a lot of these old paradigms. There's there's so much slack in those systems. And and you know this as well, but we don't just use this data to to project players. Like what we really want to do is make their lives better. We want to see what they're good at, what they're not good at, and we want to we want to sculpt them from that. We want to anticipate injuries before they show up and and change the mechanics. They're going to lead to them wearing out the cartilage in the medial aspect of their left knee.

And so we're always looking to use this data to serve these players. So like these these kids we have in these 19 year olds that have a chance to be billionaires that we have at our place right now, right? we we see something that doesn't work like we're going all in with them in these six weeks or so we have them out here to make that thing work. and so that's that's you know that's the most satisfying part of what we do. It's not predicting bad things and seeing them happen. And it's really it's fun to predict how how players going to manifest as a professional, how what their game's going to look like, how good they're going to be, but the best thing is actually changing lives and changing changing outcomes for the better. So that's that's the really the most fun part. You know, two things on that note. On the note of this next generation of athletes, the way things are going, without question, have the chance to earn literally billions of dollars over the course of their athletic careers, not to mention the marketability that often carries beyond that once they've retired. But kind of a two-parter here. one, you started P3 in 2006 doing a lot of this kind of leading edge sports science and you had to be wildly patient, I feel like, for the rest of the sports world to catch up to you. So, one, yeah, how did you have the patience to probably have lots of meetings where people stared back at you blankly thinking that you were this like mad scientist? I would presume at least that happened probably a couple times.

And two, a lot of times a lot of times. A lot of times. And two, was it did their attention finally grow on this entire area, this entire realm of data driven, data science-driven sports science? Did it grow in lock step with contract sizes and super maxes shooting through the roof when they realized what kind of an asset they were putting at risk and how much of a gamble they were taking when their \$50 million a year guy had no real insight or any sort of like predictive analytic engine telling him whether or not he was going to bust his knee and be out for you know 60 games that year. Yeah. So there there's a lot there. So the first first part of your question, yeah, a lot of people didn't know what to do with with me or or our entire project. You know, when we started this, the first pro team I worked with was the New England Patriots. And the Patriots when we started had two different training programs. You're either a speed athlete or a strength athlete. And if you're a strength athlete, you did the strength programs. You're a speed athlete, you did the speed programs. Which category you're in was entirely based on position you played. Had nothing to do with your body. And that made zero sense to me. It wasn't just the Patriots. It's everybody. I mean, a lot of pro an a major league baseball team we worked with, they had one program. There's the offseason program for everybody.

That's what you do, the offseason program. And that made no sense. All of our bodies are different. You know, you go you go in Trader Joe's, you go in Whole Foods and and and and walk around the aisles, everybody's different. Everybody's bodies are different there. it's the same with pro athletes. They all have different systems. You you take a guy who's got terrible hip mobility and you put him in the same program as a guy who's got really poor hip stability and they're going in the opposite they're going the wrong direction. You know, at least one of them is going in the wrong direction, right? And that made no sense. And so my the whole initiative this peak performance project the the idea behind the whole project was to use technology to get insight into bodies that would lead to us treating them differently and more precisely than we would have treated them from a development standpoint if we didn't have that information. And so we used all types of technologies in the beginning. We borrowed almost anything from biomechanics, from medical labs, from any engineering environment I've been exposed to to try to get insight into this this body that's in front of us.

And the thing that had the most value was studying biomechanics. So we just went really really hard at biomechanics. I can tell you like early on in my career, well first off, everybody in my academic path thought it was a waste of a world-class education almost everybody to go do what I wanted to do. You know I I I I went to top undergraduate schools. I went to I went to Harvard Medical School. did a fellowship in sports. Everybody thought I should that it was a waste of worldclass education.

you're going to take this world-class education, you're going to be an overqualified personal trainer. That's a and and then when we set up shop, people thought he was he must be a chiropractor. He must be nothing against not a whole lot against chiropractors. I'm not I want to totally pretend chiropractors a little bit, but not a whole lot. he probably dropped out of medical school, you know, because he's not like he's not doing what doctors do.

the when the reason I went to medical school is I thought it'd be interesting and I wanted to study injuries because I thought we could influence injuries by how we cared for athletes. So yeah, it was it was in the early days there was a lot of confusion and I can tell you like we invested a ton from a financial standpoint, from a skilled resources standpoint in collecting all this data at a time when nobody was interested in it. Nobody wanted it. We'd offer it to pro teams. are like why what we would they don't even have a place to put data in the early days. There was no place to put data. and then it seemed like it all kind of happened all it happened all at once because that's how these things usually happen. All of a sudden everyone was interested in all the data.

We went from an NFL team not wanting to know that their their player has a giant asymmetry and it's at the 98th percentile for an injury risk to they want all the raw files. They want all the raw video. They want everything. And it really happened overnight. It was within a couple years that it just completely changed. When did you feel the shift? What was that time frame? I would say eight years ago, maybe seven or eight years ago, and now they do want everything. And now they're investing.

They're investing a lot in the space. it's still early days. It's going to get a lot smarter. There's a lot more smart people getting in pro sport, which is great because it means we have more people to talk to. we've activated with a bunch of teams. we always, every team we work with, we help them. There's not, never do we not add. We always have insights they wouldn't have had. We've, we just started this initiative with the with a leaguwide

initiative with the NBA where we're putting labs in every all 30 NBA facilities. So, the NBA was watching what we were doing. They're saying, "Look, you know, we have an injury issue we'd like to get out in front of and we want to care for these players and, you know, we'd like you guys to partner with us on this. We'd like to basically do what you've been doing." so like the wind is so at our back right now, but there was a long period where we were investing a whole lot into things that no one was asking for. And so you have to have conviction when that's happening. We're putting a lot of money, a lot of time, a lot of resource into something that nobody wants. But I just saw how much value there was.

There was it was just clear that there was a really strong signal. so we we followed it. And so do you think it was more like to your point about they had nowhere to put the data, the the technological friction was too strong in some cases? Maybe that was people's excuse, but it was, you know, not all fake. Do you think that people finally receiving it warmly? Do you think that was tied to tech catching up or tied to just the insane money flowing into all professional sports? I think I think it was both, Brent. even when we started in pro sports, you know, over 20 years ago, it it was apparent that there was a whole lot of slack in this space and that and that that slack that meaning the de the athlete development space, the protect your investment space and that slack was costing professional teams millions of dollars. I think the team started paying more attention when it was hundreds of millions of dollars. you know, it became it became a a little bit more of a a pressing issue, right? In the NBA, where we where we're spending a lot of our time, the the teams that are left standing at the end of the season, invariably those are teams whose superstars were all healthy. And and there's a good chance they haven't lost one of the rotation players for the playoffs, you know, a fifth, fourth, fifth, sixth, seventh guy. And and that's just that's the reality of of of NBA life now. And at any given time a third 40% of their of the stars are injured, you know, and and these guys are they're now on \$300 million contracts. We're about ready to see \$80 million a year contracts. So what do you do with how do you how do you protect that investment? But they also started, you know, it's I think it's also, you know, we're probably kind of caught up in the in the Moneyball revolution. this idea that there that data can show us things that your eyes can't that might disagree with historical paradigms and so I feel like we're you know somewhat a beneficiary of that but this is a data error in in our society period it's not just sport right you know I mean AI is the most interesting thing that's happened in the last well I don't know I'm going to say it's at least at least in the last half of my lifetime it might be quite a bit more remains to be seen but this this is powerful stuff we're working It shows us things that our simple minds can't see that are going to help us build things that are going to help us create better outcomes. I'd imagine that sitting in your position with 20 years plus of historical data, a gigantic data set, which is really a moat because you're the one who's captured it, assuming you're not posting it all over the place online and open sourcing it.

Sitting there with that type of ammo going into this AI revolution, you got to be licking your chops. really that does sound like a pretty awesome spot to find yourself. And so speaking of that, when we I remember when I saw you in person like I guess that was already like a year and a half ago probably and I went by your house and we were chatting. You told me about how you have been approached multiple times by groups who wanted to either buy P3 outright from you or take a majority stake in the business and you know controlling stake and that you you know certainly tempting from a personal financial gain perspective but that you ultimately decided against it. Can you shine a little bit of light or at least do a quick fly over of that period of your life? Yeah, I mean I'll give you a quick fly over and and and truthfully it's kind of this is all this is an open issue right now because we're trying to decide if we take in some investors because it feels like it's a time to run right now, right? and and

if we're going to scale regardless, but do we scale with partners or do we just do it on our own?

and the thing I'm leaning towards is taking in athlete investors because there's enough athletes, enough pro athletes have asked to invest over the years. like I don't think that would be hard to to do a raise around just athlete money. And then maybe if there was a partner or two that that had access to more cash if we wanted to do some build out some other things, you know, somebody that's either either either sat close to or sat in an investment vehicle, but probably more family office than, you know, certainly not not GE direction.

somebody that could let this play out organically. Mhm. so it's it's it's up for discussion right now, but the the almost from the time we we opened, we had people that wanted to invest to build out more facilities and I didn't really want to build more facilities because I didn't want to I always worried about not executing well. so I didn't want to scale that way. So just quality concerns. Yeah. Yeah. Keeping the quality across locations.

I just knew that if if our reputation was these guys do it better and smarter than everybody else, then that we would win whatever that organic path was, that that wins in the end. and now we're at a place where we do have all this data. and we have, you know, we have a great brand and we have feels like sort of unlimited potential partners in pro sport and college sport. And now college sport is giant business. So that's that's a market that's kind of begging to take better care of their athletes, have access to some of these things that the pro aletes have now.

Yeah. Almost every one of these I mean we just we assessed Bryce Underwood just recently, this young kid from your sport. almost all these best young athletes end up finding us these days. Like a remarkable number of them across lots of different sports. So I feel like we're in the driver's seat in a lot of ways with this next step. And the question is, do we do it with partners? How fast do we scale? Do we think about building out a consumer version because everyone else has a body that we could provide insight to? They could have an understanding of why their left knee is hurting if we could do a biomechanical assessment, which we could if everybody had one of these things. I'm just waiting for that moment. Yeah, we actually used an infrared depth sensor on an iPhone which is built by this Israeli company called Prime Sense to to do the same thing we do in our lab, you know, in a in in what was a couple million dollar lab. so that's waiting to be done right now. it's kind of as a parallel business. I almost sold half a P3 during the pandemic to a private equity firm that has that makes a lot of investments in the sports space and owns a bunch of, professional sports properties.

Their their thesis was that we would make these billion-dollar investments they're they're making more valuable by having the best sports science in in sports. and at the same time, we'd have more data and we would grow. And so that investment by itself would also become more and more valuable, which is which was I I think a 100% correct thesis. Like I I agree with them completely. But in the end, it felt like they weren't going to be great partners.

It felt like it wasn't quite the right fit. And so we we stepped out of it, which is how I arrived at what's likely going to be an athlete investment round, plus or minus somebody that sits close to institutional money. When I think about the data set, the insane credibility, the built-in evangelism from these professional athletes from a

marketing perspective is crazy. And I I just can't imagine that you haven't gotten your, you know, been having your door beaten down by people trying to you know, capitalize this thing in some way, whether it's to productize the data set or, you know, try to convince you to build more locations or bring it to the collegiate landscape. I mean the it's literally a question of prioritization probably rather than could we do this like well yeah we could do everything right now because the end of the day it all comes down to the quality of the data and the you know the brand and the credibility and that's all there.

so that that certainly checks out. Something that's probably also not going to hurt for awareness on the P3 front is that I understand there's a book being written or being published. It's already been written about you that's going to come out month and it's called Ballistic. Can you tell me a little bit about that and why the title Ballistic? Yeah, thanks for bringing this up. I just read the book a couple weeks ago. it la it launched at the Sloan Analytics Conference, the MIT Sloan Analytics Conference, which is kind of a perfect place for it. Mh. it's written by a guy named Henry Abbott, who's an incredible author, super talented author. Henry was the head of this thing at ESPN called True Hoop that oversaw, I think at its peak, had 60 of the smartest writers at ESPN.

Whenever I would get interviewed by a really smart writer asking really probing questions, it turned out that they were under this this Henry Abbott's toutelage under his umbrella. And and he reached out a few years ago. I I really didn't know him at all. but I could see how well he he took care of this flock of writers and how sharp they were. And he reached out and said that that he wanted to write a book. His agent is telling him that it was time.

He's been thinking about this for a couple years. And as he looks around the pro sport landscape, the most interesting thing he could find was what we were doing and wanted to know if I'd be willing to to to have P3 be a subject of his book. And I I trusted his writing enough that I said, "Yeah, let's do it." And embarrassingly, you know, it turned into not just what how we've influenced P3 has influenced pro sport, but also a little bit about me, a little bit more you know, I think he just thought I was kind of a kooky character and how did this guy decide that, you know, they should do this thing different differently and you know, how do you go from a Harvard Medical School degree to figure out how to make athletes work better? So, so a chunk of it is about me personally. And then there's and then he also tried to take some of the learnings we have from a data side, these these really precise approaches we have to understanding data and create some general advice for people who have bodies that aren't proathletes. And I I was super reluctant to get involved in that too because it's I just didn't want to dumb it down. But he did a great job of it. talking about how your how your feet should interact when you land.

Talking about how important your hips are and what happens when your hips aren't working well and how the force ends up going through your knees and through your back. And I it's all the things we know from a data perspective, but sharing with a bigger audience. so I, you know, we'll we'll see how it all goes, but I think that early reviews have been really good. That's awesome. I I'm My next question. I wouldn't be shocked if this got woven into the book.

This is something that there's a press piece on it that's from 11 years ago now, which was about when I was

working out at P3 with that amateur group. And it was when you and Kyle Corver and Nelson Parish and a couple other people got written up about for doing I'm going to probably mispronounce it. Your annual Missogi. Is that right? Good pronunciation. Proper pronunciation. Okay. So, the one that I read about involved an 85 pound rock, some wet suits, and a boat. Can you elaborate?

Yeah. So, I mean, first off, these these mogis, you're you're good on the research. You're good. You're good at this, buddy. You are. I'm I'm going tell you. Yeah. I've done a couple of these and you were very good. but the the what we try to do is once a year do something that's not just going to be a challenge, but that's that you if you if you do everything right, you have about a 50% chance of making it.

Okay? And I can tell you like your brain doesn't want to take on challenges that you know if you execute everything, you have a 50% chance of making it. Like you just don't want to start that race, right? It's a but it I think it gets at something that's really primal and that's that it used to be if we if we miscalculated the difficulty of something you would frequently die. You know if we thought we could get over that mountain range with the with the full tribe before the winter set in and we were wrong you know we were Yeah. Yeah. So and so that's that's what we've inherited evolutionarily. But now what failure looks like is you didn't you get much traction with your recent post. You know, the failure isn't that you die in very many things at all. Right. Pretty low pretty low stakes. Yeah, it is. It's a it's the the it's it's a low stakes failure game we're in right now. But people still react like, you know, like they're high stakes. It's evolutionary vestage. And so, once a year we try to do something that we have about a 50% chance of making. And that that thing we did that time with, with with Kyle, who's a you know, a great shooter in the NBA. and with a with a friend of mine who's an artist is we we carried rocks 5 kilometers on the bottom of the ocean. So cookie idea, 80 82 pound weights, 82 pound rocks that we found out at the islands out here, the Channel Islands. And and if you carry a heavy rock, it holds you on the bottom of the wa of the ocean. And so you can walk even though the water is, you know, like that that high up above us, you know, it's 12 feet up there. Yep. You can walk on the bottom. and but the air is 12 feet up. And so, you're walking, walking, holding your breath until you can't take another step. And then you let go of the rock and you go up and you take a breath. And then you swim down.

You pick up the rock and you do it again. And it doesn't sound like a lot of fun. but it's super satisfying. And we we we it took us like five and a half hours. We actually made it, all three of us. And and it was incredibly hard. You think that you're going to have to stop after like 20 minutes and you're like, "Okay, I'm just going to do one more. I'm going to do one more. I'm going to do one more."

And five and a half hours you're still doing it. And that's the thing. Most people never do something that they think they have to quit at. And then and then and at 20 minutes and then five and a half hours they're still doing it. So they just don't know that they can do that. And if you try that once in a while, you're going to be surprised at the stuff you can do. It's it's my belief that the the the experience first off, it makes you less fearful of doing things that you might fail. And almost all the best things you do in your life, you have a chance of failing at and you just have to be comfortable jumping into it fully. If you if you're not willing to take that risk, if you're not willing to take the risk of failure, you're going to live live a very quiet and and uneventful life. And u I don't want that one. And so and so I think it helps you it helps desensitize you against taking on risk the risk of of

things that you might fail at. And and it also shows you that you can do much much more than you think you can. And I think generally if we if our potential is out here, we spend almost all of our time living in this little tiny circle here. You know, we our potential is this big big dining room table, but we live in this little platter in the middle of the table. And when we start getting off the platter, we're like, I don't know.

it's like that's a little late for me or I don't know that's a little far for me and and so if you push it way out to the edge once in a while then you know what you can actually do. and and and also you know if you're it usually if I don't like I I failed in the last three of these things I've tried. and usually if I tell people that I failed in them in something in one of these mogis they're like oh it's too bad. But the thing is if you don't fail you just don't really know what you could have done. You know maybe you just not maybe you didn't set the bar high enough right? When you fail and you really know that you had nothing left then you know how far you could go. 50% chance of making it. Okay, that's rule number one.

And rule number two is you can't die. So, if you're doing something that has some risk involved, then you have to take steps to mitigate those risks, right? We had safety divers out there because I didn't know what would happen if we held our breath over and over and over and over for hours if you know we'd mess up our acid base and pass out or something like that. So, you know, we had we had got divers when when when Kyle and Nelson and I were out there. Yeah. Yeah, the title of that piece that I'm referring to was the one day a year fitness plan. Pretty illustrative. It's a good title. Yeah.

Okay, we're going to wrap up here. I want to do a quick lightning round. First thing that comes to mind, rattle it off. I'm just going to go one after another. Ready? Yeah. Most intense athlete you've ever met. Y Leonard. What's something that we do currently in training or the fitness world that you think will look barbaric or medieval in the future when we're looking back on it? I would just I would go with this this our general approach is is still are you fit enough or are you strong enough? most of it's just aesthetic driven and the future is that you understand your body and you have a program for your body. Period. Right.

What is an overlooked risk factor when projecting out future injuries? Biomechanics. Number one, within the subset of biomechanics, ground foot interactions. How you interact with the ground? Ground foot interactions. Okay. Best thing for your health that people should stop doing that they should take out of their lives? Being obsessive about diets. We don't know enough. You you you you spend way too much willpower. over over the latest diet trend. We don't know enough. Okay.

I was not expecting that. That's a good one though. Yeah. I guess you can develop develop neurosis in the process of trying to get on the latest fat on the diet front. 100%. What we know is what is what your grandmother told you, Brent, that it's like eat plenty of fruits and vegetables. Don't eat too much red meat. Don't overeat. Not too much processed foods. Period. Keep it simple. Limit sugars. Okay. So, that's something that people should remove from their lives. What's what's one thing health-wise that pe that you would advise people to start doing that most people are not currently doing? Take more ownership of your of your body and your long-term health. don't outsource that. Like what what do you what do you need right now? What's your what's your body need? You know, what do what are your weak links? My body needs more mobility all the

time. I I telling you before we started recording, I crunch too much.

Yeah. Yeah. So, you're probably right. like you you you know that most people don't know that. right understand what your limiting factors are and go get those. That's it. So take ownership of it. Your doctor doesn't know. Your personal trainer probably doesn't know. you have to know. You got to gather that information. Okay. The final two. This is what I ask everyone on the show and you might be the perfect person to answer it because you can definitely be objective given your data set. Who comes to mind when you think freak athlete?

I'm sorry. There's like there's different categories, you know. We could have dadbot freaks, we could have like raw power freaks. I can tell you of the athletes we've assessed recently, Anthony Edwards is a is an unusual specimen. I believe that we made a case for Anthony Edwards right before he was drafted. There's three guys were considered for the first pick and we made a pretty strong case that that he's a unicorn. like he's one in one. He does everything from a physical standpoint that you need to be able to do on the basketball court. his acceleration, deceleration, lateral performance, vertical, everything is like is at the 99th percentile. He's a very very very unusual athlete. Well, that's a pretty good answer. I usually follow it up with who who comes to mind when you think sneaky athlete. you kind of already led off with a few of those, but I guess the better question you you said Jokic and you've mentioned Luca and even James Harden and of course Mahomes. Who are maybe one or two others, people you think of who you look at them, you think one thing and then you go under the hood in the data and you know following a P3 assessment with all of your force plates and your motion capture tech and your cameras where those things just do not match. Well, I don't want to tell you how it doesn't match in the negative way because I don't want to I don't want to throw guys under the bus right now.

we could do that like off camera. but let's see. We had this kid playing for Jaylen Williams playing for Oklahoma City right now. he was projected to be a late second round pick when we assessed him and he was he was a top three from a physical system standpoint in his draft class and that's manifest. I think he was an all-star this last year, a couple years in the league. Like he's he's going to be one of the best players in that league for quite a while, I think. completely underrated, went to Santa Clara, but he just got he he doesn't he doesn't have all of Anthony Edwards, but he's not that far away. he can really do everything. And the data revealed those secrets early on, you think? Yeah, that's all that's all that's just the data talking and me telling what what it whispered to me. That's all, right?

Yeah. All right. Well, as we wrap up here, one, I need to say thank you because you wrote me a letter of wreck like 10 years ago now for college. I don't think I ever got to even formally thank you for that. Hugely appreciate it. Only 10 years late on the thank you. Did you get in somewhere out? It all worked out. It all worked out. I even found a wife there, so it all worked out. Wonderful. You know how you have those some those certain things in your wardrobe, whether it's a shirt or a hat that you just like can't seem to lose even if you tried. One of those things one of those things that I have 2014 I was given this after like, you know, completing a solid workout or earning some sort of some sort of little, you know, t-shirt sized accolade at P3. But I got the original logo on here. This shirt it just I I couldn't lose it if I tried. I found it was literally at the top of a pile in my closet today. I had to I had to bring that one up. I love it. I love it. Yeah.

You know, and this I I will tell you this too. I'm I'm I'm I'm super conscious of this now. This what I do is the only thing I've ever done in my life. You know, it's the only thing I know the only thing I've ever done. And the two things that I most love about it and I I'm one of these guys like I love my work. Like it is fun every single day. and and the things I mo the two things I most love about it is being able to it's the discovery of having data that shows us things that we had no idea existed.

and and and oftentimes are completely counter to prevailing perception. so it's discovering it's just discovering new things asking questions that we couldn't have asked previously and getting interesting answers. So, it's that and number two, it's being entrusted with something that's really important to to an athlete, their health, their performance, their future, and taking amazing care of it and and really like throwing everything we have into it. And in in doing that and applying really smart models with a lot of effort, you build amazing relationships because you you care for this thing you've been entrusted with so much. and you know you know you know what I'm talking about because you were you were part of it. Well, thank you so much for taking the time to chat. I am so glad we made it happen. I think that hearing that I think it's he definitely made the right choice passing up on the private equity buyout. There was a there's a story about I think it's Mark Zuckerberg who said early on he got this gigantic offer to sell Facebook and it would have made him you know hundreds of millions if not a billion dollars at super young age. And they said why didn't you take it? And he's like, "Well, because if I took that, I would have just started another social media company. Like, I'm already doing what I want to be doing. I'm already doing my life's work. Why would I why would I head to the sidelines and pretend like things would be better that way?" So, there you go. I I exactly that way. And if if if this podcast is going in 20 years, I hope we can do it again because it's going to be interesting. We'll have to have you on before 20 years from now, but we'll have you back for sure.

Marcus, thank you so much. I'll let you go and entertain your guests. Really appreciate it. Yeah, it's great seeing you again, Brett. Thanks, man.