Getting Your Brain & Body Back – Dr. Bradford C. Berk

Dr. Bradford C. Berk is a spinal cord injury survivor, a former Chief Of Cardiology, CEO and Chairman of the University Of Rochester Medical Centre. He is the author of the book, Getting Your Brain & Body Back.

Highlights:

02:24 Introduction
09:06 Research Efficiency
14:57 Self Empowerment
22:54 Getting Your Brain And Body Back
35:12 Changing The Hospital Food
45:27 The Yin Yang Model
51:29 Neuroplasticity
56:44 Isolation

Transcription:

Bradford 0:00
As a scientist, one of the things we've learned is we can actually measure which genes get turned on, or which genes get turned off in tissues. And the interesting thing about a stroke it sounds like your AVM damaged the right side of your brain more than the left side.

Bradford 0:20
And you would think that the greatest number of genes that would turn on then would be in the right side of your brain. But in fact, the left side turns on twice as many. So the good part tries to compensate for the bad part and to help out.

Bradford 0:37
So I was right-handed when I had my injury, and just like you, my left side is my strong side now, so I had to learn how to write again and do things again. Just the other day, I knocked something over and my left arm moves fast enough to catch it.

Intro 0:58
This is the recovery after stroke podcast, with Bill Gasiamis, helping you navigate recovery after stroke.

Bill Gasiamis 1:11
Hello and welcome to recovery after stroke a podcast full of answers, advice, and practical tools for stroke survivors to help you take back your life after a stroke and build a stronger future.

Bill Gasiamis 1:22
I'm your host three-time stroke survivor Bill Gasiamis. After my own life was turned upside down and I went from being an active father to being stuck in hospital. I knew if I wanted to get back to the life I loved before my recovery was up to me.

Bill Gasiamis 1:37
After years of researching and discovering I learned how to heal my brain and rebuild a healthier and happier life than I ever dreamed possible. And now I've made it my mission to empower other stroke survivors like you to recover faster, achieve your goals and take back the freedom you deserve.

Bill Gasiamis 1:55
If you enjoy this episode and want more resources, accessible training, and hands-on support, check out my recovery after stroke membership community created for stroke survivors and caregivers.

Bill Gasiamis 2:07
This is your clear pathway to transform your symptoms, reduce your anxiety and navigate your journey to recovery with confidence. Head to recoveryafterstroke.com to find out more after this podcast. But for now, let's dive right into today's episode.

Introduction – Dr. Bradford C. Berk

Bill Gasiamis 2:24
This is Episode 164. And my guest today is Dr. Bradford C. Berk, who decided to begin writing the book he has just published in the early days of his recovery from a spinal cord injury that he acquired as a result of a bike riding accident.

Bill Gasiamis 2:44
The book is entitled Getting Your Brain And Body Back. Everything you need to know after a spinal cord injury, stroke or traumatic brain injury. Dr. Bradford Berk, welcome to the podcast.

Bradford 3:00
Thank you.

Bill Gasiamis 3:01
My pleasure, thank you for being here. I always like it when people get in touch with me Tell me about the work that they're doing in your space or in any space that's related to brain recovery, supporting people overcome neurological conditions.

Bill Gasiamis 3:17
I also like it when the doctor who is looking after people is very much invested in the topic that they're talking about. And it's true that I would prefer that nobody ever went through something similar to me and nobody ever had neurological issues.

Bill Gasiamis 3:37
Having a doctor having gone through something like that, and then talking from a medical space, but also from their own personal experience, makes for a very

compelling story. So could you please start by telling me a little bit about what happened to you?

Bradford 3:54
Sure. So a little background, I'm a cardiologist, and what we refer to as a research medical scientists. So I've always done research in my laboratory. And I'll tell you about that I'm sure as we go along and hold on, I'm just sending my aid away, so he's off.

Bradford 4:15
So I actually was at the University of Rochester in New York, upstate New York, when my accident happened, and at the time, I was the chief executive officer of the medical center.

Bradford 4:30
So I was in charge of the whole Medical Center, which is about 12,000 people. And I'd like to ride there's beautiful lakes near us called the Finger Lakes, and on Memorial Day of 2009. So just about 12 years ago, I rounded a curve and there was a great big station wagon, blocking the road and I tried to slide under the car but in so doing, I blew the rear tire on my bike, and I went over my handlebars, and I hit my head.

Bradford 5:07
And I broke my third and fourth cervical vertebrae so quite high in the neck. And being a doctor, I was very concerned because while I was lying on the ground, I couldn't move anything. And I was panting. So I knew that I was experiencing a severe spinal cord injury.

Bradford 5:33
But I've made a lot of recovery. And when I was in the intensive care unit, I actually started thinking about the book writing a book, because just like you said, I have a very unusual perspective. And the tentative title of the book was actually The Enlightenment of Dr. Berk, because I knew this was going to be one of those experiences, where I was gonna learn all kinds of things about medicine, that they'd never taught me before.

Bill Gasiamis 6:05
The Enlightenment, I love it. Fencing enlightenment coming from a space of a spinal cord injury, I mean, I can kind of see it. But wouldn't it be better if

enlightenment came from somewhere else?

Bradford 6:21
Of course. And that's why I've now written the book, so people can get enlightenment from the books. It took quite a while it took five years to write the book, I read about 150 other books, and about 1500 articles. Because the literature in this area of brain damage and spinal cord damage is filled with many untruths.

Bradford 6:49
And not a lot of well done clinical studies. Cardiology, when we test something like the statin to lower your cholesterol, we test 30,000 people to show that one's better than the other. And most of the studies in neurologic science involve between 100 and 500 people, very small. So people make decisions without good information.

Bill Gasiamis 7:22
I find that staggering that 150 people go into a research study, to develop a method or a process or a medication to support somebody's brain. That is staggering.

Bradford 7:37
Yes, it is. and doctor's Hippocratic Oath is do no harm. And 150 people is not enough to find out about harm. If you do 20,000 people, and the harm happens in 1%. Well, it's 200 people, that are gonna pick it up without any problem.

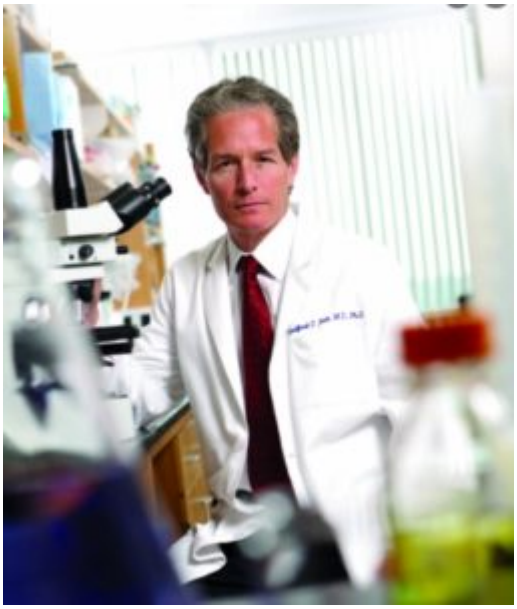
Bradford 7:58
But if it's 150 people, there's only gonna be one person, and that person may not show up in the trial. So it's a real problem in terms of how safe they are, and how effective they are, and many of them are also difficult to quantify brain damage. How do you, I read your PDF, how do you know very much about what the brain is doing?

Bradford 8:29
Because it's a very difficult organ to study, as compared to the heart, or your kidney or something where you can get the fluids very easily. It's easy to biopsy them. And the brain is much more difficult to do that, and dangerous.

Bill Gasiamis 8:48

Right. And it’s a very hot topic now, isn’t it the efficacy of vaccinations, for example, and the amount of time created to study that there’s people are going nuts about the possibility that the vaccinations are being rushed through etc.

Research Efficiency



Bill Gasiamis 9:06
And, yet I’ve never heard anyone raise this issue about the lack of research that goes into neurological support and why that’s never raised an eyebrow. What do you think’s behind it? Is it just the lack of focus from the medical community? What’s behind this lack of depth of research?

Bradford 9:36
I think two things. The first is that the vaccine or a heart attack is very similar among people. So as a cardiologist, there are three arteries that supply all the blood to the heart.

Bradford 9:53
So you have only three different kinds of things to worry about. So if you want to enroll Study, you can enroll people that just have a heart attack to the one that runs down the front of the chest.

Bradford 10:08
But the brain is much more complicated. So while there are some major blood vessels that have caused the scheming stroke where blood clot goes in. How quickly that breaks up and how large it is, is very difficult to measure.

Bradford 10:24
In fact, by far the best trials that have been done in neurologic disease are in stroke, and are specifically in the strokes that are caused by those blood clots. And TPA, the clot buster was approved and was shown to be effective, because those trials had 7000 to 10,000 people.

Bradford 10:50
So there are some areas that are very clearly showing to be effective. Another good example is the relationship between stroke and high blood pressure. So in Scandinavia, where everybody is part of the medical system, they could look at the history of 20,000 patients with hypertension, over 10 or 15 years, and show that for every five millimeters of increase in blood pressure, there was a 1% increase in the likelihood of a stroke or a heart attack.

Bradford 11:32
And so when things are very common, like hypertension, and heart attacks, it's easy. strokes are common, but they differ greatly among people. So you talk in your PDF about Broca's area, which is where we speak and understand.

Bradford 11:53
And the same exact blood vessel damage can result in one person just stuttering a little, and another person not being able to speak at all or understand, and because the brain has a much more intricate interaction between its cells than the heart does.

Bradford 12:21
Back when I was a student, looking to get my PhD, I worked in a lab that studied neurophysiology, and then I worked in the lab that studied blood vessels. And I said, you got to be out of your mind to study neurophysiology.

Bradford 12:41
It's way too complicated. blood vessels are so much simpler, there's only three cells, and they're all the same. And the brain is totally different. So it is a much more difficult, situation.

Bradford 12:58
Same thing with spinal cord, people with my injury, some people will be on a ventilator for life, a few people actually be able to walk. And I'm near the top of the functional scale, I was very fortunate that I was quickly brought to the

hospital and quickly add the pressure from the broken bones and things removed. And so I was able to make a more rapid recovery than a lot of people. So I was quite fortunate that that happened.

Bill Gasiamis 13:33
So it's a matter of focus, it's easy to focus on three blood vessels of the heart, rather than the multiple different, fully, totally way more complicated aspects of the brain. And then therefore, you can narrow down the area that you want to study.

Bill Gasiamis 13:54
Whereas with the brain, it sounds like it's an infinite task, rather than a concentrated, more focused task. So that makes sense. But nonetheless, it still seems to be that in the last 10 or so years, maybe even 15, we've come a really long way in understanding neurological conditions.

Bill Gasiamis 14:17
And the people doing great work in your space. in that space are starting to become more prolific and starting to get really fantastic results. I had the first of three brain hemorrhages in February of 2012.

Bill Gasiamis 14:32
And even then, there was a very small amount of information that I could access to support me on my own a curious problem solving kind of guy. And to sort of start to learn how I was to go about healing and recovering as much as I could from the deficits that I experienced.

Self Empowerment

Bill Gasiamis 14:57
And the best place for me to start with was nutrition because I realized that my nutrition was having a massive impact in the negative way that I was feeling after the brain injuries.

Bill Gasiamis 15:10
And then what I found was that, in fact, we can support each ourselves. And we are not encouraged enough to do so. And I think one of the biggest challenges that we face in supporting people recovering from stroke is empowering them and making them feel like they can actually do a lot to support their own recovery.

Bill Gasiamis 15:40
And if they can't impact it in a positive way, at least what they can do is not impact it in a negative way. And that was a big aha moment for me, I went out of my way to make sure that what I was doing, wasn't making matters worse, and if it wasn't making them better, I was okay with that.

Bill Gasiamis 15:59
I felt like I had contributed to my condition and created the perfect storm. So the AVM in my head would bleed. And then I had to go about taking away those behaviors and those things that I was doing on a regular basis so that the perfect storm would fizzle away, and it wouldn't be there anymore.

Bill Gasiamis 16:23
So that was my approach. In the last 10 years, I've been really excited by the fact that now I can contact anybody from anywhere in the world and get them onto a podcast and share information like this to people that really want to hear about it.

Bill Gasiamis 16:39
My podcast started about four years ago, which was around five years after my stroke experience. And it was the week of brain surgery when I came up with it. So I was being rolled out of brain surgery into rehabilitation, I was going via the transit lounge in the hospital.

Bill Gasiamis 16:59
And it occurred to me that I should do a podcast about this. And I'm not sure what it was about that moment that I decided that I haven't been able to put it behind me and let it go and not do that it was such a motivating situation. And I just remembered what you said, your book was one of the first things that came into your mind the moment that you experienced this accident.

Bill Gasiamis 17:29
Now what's behind that? How do you forget about all that other stuff that you're facing that you have to overcome? How does the first thing that comes into your mind almost be I have to write a book about this?

Bradford 17:45
Well, that's a good question. So before I answer that one, I would like to pick up on what you said that the last 10 or 15 years, things have changed. And I would again draw an analogy between cardiology and neuroscience, which is devices

have made the greatest progress in cardiology.

Bradford 18:08
So, you know, we implant defibrillators to prevent people from sudden death. We put stents in people's arteries to keep them open, that technology transferred to stroke to this device called a thrombectomy catheter, where you can actually thread a device up through the carotid artery into the brain, and snag snare the clot and pull it out.

Bradford 18:37
We soon will have devices, I think that will help control pain. My uncle, who went to the Veterans Hospital in Cleveland, Ohio, which would not be considered a top of the class in terms of hospitals, they put a device an electrode into his spine that has a little device, you can turn on and off.

Bradford 19:07
And he controls the pain he has, from what's called spinal stenosis using that device. And I think we're going to have devices in the coming years that will exercise muscles that will coordinate one's ability to pick up things and move things. And I think we're gonna see devices revolutionize this.

Bradford 19:32
So it's one of the reasons I'm very excited about it. And actually, in our clinical trials, we're going to be using a robot as one of the devices to measure how well people do. So I couldn't agree more that we're about to enter a fantastically new era.

Bradford 19:49
And I do think though, devices are probably going to be needed more than drugs because most devices you can put on and take off so that harm is a lot less with a device than with a pill, because you don't know what the long term effects of the pill might do.

Bradford 20:09
For if there's a short term problem, that's rare, you might not pick that up. So in terms of how you think about something, like a big project, while you're right at the very beginning of, you know, what could have been a near death experience or was, I think part of it is that it gives you focus away from your immediate problem.

Bradford 20:38
So you can start thinking about the chapters and what you want to say, who it's targeted for, you know, It kept my mind from going into other places that were unpleasant to put it mildly. And, for me, the worst thing was, I had a tracheostomy, and a tube, and when they would suction my lungs, that was very uncomfortable, extremely uncomfortable, and very painful.

Bradford 21:06
And before I knew that, they're gonna do it, I started thinking about what I did. And that really gave me some focus and allowed me a little distance from the anxiety and the pain that was coming.

Bradford 21:22
So I think it's really about taking your mind off the problem at hand. And, as you said, taking control of the situation, empowering yourself, and thinking of something that you still can accomplish. You know, you're not worthless, you actually can still write a book, I can, I can talk at a thought. So I could dictate to someone a book.

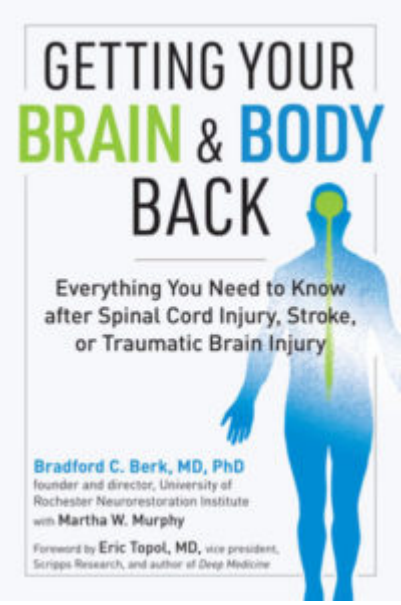
Intro 21:47
If you've had a stroke, and you're in recovery, you'll know what a scary and confusing time it can be, you're likely to have a lot of questions going through your mind, like, how long will it take to recover? Will I actually recover? What things should I avoid in case I make matters worse?

Intro 22:04
Doctors will explain things. But obviously, you've never had a stroke before, you probably don't know what questions to ask. If this is you, you may be missing out on doing things that could help speed up your recovery. If you're finding yourself in that situation, stop worrying, and head to recoveryafterstroke.com where you can download a guide that will help you.

Intro 22:26
It's called the seven questions to ask your doctor about your stroke. These seven questions are the ones Bill wished he'd asked when he was recovering from a stroke, they'll not only help you better understand your condition, they'll help you take a more active role in your recovery. head to the website now, recoveryafterstroke.com and download the guide. It's free.

Bradford 22:50
So that was actually a project that was realistic, as well.

Getting Your Brain And Body Back By Dr. Bradford C. Berk



Bill Gasiamis 22:54
Yeah. Fabulous. Now the book is called Getting Your Brain And Body Back. Do you have a copy there? Can you lift it and show us?

Bradford 23:07
There it is, can you see it pretty well?

Bill Gasiamis 23:13
I can see it pretty well. Bradford C. Berk MD, PhD, I mean it's foreword by other people with MDs and all that stuff behind their name. So it's a serious book, but it is exactly what you said unconventional with a book that's come from people who are so well entrenched in the medical field.

Bill Gasiamis 23:39
It was surprising for me to read that the name of the first chapter is your recovery begins in your head. And you're not talking about the actual brain part of your head. You're talking about battling the blues. That is very unconventional. When I hear that from a doctor, I start to feel a sigh of relief.

Bill Gasiamis 24:00

It’s I’m thinking, wow, okay, somebody is actually taking into consideration the emotional and psychological recovery from this as being just as important as the physical recovery of the other stuff. Tell me your thoughts behind battling the blues. And I imagine that you probably had some times where you experienced difficult emotional states.

Bradford 24:30
So as we started talking about empowering yourself, to take control of your recovery really is critical. And the saddest thing that I’ve seen is I frequently go and visit people in the intensive care unit, and in the rehab unit and talk to them to give them pep talks.

Bradford 24:49
And now I can give them a copy of the book and give one of their family members the book and it shows people there’s a path. I tell people all the time, hope is a very strong medicine. And to hope, though, you have to have enough control to know what it is to hope for and how to do that.

Bradford 25:13
And so it turns out that about 50% of everybody who has a stroke, traumatic brain injury or spinal cord injury, 50% of them are depressed, they have what’s called a reactive depression. And that’s totally normal, there’s nothing wrong with that, for sure, you deserve to get depressed.

Bradford 25:34
And I actually talked in the book about the grieving process, that you have to go through this grieving process, just like you’ve lost your mom, your dad, here, you’ve lost the life you used to have. And things that used to work, don’t work anymore.

Bradford 25:50
And so you have to grieve so 50% have depression, and the other 50% have an anxiety disorder, the one that’s most popular is PTSD, post traumatic stress disorder. And this was a traumatic event that happened to you and so that form of anxiety also has to be dealt with, because people who are very anxious or scared to do anything, they are reluctant to do therapy, because they’re afraid they’re gonna hurt themselves.

Bradford 26:27

And so you have to conquer those two things, to take advantage of rehabilitation. And it's critical that as early as possible, you start doing rehabilitation, because your muscles will undergo this process called atrophy, which means that they'll weaken and shrink and die, if you don't use it, the old "Use it or lose it".

Bradford 26:54
And so the sooner you get started, the more muscle mass you have. So if you can start exercising, in the first couple of weeks, you'll maintain more muscle mass than if you end up grieving six months, because you were depressed.

Bradford 27:10
So that's why I would start with where your head's at, because if you're not committed to recovery, if you don't believe you can do it. You won't be successful. And it turns out that some of the drugs that are highly effective, are the drugs to treat anxiety, depression, because those are really common illnesses.

Bradford 27:35
And it just happens that you on top of having a stroke and spinal cord injury, but depression and anxiety, we have very good drugs to use, and I almost think that, it should be a requirement that people get started in anti depressant, because it takes them a couple of weeks before they start working. And so while you're titrating up in your depression meditation, you're not losing valuable time doing your rehabilitation.

Bill Gasiamis 28:14
Yeah, I completely agree with what you're saying with regards to the process by which you have to tackle recovery is mindset first, if you can get the mindset right out. If you can, if you can create a recovery mindset from the outset, then you're in a very good starting block to go down the path of being curious and investigating all the things that you might be able to do to support your recovery, as well as taking the support from the medical practitioners.

Bill Gasiamis 28:51
In the book, you also talk about the amazing connection between your mind and your body. And that is starting to become common knowledge. I don't know that people understand the complexity of how connected they are.

Bill Gasiamis 29:09
But previously, there seemed to have been this disconnect in at least in the

medical world in the way that they treated people, for example, that had a heart condition and the way they treated people that had a head condition in that specialists do that work.

Bill Gasiamis 29:27
And I can totally understand why a specialist would focus on just brain and brain surgery and brain recovery. I get that I would want a specialist to do that. But then the conversation seemed to sort of stay in that space. And there was very little conversation about how the impact to the brain might be affecting the heart or the gut.

Bill Gasiamis 29:51
And there are massive connections now that we know between the gut and the head as well as the heart and the head and all those three organs and the rest of our body, and we started to talk about them as a whole.

Bill Gasiamis 30:06
What's your take on paying attention or understanding the impact that the head is going to have to the rest of the body, and vice versa. I noticed, for example, for me, that as soon as I had a neurological condition, my bowels stopped working effectively, and I had to attend to them. And I didn't know that they was, in fact, due to my head injury. Tell me a little bit about that space.

Bradford 30:36
The brain body interaction has become remarkably complex, and nutrition and your bowels are very important. It turns out that there are a lot of bacteria that live in your bowel. And depending on what kind of food you eat, determines the kinds of bacteria that grow in your bowels.

Bradford 31:02
And some of those bacteria can influence whether you're constipated or not. But even more importantly, we found that there are differences in the bacteria in your gut, if you're on a mainly fish diet, as compared to a mainly meat diet, or to a vegan diet. And, as I'm sure everyone would guess, the meat diet is harmful, it actually provides nutrients to the bacteria to make substances that are harmful for your brain and heart.

Bradford 31:39
So actually, nutrition as you surmised, early on is extremely important. And in the

book, I talked quite a bit about nutrition, because I think it is one of the most important things that is the brain and in particular, the blood vessels in the brain are affected by what you eat.

Bradford 32:00
And there's inflammation and immune responses. So we started with vaccines, vaccines are very dependent on our immune system making antibodies against the virus. And it turns out that a large amount of the immune systems change in your bowel. And if your bowels not functioning properly, your immune system doesn't work as well.

Bradford 32:30
And so in spinal cord injury in particular, there's a very well described problem, which is called Immune Deficiency Syndrome that's due to the changes in your bowel. And so the link is extremely strong, for your bowel and strong for your bladder, in terms of having bladder spasms, it's very strong for how well you breathe because you have to be in a coordinated manner.

Bradford 33:08
And you're not only breathing in your diaphragm, but there's respiratory muscles in your chest, there are respiratory muscles in your lower back, then you have to coordinate those. And it's not only the breathing in that's important, it's how you breathe it out. And if you lose that coordination, just like many people lose the coordination to swallow when they have a stroke or spinal cord injury, that's a perfect example of how critical the brain is to the most basic body functions.

Bradford 33:45
So they wouldn't let me eat for two months. Every night, they were plugged in some sea protein and a bunch of other things into a tube that went right directly into my stomach, bypassing my esophagus and my mouth for two months I didn't get to eat, which I can tell you was definitely worth grieving over.

Bill Gasiamis 34:14
A human basic instinct to eat to nourish your body and you can't do it. What was it like when you first had that first meal again? Was it challenging? Did you have to be careful you didn't choke? What was that like?

Bradford 34:32
It was wonderful actually, just to be able to do it. They're very careful about

making sure that you're able to eat and you don't start off eating steak, you start off eating puddings and things like that, so that you get used to it and they make sure that you can swallow properly.

Bradford 34:52
They actually do some tests, where they give you something called barium to swallow and it shows them exactly how well you're swallowing, and they have different kinds of exercises to strengthen your swallowing muscles. So it's wonderful when you finally get to eat.

Changing The Hospital Food – Dr. Bradford C. Berk

Bradford 35:12
And actually, after my injury, I dramatically improved the quality of food in our hospital, because I realized that when you're not feeling good, when you're unhealthy, that eating food is one of the most positive, uplifting things there is.

Bradford 35:31
And we should have really good food for people, because that will make them feel better. And it also needs to be the right kind of food to help their body recover. We put a lot of effort into nutrition and into taste, because it is such an important part of your overall well being.

Bill Gasiamis 35:55
If you achieved nothing else in your career, and the only thing you achieved is changing hospital food. Man, you have made some amazing achievements,

because there is not a single person that I've spoken to, that has said to me that eating the hospital food was a pleasant experience.

Bill Gasiamis 36:13
And when so many things are unpleasant, about stroke, about brain injury, about spinal injury, the least they could do is create a pleasant experience while you're eating. And I find it staggering that science has progressed so much. And the connection between food and well being has not been linked into recovery from anything.

Bill Gasiamis 36:40
There are general conversations around, yeah, smoke less and drink less alcohol and do all that type of thing. But in the places where it matters, there isn't enough understanding of how serious it is. And I would say that your hospital is one of the few where nutrition has been taken seriously and probably at a greater expense to the hospital. Is that accurate or not?

Bradford 37:09
Yes quite accurate, it costs a lot of money, you have to buy different equipment, different materials, a big part of it is actually logistics, it's how do you get food from the basement of the hospital up to people and serve it to them without it getting cold and getting mixed up.

Bradford 37:34
And we actually have 24/7 service, because people, you know might have had your brain surgery at 10pm or, you know, 4am. And so we need food at different times. So we we had to make a lot of changes to make the food taste better. But it also helped the employees because we made the food good enough that the employees actually liked eating it.

Bradford 38:05
So we wanted to make them eat healthy. So we made a giant salad bar, for example, for our employees, and shrank the size of the cheeseburger and french fries station quite a bit. So we had to wait a long time to get a cheeseburger.

Bill Gasiamis 38:23
I like that lovely motivation. What a way to motivate people. Did that become something that other hospitals became interested in? Did somebody then start knocking on your door and saying how did you manage this Brad? And can we do

the same thing? Is it possible? Did it create a conversation around the topic?

Bradford 38:47
Yeah, so we have a system. So where I had my surgeon, and everything is I guess what you would call the mothership. It's the biggest hospital is about almost 900 beds. And but we have a number of hospitals ranging in size from 30 beds, the next biggest one doors, 270 beds, and we had all those hospitals and improve the quality of the food.

Bradford 39:16
And I think that many hospitals have really focused on that so and in the States, we have the National Cancer Institute. And I think almost all hospitals that treat large numbers of people with cancer, have special nutrition is in special food because it's well known that people have specific means to get specific kinds of chemotherapy. Same thing in children's hospital.

Bradford 39:50
You know there are menus that have to be designed for growing child and just answering the same food. We have a whole separate set of our meals for children. So I think that those two areas cancer and pediatrics are recognized everywhere as being very important.

Bradford 40:13
And the general, the other thing happened in states is people are in the hospital very short periods of time that maybe one or two days on it. So those people, you know, we still try to make really good food. But it's not as important as if you're in rehab, I was in rehab for 130 days in the hospital, so that's a long grind.

Bill Gasiamis 40:39
Yeah, absolutely. Food is going to be served to you every single day, possibly three times a day. And if it's terrible experience, every single time is definitely going to impact negatively on your state of mind, and on your ability to recover. I love that we've spoken about that for a significant amount of time.

Bill Gasiamis 41:02
I look through the chapters of your book, and I just get more and more hardened about your approach and your thoughts about how to take a different approach to recovery. And it's great to read that, you know, one of your chapters is east meets west. So simple. And I completely, totally already understand what the basis of

that chapter will be. But give me a bit of a understanding of what your thoughts are about bringing the two different ways to heal people together.

Bradford 41:40
Well, that was truly an enlightening for me, I would have to say, in my research lab, I had a number of people from China work there. And one of them became the head of the orthopedics Hospital in Pacific called Nanjing. So he did a lot of the operations and people with spinal cord injury.

Bradford 42:05
And he became good friends with a rehabilitation hospital that was near his house, he said, You have to come here, because the people here are doing so well with their rehabilitation. And I did so I went out there for eight weeks, one year. And then two weeks, two years later, I went out there for two weeks.

Bradford 42:30
And those are some of the most profound times in my entire recovery. And the difference, I think, is tradition and the optimization of treatments that don't really exist in the United States. So massage, for example, here happens in spas because we don't really think about the medical benefits of a massage.

Bradford 43:07
But the person who did my massage in China use a particular kind of massage that had been passed down for many years was taught involve using your thumb very quickly. It's called Tuina and he also in addition to just massaging the muscles to loosen them up, they actually manipulated the joints.

Bradford 43:38
So chiropractors manipulate your back, but most of them don't manipulate anything else. They manipulated my joints and made a huge difference in terms of range of motion in terms of strength. It was remarkable.

Bradford 43:54
Same thing for acupuncture. I found acupuncture was so good for treating pain. And they had another thing called moxibustion where they actually put a particular kind of plant and they warm it up and put it on your skin. And the moxibustion causes some chemicals to be released into your skin and you can smell.

Bradford 44:23
So I found a number of these techniques that really made a big difference in terms of my overall state of well being not everything so traditional Chinese medicine they take lots of different burbs and people probably heard about fish and I think the livers from bears and they take the horns from rhinos and that kind of stuff.

Bradford 44:51
That's, unfortunately not what I meant by east because there's no studies of nodes and Here's a simple example, if you harvest ginseng root pines of ginseng that are in Australia, and different parts of Australia will differ one from the other. And so you may have a terrific result in Melbourne with your ginseng, which totally is not there up north.

The Yin Yang Model – Dr. Bradford C. Berk

Bradford 45:27
So I think that you have to understand which parts are good. And that's what I focused on in the book, as well as the yin yang model, I think of how we as humans, function in our world.

Bradford 45:43
And so it gives you the ability to turn negatives into positives, just the way there's a very classic picture of the sun going over a mountain. And in the morning, it warms one side, and then evening, that side becomes dark, and the other side becomes warm. And so when you think about what's going on in your own body, I can get really hot sometimes, and I can get really cold sometimes.

Bradford 46:16
And it used to drive me crazy. And now I say it's gonna pass, just the way the sun goes over. And when I'm feeling cold, then I'll do things like exercise to get hot. And when it's too hot. That's I'll use ice packs and do exercises that will require me to ice up afterwards or I'll drink things during that time.

Bradford 46:42
So I think it teaches you a lot about the harmony, that your own body comes and goes throughout the day, and how it changes over time, and allows you to take advantage of two specific areas that I think are the most different are

acupuncture and massage that are very beneficial for doing that and other things that happens in China is the family takes a remarkable role in the rehabilitation.

Bradford 47:16
So the whole time I was there, this one man took me from his job, just like we have maternity leave, he was on leave until his son would get out of the hospital. So I think their family is very committed. I would say that's probably the third pillar of Chinese traditional medicine that does that. I wouldn't say that this is just limited to China. There, India has a medicine and a number of these traditional medicines that have elements that are very useful.

Bill Gasiamis 47:54
Yeah. And I encourage everybody to be curious, and maybe cautious to curious about some aspects of that because there is an opportunity for some people do the wrong thing, and lead people who are desperate into spaces that are not going to be supportive or useful and make matters worse, if not physically worse, or medically, emotionally worse.

Bradford 48:25
Right. So I would strongly urge people to read the part of my book on stem cells. There are some places in China, for example, that do stem cell transplants. And at this moment in time, there's no justification, and no evidence that's beneficial. And what I tell people all the time if you're going to transplant a stem cell, to regrow your nerves to your lower leg, so that you can walk.

Bradford 48:55
But what happens if the only nerves that get the bone or the pain nerves, and you go from having a painless leg to a leg that's in pain now all the time, wow. And the motor nerves never grew. So you can't walk and your pain all the time. So it's very difficult to hook up the right nerves and regrow the right but that is a huge challenge. And that's why I say that devices are much safer and are likely to make a lot more progress in the near future. Then something watch themselves.

Bill Gasiamis 49:34
Yeah, I know stem cells is put out there, especially by the media as being this potential curable and amazing thing. And it's sensationalized in a way because they want to offer a good news story from time to time. And I I've even been stuck in that mindset of I've got to get to Panama to get my stem cells because I can't

get them anywhere else.

Bill Gasiamis 50:01
And I consider that for a long time and spending, God knows how much money to get there and do that so that I can get rid of the the numbness that I feel on my left side and the deficits that I have on my left side. But thankfully, that's out of my reach financially.

Bill Gasiamis 50:22
So I won't be going down that path anytime soon. And it is way too early for me to feel comfortable with that science and the efficacy of it. So it's a good thing that it's difficult for me to access and that I can't get to it. It does remind me of neuroplasticity, right? The side of neuroplasticity that we talk about and that you hear everyone going on about is the positive aspect of it.

Bill Gasiamis 50:48
But what a lot of people don't realize is that neuroplasticity is happening all the time. And if you're in a negative mindset, and you're creating negative habits, like not moving like not like not doing the things that you need to do to keep your muscle tone and to keep your bone strength and all that type of thing.

Bill Gasiamis 51:08
What we're doing is in fact, accessing neuroplasticity for the wrong reasons. And we're not aware of that. So this idea about neuroplasticity is always put out there as being a positive thing and just access it and do it. And some people aren't realizing that they've already been doing it, but for the wrong purpose.

Neuroplasticity

Bill Gasiamis 51:29
And that they need to be aware how they are impacting the use it or lose it aspect of their body. So you've got a section in neuroplasticity as well. Tell me about your take on that. What do you have to say about that space?

Bradford 51:49
Sure. So I was answering several parts. So as a scientist, one of the things we've learned is we can actually measure which genes get turned on, and which genes get turned off in the tissues.

Bradford 52:06
And the interesting thing about a stroke, it sounds like your AVM, damage the right side of your brain more than the left side. And you would think that the greatest number of genes that would turn on then would be in the right side of your brain. But in fact, the left side turns on twice as many.

Bradford 52:27
So the good part tries to compensate for the bad part and to help out. So I was right handed when I had my injury. And just like you, my left side, my strong side now. So I had to learn how to write again, do things again, just the other day, I knocked something over and my left arm move fast enough to catch it.

Bradford 52:50
And I was just shocked that I could do that, that I've done this much neuroplasticity. So neuroplasticity is based, the philosophy and the scientific dogma that I like is nerves that fire together, wire together.

Bradford 53:12
Basically what that means is, if you can get a group of nerves to start using the same responses, the same activation responses, so that they begin to have neural activity at the same time, those nerves can then join together to form a more powerful signal.

Bradford 53:40
That's the wire together. And part of what we're going to be doing in our clinical trial is this robot we have is just simply a joystick that helps you move from the center of a wagon wheel to the edge of the wagon wheel.

Bradford 53:58

And you just go back and forth. But it measures an enormous amount of data regarding how well you do that as fast you do it, etc. So what we can do is we can take the drug, and if some people do drug and other people or placebo, and see if the drug makes it easier for them to learn, or they can do it faster, faster means probably running better.

Bradford 54:26
And we can also look at their brain activity to see if they create new places where the brain activity becomes greater. And he talked about the fact that in stroke so many people lose vision and the reason is that half of your entire brain is dedicated to vision. Humans have terrific vision.

Bradford 54:51
And it turns out that you can retrain parts of the brain that aren't being used for vision. But during ancient development did do some visual, you can recruit those areas, and it's called blind sight. So people get tested to see where they might have some residual vision, and then teach them how to control that and find it.

Bradford 55:27
It's remarkable how much of a change we can make in terms of vision by doing that. So plasticity, the brain really is about helping it to join networks together to do a function that we understand.

Bill Gasiamis 55:46
That's fascinating. I love the idea of being able to recruit different parts of the brain to support vision loss, it would bring back so much more quality of life for a lot of people, as I'm going through the different parts of your book another well, they're all amazing, and very valid chapters.

Bill Gasiamis 56:09
And I know, it's a very well researched, scientifically based book, but it's very practical in its application, I believe, because one of the things that very often gets missed is the fact that people who experienced these injuries often remain, or can remain isolated, and therefore feel invisible, and not an active member of the community.

Isolation

Bill Gasiamis 56:44
And I think that the quicker we can get people back into the community, and make them feel like they are active in it, the quicker we're going to support them in their emotional and psychological healing. And the shorter that gap, the better it is, as we come to the end of this podcast, tell me your thoughts on that side of recovery.

Bradford 57:10
I'm a very firm believer that there's something called the bio-psycho social network. and so, the bio, we spend a lot of time talking about the cycle we talked about in the beginning.

Bradford 57:27
And now we're talking about the social part. And humans are social people. It's why COVID-19 and quarantine has been so difficult, because we have not been able to be social. And people are really getting depressed and struggling with that social isolation.

Bradford 57:44
And so there's no doubt that I'm being socially significant for the basic human need for friendship and interaction. But there's another part as well, it also gives you the confidence that you can function back in society that you can actually get out. And as strange as you may look, in the chair, or within a one droopy side your face, or whatever, is wrong, that's not who you are.

Bradford 58:18
You are this person. And frequently, people who've undergone this kind of trauma, both physical and mental, actually end up stronger people. And in a chapter, I talked a lot about advocacy as part of what people need to do. And that's the strongest thing you can do is you're not only taking charge of your own self, but you're helping other people to improve them to be better.

Bradford 58:47
And so one of the areas that I'm stressing in my neuro restoration Institute, is that we're an advocate for research and for assistance for people. In a book, there's I went to great lengths to make an enormous resource section that is slightly tilt to

the US, but very useful for anybody to see what the resources are.

Bradford 59:22
And so I urge people, if they buy the book, that spend the time to read the resources, because there's a great deal out there. And the sites that I've recommended are all highly valid. And a lot of them have to do with social interactions, how to go travel, how to, you know, eat.

Bradford 59:46
I have a whole section with a bunch of pictures on different adaptive kinds of forks and knives, so you can go out to dinner. I mean, that's one of the most social things is eating dinner, right eating together, breaking bread. Even if you're too clumsy or too weak to do that, then you won't do it.

Bradford 1:00:07
No one wants to have the food cut up in little pieces like a little baby. So that ability helps you to be social. And so as we started when we're talking about to empower yourself, it's okay to use a device that helps you eat because it helps you do something more important, which is to be social, and to enjoy yourself.

Bill Gasiamis 1:00:30
I've got to say that I completely agree with you in that This podcast was a bit of a, it was a selfish act, it was initially designed for me to find other people that I wanted to talk to about my own recovery and find out about their recovery so I can learn from them, and they can learn from me.

Bill Gasiamis 1:00:51
And then it changed from that two being a tool that other stroke survivors would come to and benefit from just like I was benefiting from it. And I had no idea that it seems obvious, but I had no idea that that was going to be the case that other people would find it useful.

Bill Gasiamis 1:01:11
And just today I was discussing with some people who follow the recovery after stroke podcast and myself as well on Instagram, who reached out to me to find out how I'm doing in lockdown and how it's going in Melbourne, Victoria, where I'm from, which is been a real hotspot for violence, violent protests and a whole bunch of other things as well as the longest lockdown ever in the in the history of this COVID pandemic.

Bill Gasiamis 1:01:44
We've been locked down more than any other city. And my response was that if it wasn't for the podcast, and the community that I've created around that, and the people that I get to speak to, every single week, I'm not sure what state of mind I would be in because I have been more isolated than I was with the stroke with all my three strokes and brain surgery.

Bill Gasiamis 1:02:09
And I've had way more time on my hands, to potentially take myself to the dark places, and focus on things that are not supportive. But that's not possible now, because I have people who I'm interviewing like yourself on a weekly basis, sometimes two or three interviews a week.

Bill Gasiamis 1:02:30
And then I've got to spend a lot of time listening back to that, editing that and then putting it out there. And what I'm doing is just sharing positive stories of recovery. Yes, there was that beginning part of it, which was terrible. And then there was the middle part, which was a little less terrible. And now there's this other part of it, which is far better than it was 5, 6, 7, 10 years ago. It's still not perfect, but we've made a lot of progress and look how far we've come.

Bill Gasiamis 1:02:59
So that ability for me to create that community for me in that way, has been a game changer. So it's really important that people that are listening to this get from what I know that you're also trying to share is that somehow, some way, whichever way you possibly can become a self advocate, that's going to help you and it's going to help other people.

Bill Gasiamis 1:03:29
And that's going to make you feel better. And I can't believe how much better that's made me feel and how much it's supported me to be well in this 235 days of lockdown that we've endured over the last 12 months. So I'm very grateful, as you can imagine, for all the people that have come on my podcast, and I'm grateful for you coming on my podcast, if somebody wanted to get in touch with you, and connect with you directly, check out a copy of your book, will be the best place that they could go?

Bradford 1:04:10

You can get my book at Amazon, and my publisher is there. It's called The Experiment. And The Experiment has access to me directly and will communicate with them. So when you go on there, you'll see that it's produced by The Experiment and there's a way to contact them to reach out to them to find me.

Bradford 1:04:35
And I'm very happy to help people. It's difficult to do a lot of one on one. That's why I wrote the book. And I hope you will invite me back if I write a second book. And so one of the miracles that have happened over the next five years. So Bill, I have to tell you, it's been a great pleasure speaking with you obviously really you made something useful, and very captivating, I think, with your podcast for people who are struggling to find both meaning and a way to get better.

Bradford 1:05:16
I think this podcast is a very hopeful one, which as I've said, is one of the strongest medicine. So I'm very pleased to have had this opportunity myself, making me feel very good as I get ready to head out. So it's been a real pleasure. And I look forward to staying in touch with you okay?

Bill Gasiamis 1:05:42
My pleasure, as well. And yes, definitely have you back on to share your next book. But I think we're only tipping the surface of the discussions that you and I can have on these topics. And I feel like I need to have you on way before the five year mark.

Bill Gasiamis 1:05:59
So let's get together again in six months time instead of five years because what you have to share, especially from your perspective, being in the medical field, and having this unique approach, I believe is what a lot of the communities that go through neurological conditions or spinal injury conditions are lacking. And there needs to be more of it. So I'd be happy to have you back soon as a we'll make that happen sooner rather than later.

Bradford 1:06:31
Alright Bill, sounds like a plan.

Bill Gasiamis 1:06:34
Thanks so much for being on the podcast.

Bradford 1:06:36
My pleasure. Bye, bye.

Bill Gasiamis 1:06:39
Thanks so much for joining me on today's recovery after stroke podcast. Do you ever wish there was just one place to go for resources, advice and support in your stroke recovery? Whether you've been navigating your journey for weeks, months or years, I know firsthand how difficult it can be to get the answers you need.

Bill Gasiamis 1:06:58
This road is both physically and mentally challenging. From reclaiming your independence to getting back to work to rebuilding your confidence and more. You symptoms don't follow a rulebook and as soon as you leave hospital, you no longer have medical professionals on tap.

Bill Gasiamis 1:07:14
I know for me, it felt as if I was teaching myself a new language from scratch with no native speaker inside. If this sounds like you, I'm here to tell you that you're not alone and there is a better way to navigate your recovery and build a life that you love. I've created an inclusive, supportive and accessible membership community called recovery after stroke.

Bill Gasiamis 1:07:37
This all in one support and resource program is designed to help you take back your health into your own hands. This is your guidebook through every step in your journey from reducing fatigue, to strengthening your brain health, to overcoming anxiety and more. To find out more and to join the community. Just head to recoveryafterstroke.com see you next time.

Intro 1:07:59
Importantly, we present many podcasts designed to give you an insight and understanding into the experiences of other individuals. The opinions and treatment protocols discussed during any podcast are the individual's own experience and we do not necessarily share the same opinion nor do we recommend any treatment protocol discussed.

Intro 1:08:16
All content on this website at any linked blog, podcast or video material controlled this website or content is created and produced for informational purposes only

and is largely based on the personal experience of Bill Gasiamis, the content is intended to complement your medical treatment and support healing. It is not intended to be a substitute for professional medical advice and should not be relied on as health advice.

Intro 1:08:38
The information is general and may not be suitable for your personal injuries, circumstances or health objectives did not use our content as a standalone resource to diagnose treat, cure or prevent any disease for therapeutic purposes or as a substitute for the advice of a health professional.

Intro 1:08:53
Never delay seeking advice or disregard the advice of a medical professional, your doctor or your rehabilitation program based on our content if you have any questions or concerns about your health or medical condition, please seek guidance from a doctor or other medical professional if you are experiencing a health emergency or think you might be call triple zero in Australia or your local emergency number immediately for emergency assistance or go to the nearest hospital emergency department.

Intro 1:09:18
Medical information changes constantly. While we aim to provide current quality information in our content. We did not provide any guarantees and assume no legal liability or responsibility for the accuracy, currency or completeness of the content. If you choose to rely on any information within our content, you do so solely at your own risk. We are careful with links we provide however third party links from our website or follow that your own risk and we are not responsible for any information you find there.