

# Transcript of FBC Foundational Knowledge Audio Lecture 1

Hello, I'm Dr. Leonard Matheson

Welcome to a foundational introduction to the possibilities available to us as we take a look at the integration of faith and neuroscience encapsulated in my book “Your Faithful Brain: Designed for so much more!”

We consider this (book) to be foundational in that it will provide you with the basics that you need to practice as a Faithful Brain Counselor, providing effective evaluation, education and counseling services to people for whom faith in God is an important part of their lives.

This (lecture) will be much more technical than the material presented in the book because a faithful brain counselor needs to be able to explain the information in the book from a depth of understanding that cannot be attained simply by reading the book. The book will be our primary reference while we dig deeper.

So, the first question we want to ask is why, “*why do we need to take a faithful brain approach to counseling?*” Well, we were designed in the image of God, faithful brain counseling helps clients to fit into God's created reality. This is how we were designed and this is where we will prosper.

Unfortunately even the best mental health care has produced mediocre results. The separation of faith and science has severely limited the development of mental health services. This has caused tremendous damage to generations. We need to stop moving forward with this unnatural and ill formed separation.

The National Institute of Mental Health (NIMH) in 2004 published the results of the STAR\*D study. STAR\*D stands for Sequenced Treatment Alternatives to Relieve Depression. This was an attempt to treat depression with no limitation of resources. No expense was spared in this large-scale study using the best trained professionals and the best medicines with carefully screened people who were suffering from depression.

Unfortunately here is what happened, only 30% achieved remission on antidepressants, 30% of the remaining non responders were helped by adding another SSRI or cognitive behavioral therapy. But after what the NIMH called persistent aggressive treatment with both SSRIs and cognitive behavioral therapy long-term remission was only 40% to 50%.

In this study, widely recognized as the best study of treatment for depression, they ignored the potential benefits of a faith integrated approach.

My own limitations as a very well-trained secular psychologist hit me right between the eyes several years ago when I was faced with a young woman named Julie severely burned in an auto accident. Her third degree burns included severe facial disfigurement and the loss of one hand.

From the very first she was calling out to God, angry at one time despairing at another, *“God why did you let this happen to me?” “God, what am I going to do?”*

As I counseled her with a deep level of caring and concern, my secular approach was tolerated by her rather than embraced. At the start of our third session Julie said to me, *“I know you’re trying to be helpful and you’ve got a lot of experience but I just don’t know whether or not I even want to live. I’m so angry with God and so scared, can you help me with that?”*

What Julie had done was to give me no alternative. I paused and said a silent prayer. I was very early in my faith life at that point. I asked God to help me know what to say next. I said, *“Julie let’s pray together.”* I had no idea what I prayed. I don’t remember the words today. I’m not sure they were my words but at the end we were both crying and we went on from there.

And Julie is still alive today and she’s prospering. She’s married and has three children. She’s really living life-to-the-full. I don’t think we could’ve gotten there had I continued working with her as a secular counselor. I was well-trained, I knew what I was doing, but I had taken God out of the equation.

The *faithful brain model* offers a much better alternative that takes advantage of the integration of faith and neuroscience and cognitive behavioral therapy. At least as important, we will not be addressing only the psychopathology that people experience but will take people far beyond mental hygiene and mental health into exploring and developing the full potential that’s offered to them by God through our relationship with Jesus Christ. We were designed for so much more.

The faithful brain counseling model makes a few assumptions. We assume that a faithful brain is designed by God to live life-to-the-full. It’s the brain of a person who accepts God’s will. It’s a brain that is fully integrated with God itself and others that optimizes its design.

There are three orientations of integration: vertical, horizontal and coronal or relational. We recognize that Jesus had the only perfectly faithful brain. We can follow his example.



The faithful brain model is a simple model that has tremendous depth. We start with accepting that the brain is designed with a purpose and the ability to differentiate among the billions of people on the planet so that each of us can intimately and individually be in a unique relationship with God.

The brain's capacity is astounding with apparently excess capacity. This is actually not excess capacity. The brain's design is necessary so that each of us can develop into the unique being that we are intended to be.

It is our responsibility to allow God to guide us and to participate with God in developing ourselves into who God wants us to be. When we surrender, we synchronize with God's created reality and find that we perform optimally. This should not surprise us and we should be encouraged to come back for more.

The hierarchy of integration begins with our relationship with God. We must start here so that each of our subsequent efforts to honor God's design for who we are can be guided by God. Jesus has not only redeemed us but is our best example of how we are to live, how we are to use our brains.

We must actively engage in a relationship with Jesus and allow his lessons to permeate our lives so that we can develop optimally. Both our relationship with Jesus and our practice of his lessons are necessary, neither is sufficient. This last statement will cause some people quite a bit of difficulty because they feel that their relationship with Jesus is sufficient in and of itself. I believe that it is necessary, and that we are called to participate with God.

To the degree that we surrender to God's perfect will for our lives and seek his purpose we were designed to develop optimally. This means that we are not to sit on our hands but we must roll up our sleeves and sharpen our pencils and become lifelong learners and participants in God's work to develop us, fulfilling his design for our lives.

Faithful brain counseling is a faith-based evidence-based practice. We treat anxiety and posttraumatic stress disorder, depression, management of chronic dysfunction and pain, post traumatic growth and brain healthy development and aging. This approach to counseling builds on good clinical work and clinical science undertaken in a context of faith, accepting that all good work is ultimately from God.

Although today's mainstream mental health approaches have achieved only mediocre outcomes, the best mental health practices are found in these five areas. Faithful brain counseling takes the best of these treatment approaches as starting points.

We do two things with each of the scientifically validated treatment approaches. First, we integrate each treatment approach into a faith context. In and of itself many of the



treatment approaches that have been demonstrated to be effective have their efficacy magnified with people of faith and the treatment approach is skillfully integrated both utilizing and supporting the individuals beliefs. Second, we build and extend each treatment approach where we find opportunities that would otherwise not exist unless the standard treatment approach has been integrated into a faith context.

For example, cognitive behavioral therapy for depression is modestly effective in and of itself offered widely by secular counselors and psychologists. We take cognitive behavioral therapy for depression within a faith context and find that prayer is a part of many of its components. We also find that (Biblical) grace magnifies the potential for healing and sustains the resilience that cognitive behavioral therapy initiates.

The faithful brain approach to counseling has many expectations and advantages. You're going to find that it's more effective than secular intervention for people who have a faith. It helps the person to restore their purpose within God's created reality. It promotes overall health and emotional resilience. it supports the faith-based client's values and goals. For the faith-based client, redemption sets the stage for rehabilitation and growth leading to life to the full contrasted with treatment of pathology leading to normal.

Now I began my career and spent the first 20 years or so as a secular counselor and psychologist. For more than two decades since I became a Christ follower I've been consistently amazed by the increased efficacy that is easily achieved by helping people to develop a restored sense of purpose and a future orientation that fits within God's created reality. I've also been tremendously influenced by my observations that we find general health extending beyond mental health and into physical health and spiritual health and financial health and familial health when we begin to intentionally pursue God's perfect will for our lives.

Surrendering to God and adopting the lessons of Jesus and integrating them into our lives immediately begins to be brain protective and allows our brains to be rehabilitated. All of the other aspects of our lives tend to follow.

You're going to find that neuroscientific findings about brain health and development entirely support Jesus' teaching. *Could neuroscience be an additional path to faith?*

It's also important to consider that the vocation to which we are called, counseling people from a faithful brain perspective, is another way in which we can encourage people to deepen their faith. Indeed it is clear to me that our witness and our teaching have efficacy to help people choose to remain in relationship with God and deepen their relationship with Jesus.



This is of great concern to me as I watch people in their late teens and 20s move away from God and embrace the attractive and exciting rationality that unfortunately sometimes proscribes a belief in God.

As we know, this is entirely unnecessary but young people tend to be easily swayed by the brilliance of spiritually stunted professors and mentors. I am speaking of myself many years ago and would hope that if another one of me comes along one of us will take him aside and encourage him to inspect the claims of Christ from a more attractive rational perspective, the perspective that the faithful brain counseling approach offers.

In the faithful brain approach to counseling, redemption and rehabilitation go together. We are redeemed by the love of Jesus and redemption readies us to be rehabilitated in our relationship with Jesus as we embrace and integrate his lessons and examples in our lives. In redemption we are reborn into a life that has our original potential though it appears that “generational sin” has likely caused us to have less potential than God originally intended humans to possess.

The problem with *neural epigenesis* is pertinent here. Generational sin is perpetuated with neural epigenesis as genetic changes take place in neurons. And we don't yet know the mechanisms but there seems to be a generational change that's passed down through the germ cells from father to son to grandson.

And I think there are two important points to consider in regards to this. The first, is that we must embrace the model and lessons of Jesus in close communion so that we can actualize our potential. The second, is that we must do our best to not continue to degrade the human potential as we contribute to generational sin. Thus we have our own personal responsibility and we also have a shared responsibility for the human race.

This is where Jesus talks about neurorehabilitation. “You shall love the Lord your God with all your heart and with all your soul and with all your mind. This is the greatest and first commandment. and a second is like it, you shall love your neighbor as yourself.” Christian neuroscientists agree that this is the core of optimal brain health and development, nothing needs to be added and nothing can be taken away. This is necessary and sufficient.

As followers of Jesus we take these instructions very seriously and attempt to live our lives, implementing them as best we can. As counselors we assist our clients to take these instructions very seriously and attempt to implement them in their lives as best they can.

What we find is that each of us is limited in our own individual abilities and we need to rely on God and the people God has put in our lives. Some of them support us and some of them we support and throughout these relationships we learn how to adhere to these commandments. Gradually the inherent capacities of our brains that are always developing become harnessed for God's purposes.

The faithful brain model holds that redemption leads to neurorehabilitation. There are several powerful brain mechanisms that are healthfully harnessed by relationship with Jesus including neuroplasticity, neurogenesis and neuroconsolidation.

*Neuroplasticity* is the constant pruning and linking of neurons with other neurons. Branching of dendrites and axons among neurons is guided by experience the most efficacious of which have emotional salience. Neurons link with some neurons and are pruned from other neurons reflecting learning and the individual's ongoing experience. Neuronal linkages are pruned or strengthened by the individual's thoughts, emotions and experiences.

*Neurogenesis* has to do with the birth and development of new neurons. From 21 days after conception until the last breath that we take our brains are developing new neurons first extremely rapidly with more than 1 million per hour and then gradually slowing.

Neurons grow to have the potential to be fully functional over 21 days. If a new neuron can link up with other neurons it will survive, if it cannot link up or after linking up it is not needed it will wither and die.

Neurogenesis is also vulnerable to high levels of stress. Persistently high levels of *cortisol* trims the formation of dendrites that allow the neuron to link to the axons of other neurons.

*Neuroconsolidation* has to do with the aggregation of neurons into meaningful and functional networks. Some of the most important neuroconsolidation is guided by our values. Information and experiences that are consistent with our values aggregate and extend values-based neural networks. New information that is put to a greater purpose can precipitate neuroconsolidation so that new neural networks are developed.

Obviously neuroconsolidation is best guided by God honoring values. Because proportionally greater neuroconsolidation takes place in adolescence, this is the time of life that is crucial in the development of values and character.

I consider Paul the “neuro rehab” apostle. In Romans 12:2 he said, “Do not conform to the pattern of this world but be transformed by the renewing of your mind that he will be able to test and approve what God's will is his good pleasing and perfect will.”



Paul is describing what we now call *neurorehabilitation*. The apostle Paul was a great teacher who understood the problems that we are heir to and the potential for our redemption and rehabilitation. In Romans 12:2, Paul instructs us to not pay attention to the pattern of this world which is the first step in breaking an addiction, rumination or bad habit. But we need to be pulled into a brighter future so that we can fully develop. We do this by seeking his good pleasing and perfect will.

The test-and-approve in Romans 12:2 signifies that we have a choice that we can exercise. The importance of this choice is that it is another *just-right challenge* that harnesses not just a belief but the combination of a belief and an action that brings about experiences that are consistent with what we seek if we are seeking God's perfect will for our lives.

The process of testing-and-approving generates in our brain a comprehensive neural network that provides resilience. Moreover these test-and-approve neural networks have the opportunity to become predominant.

Predominant neural networks leverage their influence over related neural networks so that there is a consistency in beliefs and action that is displayed in what is commonly known as *character*. Character does not develop simply by thinking about doing the right thing but by thinking about it and doing it, not once but many times.

Renewing your mind begins with the reception and processing of language in the brain's left hemisphere. For most people, prayer and counseling access both of these areas.

An important component of cognitive behavioral therapy is our language. What we now understand is that the *receptive language center* receives information slightly after the emotional brain so that it is always trying to make sense of and fit this information into what is essentially a pattern of *emotionally-based neural networks*.

We can become aware of this when we listen to politicians campaign for our votes. Those for whom we are emotionally predisposed will more easily have their messages understood and accepted by us. Those for whom we are not emotionally predisposed will have a difficult time even having us understand what they are saying. We are not primarily rational beings which is very difficult for all of us who see ourselves as rational beings to accept.

This is an important fact for counselors to understand. The transforming and renewing of the mind is not merely a verbal and rational experience. We cannot merely talk with people to bring about change, we need to talk with people within the context of a relationship that brings about change. No matter what we say, absent such a relationship change will not occur.

Similarly prayer has efficacy to the degree that it is genuine and comes out of a loving and genuine relationship with God. I really don't know whether or not perfunctory prayers have any efficacy, I'm not a position to say. But from a neuroscientific perspective the brain is not designed to experience much if any impact from a perfunctory prayer.

Similarly reading the Bible outside of the context of a loving relationship with God initiates only limited activity in the brain compared with reading and experiencing the Bible within that loving relationship. In fact, the more sensory mechanisms that can be engaged to explore the written message of the Bible from a brain perspective, the greater its efficacy.

This may be somewhat heretical to biblical scholars who obviously focus on the written word but it is clear that the words spoken to the disciples by Jesus, within the context of their relationship with Jesus, had a level of impact that we must strive to experience. Given that the Bible is the inspired word of God, I fully expect that we can achieve such an experience but we must do our best to seek it out.

Well, we have covered a lot of ground today. Let's take a few minutes to recap before we wrap up.

So, neuroplasticity is the brain's constant process of connecting and modifying connections in response to experience. Neuroplasticity takes place optimally with ongoing and focused just-right challenges within the context of grace moderated stress proper exercise sleep and nutrition.

*Just-right challenges* are when the demands of a meaningful task slightly exceed the person's ability. When the person takes on just-right challenges within the context of (Biblical) grace, moderated stress, proper exercise, sleep and nutrition, neuroplasticity is most powerful.

*Neurogenesis* is the birth and growth of new neurons. Twenty-one days after conception your brain began as a tube of neurons growing from stem cells. Millions of new neurons were created every hour and began migrating up your neural tube to become integrated with all the other neurons to organize your brain. Neurogenesis unfolds very rapidly up and through the first 24 months after gestation and starts to slow down but never completely stops.

And the final process we will talk about today is *neuroconsolidation*. That's the organization of experiences into long-term memories. Information is temporarily stored in the *hippocampus* and then integrated into and are creating new values-based neural networks. Less than 1% of the information that's temporarily stored in your

hippocampus is made into long-term memories. Screening of this information by the value centers of the brain allows testing-and-approval or rejection of the new information.

Neuroconsolidation before adolescence is our best opportunity to develop God honoring resilient values.

Well, thank you for your time and attention.

We've reached the end of Your Faithful Brain Foundational Lesson One.

We welcome your feedback. Please send ideas questions or concerns to the faithful brain Institute [www.faithfulbrain.com](http://www.faithfulbrain.com).

Thank you very much.