

# Neurosurgeon: Change How Your Brain Works in 30 Days | Dr. Mark McLaughlin

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## SUMMARY

*Dr. Mark McGlaughlin, a seasoned neurosurgeon, discusses the corrosive nature of fear and its impact on performance in high-stakes environments. He emphasizes the importance of dismantling fear to elevate performance and shares insights from his extensive experience in the operating room, highlighting the significance of focus, responsibility, and self-acceptance in achieving excellence.*

- Fear is a corrosive force that impedes performance; understanding and dismantling it is crucial for success.*
- Thoughts generate feelings, which in turn dictate actions; being in charge of one's thoughts is essential.*
- Neurosurgeons must prepare for potential complications while maintaining focus on the immediate task at hand during surgery.*
- The concept of "terrible knowledge" reflects the harsh realities of life, and transforming it into useful knowledge can foster healing and connection.*
- Self-esteem can be detrimental; instead, one should focus on self-identity and responsibility for personal actions and outcomes.*
- Language shapes our reality; using positive and constructive language can influence thoughts and behaviors.*
- Embracing vulnerability and accepting the unpredictability of outcomes in surgery is vital for personal growth and professional development.*
- Authentic human connections and contributions define greatness, emphasizing the importance of service and compassion in all endeavors.*

Fear is the enemy. It's the enemy in performance of anybody's fear of life. If we can figure out how to dismantle it, that's when our performance elevates. You can't control your thoughts, but you can be in charge of them. So, I'm in charge of my thoughts, and my thoughts generate my feelings, and my feelings generate my actions. He >> is a certified brain surgeon who's done over 8,000 brain and spine surgeries. For over two and a half decades, he's made life and death decisions under extreme pressure in the operating room.

Please welcome Dr. Mark McGlaughlin. Still to this day, sometimes I'll get that nervous edge when I'm operating or before I'm operating. I'll say, "You are trained. You are enough. That's it. Don't think about the outcome. The outcome doesn't define you." >> How do you not ruminate on all the worst case scenarios while preparing to overcome the worst case scenarios? What I would say is, you know, what I've learned is >> now you've spent over 25 years as a neurosurgeon making cuts where a single millimeter could be the difference between life and death for some people.

And you've said that fear isn't the enemy, but ignorance of fear is. And I'm curious, what did the operating room

for the last 25 years teach you about fear that most people get wrong? >> What I've learned most about fear is that it's a corrosive force in our lives. Early on, I had teachers that would say things like, "Oh, you know, too much fear will paralyze you, but too little makes you foolhardy." But what I've come to realize is fear is corrosive and it always impedes our performance. M >> so if we think of performance performance is your potential minus the interference and interference can be discursive thoughts it can be thinking about the future and that's what fear is I mean fear is the anticipation of an event that might happen in the future that if that event happens you're going to feel something you don't want to feel >> so if you >> anticipation >> of a of an uncomfortable feeling in the future >> exactly >> that's fear essentially >> it is so there's two ways is to dismantle it. What I've learned basically and you can not think about the future or you can not be afraid to feel what you're going to feel.

>> Mhm. >> Now, thinking about the future is probably a valuable thing to do. especially if you're going to be prudent when you're doing an operation. You you do want to think about all the things that can go wrong in an operation. You want to be prepared for that, but you don't even want to worry about it. You want to be prudent about it. So, how do you I mean, I think Navy Seals, even like UFC fighters and wrestlers like yourself, like you have to prepare for all the bad positions you could be in and how to get out of it as a wrestler, as an athlete, as someone in the army, as a as a brain surgeon as well.

Like, I'm assuming you have to prepare. Here's the things that could go wrong. What do I do when that happens? Is that correct? >> Yes. Exactly. So, how do you know that there's a million things that could go wrong and then not go down the rabbit hole of, okay, but if that goes down wrong and I can't solve it, then it's life or death or I lose the game or I'm embarrassed or humiliated in a a social setting. How do you not ruminate on all the worst case scenarios while preparing to overcome the worst case scenarios?

What I would say is, you know, what I've learned is, you know, Anders Ericson said it takes 10,000 hours to become an expert at something. Takes 50,000 hours to become a neurosurgeon. Wow. >> And in my career, I've spent another 50,000 hours practicing. So that's a 100,000 hours. >> And we talked about how brain surgeons not only do brain surgery, but they do spine surgery. And one of the instruments that we commonly use is this kerosen ranjour, which is a bone biter.

And what this instrument simply does is it removes bone spurs. When we close this trigger, the mouth of this instrument closes and it removes bone. >> Kind of cuts it off or shaves it a little bit. >> Exactly. It shaves it off. So make a canal where a nerve is is compressed free to relieve pain. And so every time you close this instrument as a neurosurgeon, you need to be watching the edges of this instrument and make sure when you're closing it, you're closing it on the bone spur and not the nerve. And I've closed this instrument probably two million times in my career.

And every single time I take a bite, I need to be focused on the bite I'm taking, not the one before, not the one after. You can never be casual. If you're casual, you create a casualty. That's what I say to the West Point speak to the West Point cadets is I say if you're casual on duty you're going to become a casualty. So you be need to be focused on the moment at hand. And so when you're talking about what could go wrong yes before a surgery I

go through my mind what could go wrong and what are my plans what are the steps to go through if a vessel is bleeding and I can't control the bleeding what would I need to do next? We'll start with try to control the bleeding compress it. order blood, maybe call in a second set of eyes and hands to help me. Boom, boom, boom. I have a set thing I'm I'm thinking about. If a nerve looks like it's damaged, what am I going to do? Can I consider repairing it? Can I suture it? All of those things need to be in my mind before the surgery, but the second that surgery starts, I am focused on the next step. Whatever it is, the next step, the next step, the next step.

Nothing before, nothing after. >> But what if something has gone wrong? Let's say like it didn't go according to plan. I don't know, a blood vessel or you clip a nerve on accident, I don't know, something could go wrong. >> Sure. >> How do you focus on the next thing when you've made a mistake or something has gone out of control >> in surgery and how can someone apply that to their life? >> So, the first moment that you realize something has gone wrong or that you've made a mistake is reject your first reaction to it. And I talk about that in a protocol called Irise. in my book, you want to reject what your first impulse is going to be because it's almost always self-preservation.

So, you need to reject that initial thought. I talk about in the book, I talk about a time when I'm putting a scope through the hole and into the brain of a child and we encounter severe bleeding. >> So, it's like coming out of the skull. >> It's coming out of the scope that I put in. Oh, you put a scope to see. >> Exactly. And the blood is coming out. What's my first initial reaction? Pull the scope out. Right.

>> That's the worst possible thing that you can do. You need to keep the scope in so that the blood comes out of the head and doesn't stay in the head damaging normal structures. >> Interesting. >> So, the first thing you need to do is reject your first impulse because it's almost always self-preservation. >> Like take it out and put it like some like gauze over or something. Right. >> Exactly. Interesting. So, you keep it in.

>> You keep it in. So when you do that, >> yes, >> you will drill through the top of the head. Is that right? >> That's correct. Yes. >> That's correct. So you put a scope in first through the top. >> Depending on the type of surgery, sometimes we can do the surgery just with a scope. and so you can see what's going on and you can do surgery through that tube, through the scope that you're working on. And so what going back to your question is identify what's going on. Reject your immediate response. Inventory what other avenues you have to manage this.

What resources do you have around you to talk about? Okay, I'm having profuse bleeding. Let's get some blood in the room now. Anesthesia. We're losing blood. We need to control the blood pressure. let's get another doc call my partner doctor to come into the room to help me manage this and then basically try to evaluate what other alternatives there are and stabilize in the way that you can so you can think further. >> So you've done over a thousand brain surgeries but over I think 8,000 total of the spine surgeries involved as well.

Is that correct? >> Yes. >> Which one is harder to do? brain surgery or spine surgery in your mind? >> It really depends on what your what what your niche is. So, as you do this over years, you will find what you are trained

best to do and you'll focus on those. So, if I see some type of a tumor that I don't operate on, I won't do that. I'll hand that off to another person. But in a person that has like severe facial pain, when they're having trigeminal neuralgia, which is a syndrome where they have severe facial pain where they're stabbing sensations in their cheek or in their jaw, that's an operation I trained in Pittsburgh to do and I feel very comfortable doing and I'll offer that person surgery. So, it's really an assessment. As you go along in your career, you'll find that there are, you know, a certain number of operations that you do regularly and that's what you do and then you'll hand them off to other if you see something that's not common, you'll hand it off to other doctors.

>> Yeah. >> And so with your is that would you say that's your specialty is like dealing with like a pain in the face? >> That's correct. >> And is that tied to a nerve in the spine? >> It's tied to a nerve in the in the brain. As the nerve comes off of the brain, >> typically what happens is a blood vessel nudges up against the nerve and it irritates the nerve and the nerve fires.

>> Interesting. >> So that surgery to fix the trigeminal neuralgia is to go in the back of the head and go down to where that nerve is and move the blood vessel away and put a padding between the vessel and the nerve so that the vessel stays away. >> Really? >> And that's called a microvascular decompression. >> So you cut a hole in the in the back of the head of the skull. Is that right? >> That's correct. Yeah. This is a this is actually an example of about the size of the hole that we would go we bring in a microscope. We go down between the bone of the of the skull and the brain surface and we gently move the brain surface away, come down on the nerve, free the blood vessel up and then and then come out and close.

>> Wow. >> Yeah. >> You said you studied philosophy in college as well. What has studying philosophy and being a neurosurgeon taught you about life? >> Tremendous. Like I was I always knew I wanted to be a doctor. Ever since I was 5 years old, I wanted to be a doctor. I was the pool doctor. I used to give people band-aids when they stubbed their toes and I would clean out scrapes and things. And so I always knew I wanted to be a doctor. And when I got to college, I I didn't want to go the pre-med route.

I wanted to, you know, have more of a humanities background. So I I I chose philosophy and I tr I truly enjoyed it and I think it it it it created sort of a thought pattern in my mind about to to to analyze things. Why are we doing these things? What are the patterns that you see in your career and what can we learn from them? And what I what I found is over the 25 years, you know, 50,000 hours of training, 50,000 hours of experience, 7,000 operations, you know, closing the instrument, 2 million times, what have I learned about concentration and performance, and how can I leverage that? And really what I what I learned is that fear is the enemy. And it's the enemy not just in neurosurgery, it's the enemy in performance of anybody's fear of life.

Whatever we do, whether we're a parent, whether we're a business person, whether we're making a deal, fear gets in the way of our performance. And if we can figure out how to dismantle it, how do we wrestle with it in a way to minimize it, that's when our performance elevates. And I tell the story about when I was you asked about the frequency of operations. So, early on in my career, I was, I was planning to do an operation on a patient that had a brain tumor in the back of their head in a location where there was a very tricky vein, where you had to really be careful to preserve that vein as you were doing the surgery. And it turned out I was doing that surgery

on Friday after a long week. And the surgery was postponed from 11:30 in the morning to 3:00 in the afternoon, which you know is not an ideal time to operate. You have you still have good competent staff, but everybody has shifted and the PE person who set the table for the surgery is leaving and you're getting a new person there. So I I'm totally exhausted. and I'm thinking, wow, I you know, I'm trying to get myself psyched up to do the surgery.

>> It's the end of a week. It's a long week. You got the weekend coming up. Yeah. >> And it's an operation that I've done many times before, but I hadn't done recently because I had been handing a lot of my tumor patients over to one of my partners. So, I'm getting ready to go in trying to psych myself up and I get a phone call from my father's physician. And my father was, you know, my mentor and just a a leader, a huge leader in my life. And the news was bad that he had he had cancer and his his prognosis was really poor. So, >> right before you're about to go into surgery.

>> Right before I'm about to go into surgery. >> And so I'm in my car and I'm I'm I'm saying to myself, I don't think I can do this. Like I I I don't think that this is a good time to do surgery. You're distracted. you're you're you're not going to be at your best. What happened? What if something happens and you'll never forgive yourself? Right? So, I decided to cancel the surgery. And I walked in the hospital to go talk to the patient. And as I'm walking down the hallway to talk to him, I see it's not just him in his room.

>> It's his wife >> and it's his three daughters. >> So, he's already like in, you know, scrubs or whatever. He's like ready to go in. He's >> He's ready to go. He's ready to go. >> And as I walk in the room, it's something just shifted in my mind and I said, "You know what? My dad needs me." I was a such a gut punch. I wanted to go drive and go see him right here and give him a hug. And I said, "My dad needs me, but this guy needs me now."

>> Mhm. >> What would my father want me to do? >> And I thought about, you know, he he loved poetry. And one of the poems I always loved is Roger Kiplings, if if you could meet with triumph and disaster and treat those two imposters just the same. And I said, you know what? I'm going to dedicate this operation to my father. I'm going to dedicate it. And I shook his hand. I took him back and I did what needed to be done at that moment. And I was talking to my coach afterwards and I said, "Yeah, wow. This whole thing happened. I got I got courageous." He says, "No, you didn't."

And I said, "Yeah, I did. I I thought of that poem." No. And it made me courageous. And he said, "No, you didn't." He said, " they're just words. They don't they don't really do anything. They're words on a piece of paper." He said, "What you did was you reminded yourself of who you are. M >> you dismantled fear by reminding yourself of who you are. And you began to love your father more, >> love your patient more and love what you do more. And when you love what you're doing, you're at your best.

>> Wow. >> So that's what I've real that's when I realized like fear interferes. When I dismantle fear, I love what I do more >> and I'm at my best. >> I love this because you shifted your attention to to not what is going wrong in my life right now with my father. What could go wrong? I'm exhausted. You said, "How can I love my father? How can I serve my patient, my client more? And how can I be excited or passionate about my craft is what I'm

hearing you say. How do you not let the worry of, yeah, well, still, what if something goes wrong? How do you eliminate that?"

Or maybe you don't eliminate it. How do you navigate that worry or fear of like, well, I'm not at my best still. You know, I'm not still not emotionally fully there maybe, or I'm a little off. It's the end of the week. How do you overcome that thought? >> Sure. What I've learned is, you know, you can't control your thoughts. Your thoughts are always going to be percolating in your mind, but you can be in charge of them. So, I'm in charge of my thoughts and my thoughts generate my feelings and my feelings generate my actions. So, I focus on when I hear and and still to this day, sometimes I'll get that nervous edge when I'm operating or before I'm operating. I'll say, "Wait a minute. Hold on. I know you. I I' I've heard that voice before. or I've heard that okay if something goes wrong at the moment that it goes wrong I will take care of it you are trained you are enough that's it don't think about the outcome the outcome doesn't define you >> I learned I learned that lesson you know took me 16 years to learn that lesson in neurosurgery that really I'm going to show up for work I'm going to do my job and there's going to be desirable outcomes and there's going to be undesirable outcomes and that's the way that's the business I've chosen and so that you have to accept that. I had this one experience very early on in my career where I got called to the literally within a month of my first job. I got called to see a patient who had was was quadriplegic. They had jumped into a pool and they broke their neck.

>> And this happened like recently. They weren't quadriplegic for a long time. >> No, they they just became quadriplegic >> and they were in the hospital. >> Exactly. They were brought by the emergency squad to the hospital. I met him in the emergency room. He had no movement in his arms and his legs >> and we rushed him to the operating room. He had a dislocated spine and I relocated his spine and I figured his odds of getting better and being able to move again were still like one in a thousand or more. But miraculously he started moving his hands and his legs a few days later and he walked out of the hospital.

>> Shut up. >> Like two weeks after the surgery. >> Wow. >> And I I I did that when I that happened. There was a picture of me and him walking out of the hospital on the town newspaper and I put that on my wall and I was so happy and I was like, "Wow, this is great. I love being a neurosurgeon." But then a month later, I had a young boy come into the and he had a brain tumor and I took him to the operating room and did the same perfect operation that I did on this other guy and he had a terrible outcome >> and he had every complication that he could possibly have. And I I kept asking myself weeks, months after like I must have done something wrong, you know, I must have taken too long to do this surgery. I must I should have missed should have picked up some harbingers of things that were going wrong along the way. I could have done something differently to affect his outcome. And and I carried that with me to the point where I I stopped doing pediatric neurosurgery because I just it was too emotionally wrought with feelings of inadequacy.

And I carried that with me for many years. In fact, I ended up not not really following with him because I moved I I quit pediatric neuro surgery and I moved to a new town partly because I I couldn't escape these feelings of sadness. And and and then fast forward 15 years later, 16 years later, I'm writing a book. And I look at a picture on the wall. I had a picture of of this this young boy, Anthony, on the wall. And I thought, you know, I've never never found out what happened to him. I thought he had just passed away because it was a bad tumor and he

had had a bad outcome. And so I looked up his mom and dad had a pizza parlor. And I looked up on Facebook and I saw his mom and dad still had the pizza parlor. And then I scrolled down a little farther and I saw a 20 some odd year old man in a wheelchair with his parents.

>> Wow. >> I was, "Oh my god, he's still alive." I couldn't believe it. So I called his parents. I said, "I want to come up and see you. can I come visit Anthony?" And they said, "Sure." before. So I went back up and I visited them and I had dinner with them and at the end of and I saw Anthony and Anthony has serious neurological challenges still. and he ended up go leaving the dinner early and I was with his parents and at the end of the dinner I said, "You know, I I've had something I wanted to tell you for for a long time and I never have told you." And I I wish I could have brought your boy back, you know, >> and he and his mom and dad, they jumped over the table and gave him this big hug and they said, "What are you talking about? You saved our boy. Like he's still part of our family. He's still my number one guy." And I I realized on that moment like I had the story all wrong. I kept blaming myself for his bad outcome when in fact I I did I did the best I could in a very difficult situation and I kept his family intact. And I was calling my editor and I said, "You're never going to believe this story about Anthony because you know he he's still alive and he's and he's with his family." And my editor said, "Yeah, well, I think we should put the Anthony story and the your spinal fracture story in the same chapter." And I said, "Well, that doesn't make any sense. One one's really great outcome, one's a terrible outcome.

Why would you do that?" He said, "Well, Mark, you've been telling me this whole time, like, you know, you take a person who's paralyzed and you help him walk again and you say you're lucky, and then you have a child who has a bad tumor and he has a bad outcome and you say, "It's your fault." M >> that's an impossible standard to live up to. >> Yeah. >> And on that day, I recognized like I cannot judge myself on my outcomes.

>> I got to show up to work, do what I was trained to do, >> and the chips fall where they may. >> And that was a great lesson. >> The School of Greatness is brought to you in partnership with Airbnb. And there's something really meaningful about creating a space where people can come in, they can feel comfortable and make memories in a new city. And I've experienced this firsthand through a space that I share on Airbnb. It's a place where people come into town for something special like a concert, a big game, or a fun weekend. And it's a moment they've been looking forward to.

And I love putting thought into that experience for others, making it feel clean, calm, and welcoming. and adding those little touches that make someone feel like they're cared for when they walk in. It's really special. That's one of the things I appreciate about sharing a space on Airbnb because it gives you a chance to create a great experience for someone else while also earning extra money. Listing your space on Airbnb is a great way to make extra money during those moments. And if you've ever thought about hosting, consider planning around major events in your city. Your home might be worth more than you think.

Find out how much at [airbnb.com/host](https://airbnb.com/host). >> I mean, how do you Because if you judge yourself on your outcomes and you have a let's call it a winning streak of like you can't do anything wrong and every surgery it's like the best desirable outcome and you're thinking I'm you know I'm hot stuff and I'm so talented and look what I can do and look what I created or whatever it is. But then all of a sudden you go through maybe a challenging streak

of like oh these undesirable outcomes where the patients don't recover as fast or other challenges but that could affect you also if it's always based on the outcome. Correct. I'm I'm so glad you asked this question because you know I remember a question a couple of podcasts I've listened to on yours is you know why do high achievers still suffer from you know this feeling of inadequacy and the fact of the matter is it's a disease called self-esteem.

>> I don't want to have high self-esteem. I don't want to have low self-esteem. I want no esteem. Esteem is a roller coaster that I don't want to ride. M >> it it is >> you might run out of steam. >> Yeah, exactly. It's it self-esteem is not helpful. Connecting with yourself is >> what's the difference? >> Huge difference. Being who you are, accepting who you are as it is. Understanding that you're you're enough.

You know, you need to go through this training, whatever training, whatever profession you're in, whatever specialty you're you're you're executing in. Train to be the best. I'm I'm not saying don't do afteraction reports when things go wrong. Look at how things could have gone better, but not in a fault or blame way. Just be responsible. Responsible meaning the cause. I am the cause of what's happening. Not in blame, not in fault, but I'm responsible and I'm going to continue to get better. I love Ryan Holiday's quote. You know, mastery is a fluid, continual, neverending process. So just keep getting better and better and better and don't don't beat yourself up by saying I I should have known better. You know, I mean that's just you know guilt masquerading as self-help. It of course every every single thing in your life you should have done better in the past because you know more now than you do then. So I think it's a useless statement. so getting back to I I think the the key to excellent performance and and your best performance is connecting with yourself, not going into an operation saying, "I'm a great surgeon. I'm going to do a great job." because that doesn't last. You know, the the outcome that didn't go so well, that that hand's going to reach up from the graveyard and pull you down later on that week or that month.

>> As opposed to saying, "You know what? I'm a servant. I'm going to do whatever I need to to this day to be a good servant. >> But it sounds like with Anthony you know what the individual that didn't recover as well as you would have liked in your mind it weighed you down for many years 15 16 years I think you said right? >> Yes. So when did you learn to not let the trauma of the past or an undesirable outcome of your performance of the past to not rob you of your joy or your ability to show up as your full self in the present or in the future?

>> I mean I think that lands squarely in the concept of acceptance. You know healing is acceptance. you know, in the book I talk about this concept called terrible knowledge. And terrible knowledge is a term that was described by a psychologist in Chicago by the name of Jeffrey Jay. And what a terrible knowledge is is these horrific experiences that we all have in our lives that that make us realize that wow, the world can be so incredibly capricious and so harsh.

>> Yeah. And yet you you have to go on and live your life. When I was thinking all all these sad times about Anthony, I was looking around seeing people who are happy and going, "How can they be happy?" Like this poor family, they their life got turned upside down. How all these people are naive? They don't realize how harsh the world is. >> So we're all carriers of some terrible knowledge. It's it's just a fact of life. I love the quote

by philosopher, life fires at you point blank. It just fires at you. And so we had these experiences. We weren't trained for them. We weren't ready for them. Nobody asked if you were, you know, prepared for them. They just happen. And and even if you think about them, I talked to state troopers in New Jersey about these experiences. Even if you train for them, they don't they don't really play out the way you expected them to. And they're never going to be desirable or good experiences for you. They're going to be awful experiences. So, how do you carry your terrible knowledge? Well, you can let it you know, pull you by the string, the puppet strings and and feel terrible or you can turn it into useful knowledge. And the only way to turn it into useful knowledge is to share it with others in a way that it's useful for them. Mhm.

>> And what I say about that is then then that knowledge when the this the knowledge terrible knowledge of Anthony not going back to be the normal 8year-old boy that he was that knowledge doesn't use me anymore. I use it. And that's you put a frame around it. Put it on your wall and you say that was a time I I experienced this sadness. You may be going through another experience, questioning yourself, holding yourself to an impossible standard. Maybe my story will give you a different perspective and you realize that it's it is what it is and it's not what it's not, >> right?

>> That's acceptance. And it sounds like the more you reflect on it and put self-lame or anger, resentment, frustration, questions around it, it's only going to hurt you emotionally and mentally instead of transforming that wisdom into how can I serve? How can I improve? H and you hear this with widows or people who have been through divorce or other challenges like that or lost someone close to them. It seems devastating for a period of time until they meet someone else who's been through a similar experience and they can share that information and kind of create community and connection and support through how did you get over this and how did I overcome this and it's when you use it to serve another person that's when it's really helpful I think >> of course and and you mentioned you have to express it self-expression is extremely healing if I hadn't shared my story of Anthony with his with his parents and with my editor. The worst case in my career wouldn't have turned out to be the best case in my career.

>> Interesting. >> Absolutely. I wouldn't trade taking care of Anthony for anything now. >> Wow. >> Because I shared it and when I shared it, I got different perspectives from other people >> and that changed my worldview. That's what I love about transformation. Transformation happens when you see something from a different perspective and you're transformed. The world's exactly the same, but you are totally different. >> You've been inside a thousand brains through surgery and operation.

What has being a neurosurgeon, working on a thousand brains, but also studying the body and human dynamics taught you about thoughts, feelings, and actions? >> I think it all stems from language. I think that we underestimate how powerful our language is >> and our choice of words. So I used to think I would be I would worry about something bad happening in operation and I changed that word to prudent. I want to be prudent. I want to know where this vessel is and what happens if there's a tear in it and how I'm going to repair it. luck am I lucky or grateful? I say to the West Point cadets, I say some people you'd say I'm lucky to be here. I would say that denigrates everything you did to get here. Okay. Yes, there's some luck involved. We were born in the genetic lottery to be in the United to live in the United States, be born in the United States, but it takes a lot to

get into West Point. And I think a better word would be grateful. Grateful.

>> how about, you know, is something hard or challenging? Nobody likes to do something hard but challenging. I love doing challenging things. So I think that our words our language not only reveals what we're thinking, it creates our reality >> and we see that I mean look at Muhammad Ali talking about affirmations and how affirmations repeated over and over become beliefs and beliefs become action and become reality. So I think that our brain is has neuroplasticity. It has the ability to rewire itself and you know unfortunately we're all steeped in in a culture that that has some things wrong about it. All the things we learned as kids aren't helpful to us. You know I talk about in this another book I'm working on with Joe Desenna why we quit. You know, one of the things our parents used to say is if you start something, you got to finish it.

>> Well, that's not great advice. Like not everything you start you should finish. >> There's plenty of things you should stop immediately. So, I think that we we get steeped in a culture that talks about self, you know, you want to have high self-esteem. You want to go into this, you know, event as I'm the best and nobody's going to beat me. No, I want to go into the event as I'm me and I am going to be the best me I can possibly be. And I'm in a competition where a competition, if you really look at the Latin root of competition, it it is to bring out the best in each other.

It's not about winning or losing. It's it's a nonzero- sum concept. Competer means to bring out the best in each other. So, you're competing with someone else who loves what they do and you're bringing the best out in each other. So it's a it's a part partly language. Language affects our thoughts and again like I said thoughts your your brain is a thought generator continuously generating thoughts. >> It's like you know the the ticker tape on the old Times Square news reel. But not all those thoughts are real and not all the thoughts are facts.

Some of them are. Some of them are extremely valuable. Some of them are just garbage and you need to get rid of them. So, it's slowing it down. I think slowing it down >> so that we really have a menu of choices when when we're when we're challenged. We want to go with a menu of choices. I say like as a doctor, I I hit the reflex hammer and a knee-jerk. We don't want our brains to be like that when we're challenged by something. We want to have a menu of options to choose and then choose the one that's most fitting and and serves the most people. As a neurosurgeon that's done over a thousand brain surgeries, what is the greatest skill that you've developed to master your own mind?

Focus. It truly is focusing on what is the most important matter at hand. I had one terrible Christmas morning where I took care of a young boy who was hit by a car and and he we lost him on the table >> and it was just it's just still to this day I'm very I'm sad about it. and I thought like what can I do like in I call these all is lost moments in in in our life which we all have where we we have something objectively that's terrible and something that's subjectively that's terrible. And I thought what can I do? I can go and deliver this news to the family as the best in the best possible way that I can in the the best setting with the right people around them with their clergy with nurses in the right area delivered the right way and that's the only thing I can do today to to move up a little bit on the subjective scale of what do I do?

>> Yeah. And by doing that, that's how you live your life. It's a constant challenge. Sometimes we're in flow. Sometimes we're in something I call calm before the storm where something good happens to us, but there's also something subjectively not good about it. We get a job promotion, but our new boss is toxic. Okay? I call that the calm before the storm. All is lost. That's where, you know, you get a diagnosis of cancer and you have to stop your job and focus on your health. And then there's the birthing a new skill set where you you lose your job but you get an opportunity to write the book you always wanted to write and we're constantly in this circle of flow and all the way around and that's the heroic journey of life.

>> Mhm. >> So that's really how I would say what I've learned from operations is focusing on where you are and what's the next step to serve what your goal in your life is. I learned very early that I'm a servant. And so when I when I end have a an awful experience, I say, "What can I do to make the world a little bit of a better place?" >> Yeah. How much of your studies did you study the mind versus studying the matter inside of the brain?

>> Wow. And nobody's ever asked me that question. very little of the didactic training that you get in neurosurgery is of the mind >> because it's not neuroscience, right? It's neurosurgery, right? It's it's different. Neuroscience would be more of the study of the mind. Is that correct? >> Exactly. Yeah. >> Like our thoughts and >> Exactly. But but as a reader and as a philosopher, I I very much enjoy studying the science of the mind. And one of my one of my idols is Ian McGillchrist. Ian McIlchrist is an amazing author and he wrote a book called The Matter with Things. And he wrote another book which is fantastic called The Master and His Emissary.

talks about the right and hemisphere differences and how the left hemisphere wants to apprehend things in the world and the right hemisphere wants to comprehend things in the world. And it really is like I think to live a full life you need to understand you need both of that. You need to apprehend some things and you need to comprehend things. >> Yes. How much of the brain influences the mind versus the mind influencing the brain? The brain has machinery to to do I think whatever the mind asks it to >> really.

>> Yes. so the brain has a machinery to develop habits. Okay. The brain has a machinery to experience emotions. The brain has a machinery to sense danger in ways you don't even know. Like you can smell danger actually. And most people don't realize that, but there's a smell of danger. When the the pheromones of a of a nefarious character who's ch walking down the street near you, there is something there that we don't we're not even aware of.

>> Your brain creates that mechanism for you to feel it. >> Exactly. >> You smell it and then it triggers like fear, danger, something's off. >> Exactly. >> And now you interpret it through feeling. >> Yes. >> And what sends a signal through your immune system, nervous system. What is this? your it's well your lyic system which is your amygdala and your hippocampus and the areas of your brain which are your alarm system >> sometimes that like goes to your stomach or like makes you like clenched in the chest or like gives other feelings and sensations right >> yes there's a whole neuroadronurgic or chemical storm that happens in your body that gets you ready for fight flight or freeze >> now we have to understand that many times that's not helpful in in terms of when we're in the boardroom or when we're being challenged by somebody. But but somebody says, you know, even

even if people say like, well, fear is good if like a bear is chasing you. My answer is no. Fear is not good. You got to remember like if it's brown, lay down. If it's black, fight back. You've got to be thinking. The more fear you have, the less you're going to think.

>> You need to focus more. >> Exactly. So, I think that the brain has the machinery to for the mind to do really whatever it wants. And I think that we're just starting to scratch the surface on the capabilities of the mind. And we're seeing, we used to think the brain doesn't really grow as we get older and we lose cells, but the number of connections can increase and increase increase based upon based upon what we're doing, what we're thinking.

>> Really? >> Yes. And even learning new skills creates new proteins within the brain and the way the neurotransmitters. So there clearly is the mind's ability to kind of guide the brain's growth. There's definitely like some hard wiring there, but the mind can generate brain growth. >> Have you ever studied your own brain? >> I haven't. >> That'd be Have you ever scanned your own brain or like >> I have not. I've never never >> That's interesting. I wonder if like there's a documentation of a brain surgeon who's like scanned it every five years and seen like their own development. I wonder what that'd be like. But >> that's a great question. But you know, interestingly, Einstein's brain was small. Smaller than average.

>> Really? >> Yes. Yeah. >> Then how was he so smart? >> He probably just had amazing connections. >> He's probably Well, he's always always constantly learning, too. So, it doesn't have to be the bigger size for you to be smart. It just needs to be the amount of usage you use. Is that what it is? >> Yeah. And connections. And the connections. So, we talked about there's 90 billion neurons in your brain, but there's a 100red trillion connections and you can increase those. What's the difference between a neuron and a connection in the brain?

>> Oh, so a neuron is basically like a cell that fires impulses the and they communicate to the other cell. So those connections are the things that can increase. >> Wow. So say it again and 90 billion >> neurons >> neurons >> and 100 trillion connections. >> Oh my gosh. So the brain, you know, we probably have 1% knowledge of what the brain actually is. is I'm assuming there's probably so much information about the brain that we don't know. I'm assuming unless correct me if I'm wrong.

with all that all those neurons and and connections, it just seems like you could study the brain forever and still not understand it fully. >> It's the most complex organ in the universe >> and I get to operate on it. >> Wow. >> And operate on the place where fear lives and that's why I like to dismantle it. Has there ever been a time where you worked on a brain in surgery where you're just like, you know, I'm following every protocol. I'm following everything they've taught me from school and all my knowledge from the last 25 years of operations, but this just seems like I'm not sure what to do, if this is going to work or not. And has instinct taken over or what, you know, just like, well, this is the next step that would make sense taken over or has anything like that happened for you?

Yes, actually I had a a transformational moment about maybe four years into my career where I was operating on a gentleman who presented to the hospital with some confusion and some sleepiness and the the scan that we got showed that he had a small cyst in the center of his brain that was clogging the fluid pathways. So, I took him

to the operating room and I got the microscope in and I got my, these things are like retractors. They're like basically metallic, tongue depressors that are separating the brain tissue to get down to where this cyst is. And I bring the microscope in and I come down. I'm coming right down where the cyst is.

And there's no cyst. >> No way. >> There's no cyst. >> Come on. And on the scan, the scan you see the cyst, but when you open it, there's no cyst. >> There's no cyst. I take a step back. >> Am I operating on the right patient? >> Oh no. >> Am I operating on the right side? >> Oh no. And you don't want to like just dig around inside the brain. >> No, it's not. That's frowned upon.

>> Oh my gosh. >> No. So, I took a step back. I looked at the scan. Could this system disappear? No. The scan was done two days ago. we're we're on we're with the we're operating on the right patient. we're operating on the right side of the head. okay. So, I I call one of my senior partners. I say, "Hey, can you come in and help me?" He says, "I I can't. I'm not available." >> No.

>> So, >> so you're like, "I'm not 20 years in, I'm four years in still." It's like, yeah. >> So, I I said, "All right, we're going to take this slow." And actually, it's funny. I shared this with Sanjay Gupta, and he said he does this a lot. >> I said I I took the retractor blades out. I took a step back and said, "All right, we're going to go very slowly here." This is Ed who has a cyst in his brain. This is his scalp. This is his skull. This is the covering of the brain, the dura. This is the cortex.

Okay, I'm going to put the blades in again. I put the blades in. Okay, I'm retracting the blades. I put the open up to the area. I come down a little bit more and just in the upper left hand field on the microscope I saw this little wisp of whiteness. I'm Oh, there it is. There it So I I angled up a little bit more. I came up and what had happened was the cyst was like on a it was like a cherry on a stem and it had moved away from where it was supposed to be and it was smaller than my brain had thought it was. I looked at the scan and my brain thought it was a certain size but it was actually smaller than that.

second I saw it a few a few expletives and then I said I got it 30 minutes later I took it out and it was gone and I was closed. And the thing about that day was I got back into my car and I thought wow like the surgeon today is very different than the surgeon who came in in the morning. I didn't think I could get myself out of trouble. I knew I could. another transformation, another experience where the world was the same, neurosurgery was the same, everything was the same, but me, I was different.

>> Wow. >> And so, yes. And could does that still happen sometimes? It can happen sometimes. And that's where I sort of go through my eye protocol of identify that there's a black swan happening. Reject your first impulse because it's almost always self-preservation. inventory other oper operatives that other things that you can do stabilize and then re-evaluate. And so that's my sort of process that I go through when I when I experience a black swan. >> Wow. So when you're when you're opening the skull and then going through the brain matter with metal tongs essentially you're kind of you're piercing through all these neurons and connectors. Correct. Yes. like you're essentially cutting through or pushing through these neuron characters in the brain. And if you have to do that once, how does that affect the brain in general? Like going in and then

coming out does it like can you the person wake up and be fine or is it like there's a healing process the brain after that or how does that work? So early days we would go through areas of the brain that we knew were more dormant or not really what we call eloquent areas of the brain where that you wouldn't see a deficit when you cut through. Now we're getting better and better at parting these pathways and finding ways of kind of just easing through and gently kind of teasing them away almost like you take a hanging blind of a curtain and you pass them open so you can look out.

We're trying we're working more and more on these pathway sparing approaches to get down to where we need to get to really. >> Yeah. So there we're getting better and better but still there is I mean surgery is traumatic to the tissue that we go through. So when you see a surgery you'll see that there is some trauma to the to the area and we're just as gentle as we can be to get there >> but you have to get the job done. So when someone goes through something like removing a cyst that is causing serious problems in them, what is the outcome, the general outcome of like a normalized cyst in the middle of the brain somewhere? Is it you're going to see improvement like you could have a full recovery? Is it just a minor recovery? Is it what is the the outcome typically look like if the job is done according to plan? Almost all of those people will have 100% recovery.

>> Really? >> Yes. Exactly. If it's a benign cyst and it can be completely removed. >> yeah, the majority of people will make a 100% recovery. >> Wow. So, what can someone do to optimize their brain with their thoughts and their actions? Is there a way to prevent trauma in the brain through how we think, act, and feel? I'll start with we can stop insulting our brains. Okay, there are many ways that we insult our brains. Alcohol, tobacco, not taking our blood pressure medicines, not having good oral hygiene, keeping a healthy exercise regimen to keep blood flowing, diet, those are all insults to our nervous system. So, also wearing a helmet when we're skiing, wearing a helmet when we're bicycle riding, avoiding sports that damage the brain, striking head strikes in sports, all of those things will dramatically improve brain health. So, those are actions that people can take. What are some other healthy things they can do? Well, certainly, exercise is great. You know the exercise gives bone strength, gives muscle mass, gives blood flow to the brain. clearly it gets us stimulated. helps us learn.

Exercise helps you learn and remember what you what you study. So those are all actions that can be done. As far as thoughts go, I think it's really curating your thoughts and curating your language to to move you to where you want to go and identify thoughts that and habits that hinder us from getting where we want to go. So, I used to have this one habit after I would if I got called in for an emergency craniotomy at in the middle of the night. I'd walk out and there'd be the vending machine on the way out and I would always be starving. It'd be like 2:00, 3:00 in the morning >> and I would get myself two bags of Cheetos, the extra-large bag >> and it tasted so good in the car and I'm like, you know, you did a good job. you went in, go have the Cheetos and like and then I finally just said like, you know, you feel like crap when you wake up in the morning cuz you're tired and then you feel more like crap because you're eating two bags of Cheetos and you're putting some weight on like just don't do that. Get a glass of water, get a cup of water and get in your car and go home and go to bed.

>> So, so there are, you know, breaking habits, knowing that you're capable of weakening habits and then breaking them. And I love that epic Tetris quote, you know, for habits must first be weakened before they can be

destroyed. >> And then as far as thoughts to give have a healthy brain. I think that you talked about judgmental being judgmental of yourself. One of the things I found, especially with Anthony, I was being judgmental of myself. I was saying I wasn't good enough. I was saying I should have picked something up sooner.

I should have operated more slickly. I could have retracted on his brain less. Whatever whatever caused him to have this bad outcome must have been my fault. >> When I became less judgmental of myself 16 years later, I became less less judgmental of others. >> And I became a much more effective leader because I I just I eliminated now I'm not I'm haven't eliminated all judgmental from this. When somebody cuts me off on the highway, I'm still >> want to judgement is important. Judgment is good. you know, knowing not to cross the street during rush hour, that's judgment. That's important. But judgmentalness, when you have an assessment of somebody, >> where your affinity, your respect, your admiration for them, diminishes, that's not healthy for you and that's not health healthy for your brain.

>> Really? What does that when you're judgmental of someone else? How does that affect you and your brain? Well, it reflects that you are judgmental of yourself, too. You're you're and that's going to interfere with your performance. >> Wow. >> Yeah. Because judgmental is what would other people think, what would other people say. That's what judgment is. >> Yeah. >> so, it's going to get in the way of your performance. >> You want to be a better performer, eliminate judgmentalness as much as you can. But what if someone in your life or in your work or wherever around your your sphere of influence is doing things out of alignment, out of integrity, illegal, harmful, you know, acting in a way that is is just not good? How can you take action without being judgmental when there's a lot to judge? And you gave me a gift. You gave me your favorite quotes, Albert Einstein, that says, "The world will not be destroyed by those who do evil, but by those who watch them without doing anything." So, how do we make sure we're taking action and having the courage to say what this person is doing is they're a bully, they're doing something illegal, harmful, wrong, hurtful, without judging them, but making sure you you don't watch without doing anything.

Well, I'm certainly not advocating not taking action when you see something going wrong, but I think giving them the benefit of the doubt and and understanding and telling yourself like they're they're doing the best they can. They're doing this for some reason. Nobody intentionally does wrong. For some reason, they think it's right. Mhm. >> And so to intervene and to show them what what your perspective of what is going wrong and how it's going wrong, not in a way of criticism, but in a way of hey, let me show you what's really the right way to do it. And that would lead you to the Marcus Earlas quote below it. And is what if someone despises me? Well, let them despise me.

I will still be kind and gentle to them and show them where they've done wrong. Not in a way that's condescending, not in a way to look good, but in a way to say, "Hey, we're all part of the same universe here, and let me explain to you where this is coming from." >> Yes. >> And and people still are have to be accountable for their actions if they're doing something harming someone. but there's no need for judgmentalness for it.

>> Yeah. One of the things we've talked about a few different times is fear. in your book you talk about this as well. You you map fear into four types using something you call the fear framework. Can you break down what

those four quadrants are and how we can you understand it so someone can know how to overcome fear as well?

>> Sure. So one of the things we're steeped in in this universe is that our current experience is less desirable than our future experience. We're all on a path of going from presently less desirable to future more desirable. And along on that path, what happens is events happen in our lives. And I call those events fears. P H E R E S. And what that means is these are events that come in and they're unexpected. So I give an example of I'm a medical student and I want to become a doctor and along the way something drops into my life. a teacher becomes very critical of what I'm doing and I immediately see this person as an obstacle to my attainment of my final medical degree and graduation or I have a stroke of good luck and this event is a tool for me to get to where I am. So we're looking at all these events that come into our lives either as obstacles or tools. when they're when they come in, they generate this experience of, oh my gosh, am I going to be able to succeed in this and so we need to dissect that event out because many times that event can happen and it can really u impede our performance. It can cause us to have what I call in the book a fear freakout where you're like, "Oh my gosh, what am I going to do here? What am I what am I I can't I don't see the cyst. What am I going to do? I Everybody's going to think I'm a bad surgeon. What am I going to do? What is the patient going to say?

What is the family going to say? What is the hospital going to say? So we're immediately this drops into our life. Okay, I've I've I've gone to an operation and now I' the thing I was looking for is not here. Okay, that's my fear event that's dropped in. Okay, I need to dissect this. All right, so what I say is we dissect it by what are the objective components of it and what are the subjective components of it and you can literally put it on an XY axis like a day a cartisian or daycare's formula.

Okay. So on the xaxis is the material objective. Is it objectively positive? Is it objectively negative? On the y axis it's subjective. Subjective is it materially good for towards what my goal is in life? Is it materially bad for what I'm doing and what I want to be in my life? And the x-axis is kind of like your left brain. It's the it's the acquisition. And the y-axis is kind of like your right brain. It's the subjective comprehend.

So when we have an event that drops in our life, we have to ask ourselves, is this a tool or an obstacle? Is it positive and negative? Subjectively and objectively. Okay, I got a raise that monetarily is good. Okay, my boss is a real problem. I don't think I can work here. That's subjectively negative. That puts me in the bottom quadrant of the day carts XY. Okay, that's the calm before the storm. Something's going to happen.

>> Okay. or I talk about an experience when I had a person that had this facial pain and they came in and it was one of the first times I did the entire operation myself during my training where we had to make an incision behind their ear, drill a hole about the size of a 50 cent piece, retract the brain and come down to the nerve that causes the pain and move a blood vessel away from the nerve and put some padding between it. It's called the microvascular decompression and it relieves the pain. and it cures them.

And in my training, I I did the whole operation myself with my teacher just watching. >> Wow. >> And it was a flow experience because objectively I was materially having my boss see me knowing that I was competent and subjectively it was getting me towards my goal. That's the flow quadrant. >> So flow and then below that is the calm before the storm. And then if something is objectively negative and subjectively negative, then you're in

the negative negative quadrant of the day carts.

>> And that's the all is lost situation. And then birthing a new skill set is when objectively on the x-axis you you had something that's monetarily or acquisitionally bad, like you lose your job, so you're not getting paid, but you have free time to create. And that's subjectively positive. M >> and we're constantly going through this quadrant system in our lives. it's the heroic journey that Joseph Campbell talks about. And ideally, we're getting better and better at getting out of these things because if you learn how to dissect them and break them down, that's the first step towards dismantling fear.

And when we dismantle fear, what happens? Love shows up. >> Some people say courage shows up. I say love shows up. If you ask a Congressional Medal of Honor winner why they ran up the hill to that bunker under machine gun fire to kill that guy that was firing the gun, he doesn't say because I believe in freedom. He says because he was killing my friends. >> Right. >> That's why they do it. That's that's love. It's an act of love.

>> Yeah. >> So that's what I believe. I believe if we want to perform at our best, we dismantle fear. Love shows up and we're at our best. And what do you think is the biggest mistake or the most common fear mistake you see in high performers? >> The disease of self-esteem. >> I think that if if you really talk about elite performers that day in and day out deliver what they need to, they don't have esteem. They have no esteem.

Not high esteem, not low esteem, no esteem. M how does someone learn to navigate self-esteem and self-identity? Cuz you want to have some sort of positive self-identity that you are enough, that you believe you're capable of being in the right rooms to perform, but not having this esteem, I guess, being too high. What's the difference between self-esteem and self-identity in your mind? >> Self-esteem is judgmentalness.

you're either above somebody or you're below somebody. self-identity is, you know, that's when we lose our our pretend masks that we all wear and we say, "This is me." I love that Brian Brian Adams song, "This is me. Here I am." You know, in Spirit, the movie, I play that song when I lift weights. Here I am. This is me. When we say, "This is me," we're at our we're at our best. >> Yeah. How do we build our self-identity then rather than think about building self-esteem? Like how do we accept ourselves if we're broke, broken, no relationship, no skills, made a lot of mistakes in our lives? How do we learn to accept and believe in ourself if we've just been through struggle and loss and not really on a winning streak?

>> That's a challenging question. Mhm. >> I I would I mean >> I love the book Po Quo's The Alchemist. >> Great book. >> you know and the the kernel of truth in that book, the the main lesson is you know you need to find your personal legend and you need to follow it with all your heart and when you do the world will conspire for your success. Things that you would have never imagined happen to you. Mhm.

>> So I if to that person that you're talking about, I would say sounds like probably you've you've got some habits that need to be looked at and dismantled. You've you've you probably you may have some poor coping strategies. Mhm. >> really sit down with a piece of paper, I would say, and write down who you are >> and who you're not >> or who you don't want to be >> and then live it. Start living it one moment at a time. I have a big

cardboard thing on the back door of my office and it's all the things I am and all the things I don't want to be. You know, >> helpful bully. useful, arrogant, you know, and I I recognize that all those things that are not desirable some are some small part of my personality. I I guess I don't know if I can ever totally eliminate them, but I it's not what I want to be. So, I would focus on >> choosing the other things.

>> Exactly. >> And one step at a time. >> it's not like turning a speedboat. It's like turning a steam liner. You know, you got to you got to go slowly. Slowly here on the school of greatness, we've talked about one of the biggest things that holds people people back is the fear of other people's opinions. It's one of the reasons why people never act on their dreams or they never start their book or they never ask the person out is because they're afraid of what other people are going to think about them. So, with the fear of other people's opinions being one of the biggest fears that most people have, what has 25 years of brain surgery taught you about letting go of the opinions of others when there's so much at stake?

>> Well, my answer was if you want to get rid of worrying about other people's opinions, get rid of your own opinions. You know, another epic Tetus quote, you know, what what somebody else thinks of me is none of my business. So I think that as we become less judgmental of others, as we have, you know, let go of our opinions of others, we let go of our opinions of ourselves. I think that's the that's the that's the path to greatness. It's challenging. I haven't mastered it. I'm a hopefully an advanced student and imperfect practitioner, but I think that's the key to greatness.

>> Yeah. Most people think that skills are built through repetition, but I've heard you talk about skills being built through pressure. What's the difference and why does it matter? >> Well, I think skills need to be learned through deliberate repetition and pressure, you know, I've learned a lot even since I've written this book. I I would probably say that pressure is again something that we need to eliminate from our lives because pressure is what other people think.

Pressure is what other people would say. So if I and I will rewrite this book, I'm working on another one now called why we quit. But I've learned even from this book that pressure is probably something that's not going to be the most productive thing. having simulations of what needs to be done I think is helpful. So you you know when if you're going to do a debate going to the room where the debate's going to be and imagining the people there all that I think is very helpful in terms of teaching somebody a skill if you can replicate the environment. We see it. It's interesting when I when we work out in the Princeton University wrestling room, sometimes the coach will have this the crowd playing really loud to have the wrestlers experience the what it's like to be >> rehearsing what could happen.

>> Exactly. I think I would say rehearsing deliberately and and multiple times is very helpful, but thinking about pressure probably not helpful in getting better. >> As a brain surgeon, do you feel pressure or do you feel something else when you're about to operate? Every once in a while it will creep in. You know, if I'm operating on a celebrity or somebody like that, it will and then I again, you have to recognize it. Again, you have you can't control your thoughts that it's going to pop in there, >> but you can be in charge of them. And so I I say, "Look, I need to work on this person like they're a clock and like they're a person." And integrate the two of those

together. It's a person and it's a clock. Now get to work. Why operate on someone like they're a clock as well? What does that mean?

>> Because you know this is surgery is a mechanical alteration of some pathology that's happened in somebody's body. So you need to go in there and you need to get the job done. Either dredge out a channel so that a nerve is free or remove a piece of material that's herniated and it's pressing on a nerve or take a tumor out. So there's a mechanical part of it and our bodies are a machine. And they it is very much like a clock. It works in a certain way.

>> Maybe you have too much emotions tied to it of like the mom is crying to me right before or this is a celebrity or this is a child or whatever it might be and and their life is at stake. If you have too much of that, it sounds like you probably won't deliver your best if you're thinking of the emotions as well. >> Absolutely correct. Yes. Absolutely correct. So the the emotion is and all of that comes before the incision.

You know, there's a lot of that. There's a lot of chatter that can go on in your mind before an incision, but once the incision >> Yeah. >> you it's step by step by step and and then you just you just do what needs to get done. And you're still thinking of this person as a person, but but there's no big operation. There's no small operation. There's just an operation. >> I mean, how do you compartmentalize though? That's like got to be one of the hardest things if you've connected with this person beforehand, the family, you know, the the potential good outcomes, but hey, if something doesn't work out, this could potentially be life or death as well, right?

>> How do you not allow that to consume your emotions and your heart or if like, oh, something didn't work according to plan? Like, how do you not allow that worry to consume you before finishing the operation? So you use a word compartmentalize which I'm not a huge believer in. I'm a believer in integration. >> So when I'm working on, you know, a let's say a a young person, a 20-year-old, and I know that their whole life in front in is in front of them, and I know that, you know, your best chance at a recovery is that that first surgery that you do that's done exactly properly, right?

>> You don't want to try to do more afterwards. It's hard. >> Exactly. So, you want to get what's done done. You want to create as least trauma getting there and getting out as possible and you want to get the job done. And I believe that if it pops in your mind that, hey, this is a young person and they're, you know, they got their whole life ahead of them, I would say it in the I would say in the room, you know, okay, you know, we're going to retract the nerve here. This is young person and this is a really important part of the operation. Just identify it. Identify it. I I would not try and keep that thought out and I would focus on what's the step I need to do right now. What's the step I need to do right now? even coming out here, I had a surgery yesterday and I had a flight to catch.

>> Really? >> And I thought, you know, that's, >> you know, that could put some extra pressure on you, right? And I said, "No, it won't because if it takes too long, I'll miss the flight, right? >> It's the way that it is. That's what I do." So I just think keep trying to keep it out is is too challenging. I'd rather bring it in. I interestingly I started operating on my friends again. That was another thing >> really >> was another thing that I was taught. I

was given conventional wisdom by my grandfather who was a surgeon and my uncles who are surgeons. Never operate on your friends because >> what if something goes wrong?

>> What if something goes wrong? >> Oh my gosh. >> Okay, that's scary. >> So here's the thing though. What if something goes wrong? Well, who's the person who cares about them the most? >> Yeah, you >> who would do whatever needs to happen to get it >> done right. >> That's true. >> So, I'm getting a little older now and a lot of my friends are getting degenerative spine disease and they're needing surgery. >> How many friends have you operated on?

>> Probably about 10 or 15. >> Really? >> It's only happened recently. >> Oh my goodness. >> But my, you know, my coach helped me. I have a coach and he helped me. He asked me. He said like, "Wait a minute. You don't you you love this person. They're your friend." that one of them was my one of my coaches. He said, "You love this coach?" I said, "Yeah." He said, "And you this is an operation that you can do better than anybody else or as good as anybody else." I said, "Yes, absolutely." He said, "Then why aren't you? You're you're you're morally obligated to operate on them." I said, "Well, >> this person's going to feel more safe with your hands probably." You know, >> exactly some stranger they don't know.

>> What I say to my friends is I say, "I I want you to put on your menu that I would I would operate on you if you want me to." Some people don't feel reciprocal. they don't want it to change the relationship. But what I found is it works just great. And a couple of times the surgery didn't go as planned, >> but I was there and and whatever went wrong during the surgery, I'm I mitigated, I fixed and went through it and they've done well. And yes, it's it's it's after the surgery, it's a little more emotionally taxing because I'm I I really do want them, of course, to be better, you know, to recover. Yes.

To recover. But during the surgery, I've trained my mind to not do it. Now, the next level, which I I I do not have, is operating on family members. >> But I know some doctors who do, and they've said to me, they said, "Look, I care about this person more than anybody. I'm going to do a better job, right?" >> So, I think it's the mindset. It's It's your mindset. >> Wow. >> That's scary. That's scary. But I guess if you had 30 years of experience, you're probably like, "Oh, yeah. It should be me doing this." And it's not scary, you know?

>> Exactly. Exactly. >> Wow. That's interesting. >> It comes with a higher price tag in terms of just beforehand, you know, again, because again, like I said, it's beforehand, all those thoughts creep into your head and after all those thoughts creep into your head, but during the surgery, I've focused on what needs to get done. >> Wow. If someone is watching or listening to this conversation right now, and they only do one thing differently this week moving forward about how to optimize their life, what would you say that thing should be that they do? recognize that fear is ubiquitous in our world and fear comes in many different forms in many different words. Saying that you're uncomfortable is fear. Saying it's a it's a low-level fear but it's a fear.

Saying that you're anxious is a fear. We live we have an epidemic of anxiety. What is anxiety? It's fear. Okay. Recognize that it it it impedes your performance. And the way to diminish it is to pick it apart. to ask yourself, what am I really fearful of? Okay, and again, it comes down to you're thinking of something in the future and

you're thinking that you're going to feel something you don't want to feel. And the thing is, >> okay, so let's say my dog is limping now and I'm I'm I'm sad for her cuz she loves to run and and my thoughts in my mind are like, oh, my dog maybe she's gonna reach in her and I'm okay, Mark, what do you you're thinking about something in the future. There's going to be coming. There's going to come a day when your dog is going to pass. You're going to have to make a decision to put her down. Is that today?

It's not today. Okay. When is it? I don't know. When it is, I'll be sad. Okay. Nobody ever died of sadness. Okay. It comes, we feel it, and it passes through us, and we move on. Nobody ever died of sadness. Don't be afraid of it. >> That helps me. >> Yeah. I still I still have, you know, I still have a little worry about it because I worry about her. But but that's what I do. I pick it apart. I ask myself, "What are you feeling? Is that happening in the present moment?" No, she's still she once he gets a little gets moving a little bit, she's not limping. So, it's clearly an arthritis kind of thing.

>> But that's how you do it. So, it's watch out for fear. Steve Presfield calls it resistance and war of art. that's another great book. I call it fear. Fear is the most corrosive substance on earth. What is the one thing you still have not mastered that you think would make you a better human and a better brain surgeon? >> For me, leadership and and that comes with responsibility. and you know, if I want to be a better leader, I have to stop denying my responsibility. And responsibility not in a blame or fault way, but in a I'm the cause way. I'm the cause. Some people say, and I've got kids in their 20s and 30s. Some people say, "Oh, I'm not responsible for my 25-year-old son." My answer is, "Well, I am in the way that I can be. I'm I want to be responsible for them in the fact that I want to be a positive force in their life." And and and whenever whenever I deny responsibility, I don't learn anything.

>> Whenever I assume responsibility, I learn something and I have more power in my life and more effectiveness. If you could go back to your first day on the job 25 years ago after you graduated, after residency, after all the learning was done in terms of schooling, and now you've officially become a brain surgeon and you could go back and you could face yourself before that first operation or that first surgery as a doctor.

What piece of advice would you give yourself, your younger self? Now, >> it's great because I I love this question and I I give it to talks to to neurosurgery departments because if I could write a message in a bottle and send it back, >> it re it really is about outcomes. I mean, you're in a you're in a performance-based profession. you've chosen something very challenging that has it's a in some respects it's a very unfriendly learning environment and and you're going to have desirable outcomes and undesirable outcomes. Do the best job that you can.

Analyze when things go wrong and continually focus on getting better and don't judge yourself by your outcomes. >> That would be it. >> That's great. I've got a couple final questions for you, but I want to make sure people check out your book. It's called Cognitive Dominance, a brain surgeon's quest to outthink fear. I think everyone's got to get a lot of great information, a lot of great frameworks from this and some amazing stories as well from your experience.

You want to make sure people get this book if you're trying to master fear and overcome fear. a great book to to

to jump in and dive into. They're also the co-founder and president of a nonprofit organization called Trenton Youth Wrestling and Learning Center that provides free wrestling instruction and mentoring for underserved boys and girls in third through 8th grade through your community, which is really cool. And if people are interested in that, they can go to [trenton.youthwrestling.org](http://trenton.youthwrestling.org).

You're also on social media, Mccclaclin MD on Instagram, LinkedIn, and X. Where else can we follow or support your journey? >> If people are interested in more my website, Mark McGlaughlin MD. I have a cognitive dominance questionnaire and a questionnaire about quitting, which is a new book that I'm working on and I have a newsletter that comes out monthly for anybody to be interested. >> Okay, cool. And that's all on your website, right? >> Yes.

>> Okay, a couple final questions for you, Dr. Mark. This has been really powerful. So I want to thank you again for being here and sharing your wisdom and I acknowledge you for the big heart that you have. I know that working on human beings has got to be the most sacred thing that anyone can do. So the fact that you care deeply about humans healing and about sharing this knowledge is such a gift to the world. So I appreciate all that you do.

>> Thank you. >> And privilege. >> Yeah. And I'm excited to get this message out there to people. This is a question I ask everyone towards the end of my conversations. It's called the three truths. So, it's a hypothetical question. Imagine you get to live as long as you want to live and you get to create and accomplish all the things you want to do in this life. But on the last day far in the future, all of your work has to go with you. The books, the content, this conversation, no one else has access to it in this hypothetical scenario. But on your last day on Earth, you get to leave behind three lessons. I call it the three truths. and we would have access to that. What would those three truths be for you?

>> It would be gratitude for the past. If you like where you are now, then everything in your life has led you to where you are. >> So be grateful for it. >> It would be acceptance of the present. It is what it is. It's not what it's not. It's perfect just the way it is. And lastly, responsibility for the future. Not in a blame or a fault finding, but that you are the cause, the creator, and the source for all your thoughts and who you are and what you do. And if you want to be less frightened in the world, if you want to be a better leader, and you want to be more effective, stop denying responsibility.

>> It's a good truth. And the final question, Dr. Mark, what's your definition of greatness? >> One authentic human connection and contribution at a time. >> Mark, thank you so much. Appreciate you. >> Powerful, man. >> So, people that fundamentally commit their lives towards any aim and the word is fundamentally commit have a chance of knowing how good or extraordinary they can be in any endeavor. And if your endeavor is handball, you have to fundamentally commit.