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— Sonia Choquette, six-sensory consultant and New York Times best-selling author of The Answer Is Simple Wille will

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You Are the PLACEBO making your mind matter

Dr. Joe Dispenza



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For my mother, Francesca

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FOREWORD

Like most of his fans, I look forward to Joe Dispenza's provocative ideas with relish. Combining solid scientific evidence with stimulating insights, Joe stretches the horizons of the possible by extending the boundaries of the known. He takes science more seriously than most scientists, and in this fascinating book, he extrapolates the most recent discoveries in epigenetics, neural plasticity, and psychoneuroimmunology to their logical conclusion.

That conclusion is an exciting one: You, and every other human being, are shaping your brain and body by the thoughts you think, the emotions you feel, the intentions you hold, and the transcendental states you experience. You Are the Placebo invites you to harness this knowledge to create a new body and new life for yourself.

This isn't a metaphysical proposition. Joe explains each link in the chain of causality that starts with a thought and ends with a biological fact, such as an increase in the number of stem cells or immunity-conferring protein molecules circulating in your bloodstream.

The book starts with Joe's account of an accident that shattered six of the vertebrae of his spine. Suddenly, in extremis, he was confronted with the necessity of putting into practice what he believed in theory: that our bodies possess an innate intelligence that includes miraculous healing power. The discipline he brought to the process of visualizing his spinal column rebuilding itself is a story of inspiration and determination.

We're all inspired by such stories of spontaneous remission and "miraculous" healing, yet what Joe shows us in this book is that we are all capable of experiencing such healing miracles. Renewal is built into the very fabric of our bodies, and degeneration and disease are the exception, not the norm.

Once we understand how our bodies renew themselves, we can start to harness these physiological processes intentionally, directing the hormones our cells synthesize, the proteins they build, the neurotransmitters they produce, and the neural pathways through which they send signals. Rather than possessing a static anatomy, our bodies are seething with change, moment by moment. Our brains are on the boil, teeming with the creation and destruction of neural connections in every second. Joe teaches us that we can steer this process with intention, assuming the powerful position of driver of the vehicle, rather than the passive role of passenger.

The discovery that the number of connections in a neural bundle can double with repeat stimulation revolutionized biology in the 1990s. It earned its discoverer, the neuropsychiatrist Eric Kandel, a Nobel Prize. Kandel later found that if we don't use neural connections, they begin to shrink in just three weeks. In this way, we can reshape our brains via the signals we pass through our neural network.

In the same decade that Kandel and others measured neuro-plasticity, other scientists discovered that few of our genes are static. The majority of genes (estimates range from 75 to 85 percent) are turned off and on by signals from our environment, including the environment of thoughts, beliefs, and emotions that we cultivate in our brains. One class of these genes, the *immediate early genes* (IEGs), takes only three seconds to reach peak expression. IEGs are often regulatory genes, controlling the expression of hundreds of other genes and thousands of other proteins at remote sites in our bodies. That kind of pervasive and rapid change is a plausible explanation for some of the radical healings you'll read about in these pages.

Joe is one of the few science writers to fully grasp the role of emotion in transformation. Negative emotion may literally be an addiction to high levels of our own stress hormones, like cortisol and adrenaline. Both these stress hormones and relaxation hormones like DHEA and oxytocin have set points, which explains why we feel uncomfortable in our skin when we think thoughts or countenance beliefs that drive our hormonal balance outside of that comfort zone. This idea is at the very frontier of the scientific understanding of addictions and cravings.

By changing your internal state, you can change your external reality. Joe masterfully explains the chain of events that starts with intentions originating in the frontal lobe of your brain and then translating into chemical messengers, called *neuropeptides*, that send signals throughout your body, turning genetic switches on or off. Some of these chemicals, like *oxytocin*, the "cuddle hormone" that's stimulated by touch, are associated with feelings of love and trust. With practice, you can learn to quickly adjust your set points for stress hormones and healing hormones.

The notion that you can heal yourself by simply translating thought into emotion might sound astounding at first. Not even Joe expected the results he began to observe in participants attending his workshops when they fully applied these ideas: spontaneous remission of tumors, wheelchair-bound patients walking, and migraines disappearing. With the openhearted delight and open-minded experimentation of a child at play, Joe began to push the envelope, wondering just how fast radical healing might occur if people applied the body's placebo effect with complete conviction. Hence, the title *You Are the Placebo* reflects the fact that it's your own thoughts, emotions, and beliefs that are generating chains of physiological events in your body.

At times, you will feel uncomfortable reading this book. But read on. That discomfort is just your old self, protesting the inevitability of transformative change, and your hormonal set points being disturbed. Joe reassures us that those feelings of discomfort may simply be the biological sensation of the dissolution of the old self.

Most of us won't have the time or inclination to understand these complex biological processes. Here's where this book provides a great service. Joe digs deep into the science behind these changes to present them in an understandable and digestible way. He does the heavy lifting behind the scenes in order to present elegant and simple explanations. Using analogies and case histories, he demonstrates exactly how we can apply these discoveries in our daily lives and illustrates the dramatic breakthroughs in health experienced by those who take them seriously.

A new generation of researchers has coined a term for the practice Joe outlines: *self-directed neuroplasticity* (or *SDN*). The idea behind the term is that we direct the formation of new neural pathways and the destruction of old ones through the quality of the experiences we cultivate. I believe that SDN will become one of the most potent concepts in personal transformation and neurobiology for the coming generation, and this book will be at the forefront of that movement.

In the meditation exercises in Part II of this book, metaphysics moves into concrete manifestation. You can do these meditations yourself easily, experiencing firsthand the expanded possibilities of being your own placebo. The goal here is to change your beliefs and perceptions about your life at a biological level so that you are, in essence, loving a new future into concrete material existence.

So embark on this enchanted journey that will expand your horizons of the possible and challenge you to embrace a radically higher level of healing and functioning. You have nothing to lose by throwing yourself enthusiastically into the process and dumping the thoughts, feelings, and biological set points that have limited your past. Believe in your ability to realize your highest potential and take inspired action, and you will become the placebo that creates a happy and healthy future for yourself and for our planet.

— Dawson Church, Ph.D. Author of *The Genie in Your Genes*

PREFACE

Waking Up

I never planned on doing any of this. The work I'm currently involved in as a speaker, author, and researcher sort of found me. In order for some of us to wake up, we sometimes need a wake-up call. In 1986, I got the call. On a beautiful Southern California day in April, I had the privilege of being run over by an SUV in a Palm Springs triathlon. That moment changed my life and started me on this whole journey. I was 23 at the time, with a relatively new chiropractic practice in La Jolla, California, and I'd trained hard for this triathlon for months.

I had finished the swimming segment and was in the biking portion of the race when it happened. I was coming up to a tricky turn where I knew we'd be merging with traffic. A police officer, with his back to the oncoming cars, waved me on to turn right and follow the course. Since I was fully exerting myself and focused on the race, I never took my eyes off of him. As I passed two cyclists on that particular corner, a red four-wheel-drive Bronco going about 55 miles an hour slammed into my bike from behind. The next thing I knew, I was catapulted up into the air; then I landed squarely on my backside. Because of the speed of the vehicle and the slow reflexes of the elderly woman driving the Bronco, the SUV kept coming toward me, and I was soon reunited with its bumper. I quickly grabbed the bumper in order to avoid

being run over and to stop my body from passing between metal and asphalt. So I was dragged down the road a bit before the driver realized what was happening. When she finally did abruptly stop, I tumbled out of control for about 20 yards.

I can still remember the sound of the bikes whizzing by and the horrified screams and profanities of the riders passing me not knowing whether they should stop and help or continue the race. As I lay there, all I could do was surrender.

I would soon discover that I had broken six vertebrae: I had compression fractures in thoracic 8, 9, 10, 11, and 12 and lumbar 1 (ranging from my shoulder blades to my kidneys). The vertebrae are stacked like individual blocks in the spine, and when I hit the ground with that kind of force, they collapsed and compressed from the impact. The eighth thoracic vertebra, the top segment that I broke, was more than 60 percent collapsed, and the circular arch that contained and protected the spinal cord was broken and pushed together in a pretzel-like shape. When a vertebra compresses and fractures, the bone has to go somewhere. In my case, a large volume of shattered fragments went back toward my spinal cord. It was definitely not a good picture.

As if I were in a bad dream gone rogue, I woke up the next morning with a host of neurological symptoms, including several different types of pain; varying degrees of numbness, tingling, and some loss of feeling in my legs; and some sobering difficulties in controlling my movements.

So after I had all the blood tests, x-rays, CAT scans, and MRIs at the hospital, the orthopedic surgeon showed me the results and somberly delivered the news: In order to contain the bone fragments that were now on my spinal cord, I needed surgery to implant a Harrington rod. That would mean cutting out the back parts of the vertebrae from two to three segments above and below the fractures and then screwing and clamping two 12-inch stainless-steel rods along both sides of my spinal column. Then they'd scrape some fragments off my hip bone and paste them over the rods. It would be major surgery, but it would mean I'd at least have a chance to walk again. Even so, I knew I'd probably still

be somewhat disabled, and I'd have to live with chronic pain for the rest of my life. Needless to say, I didn't like that option.

But if I chose not to have the surgery, paralysis seemed certain. The best neurologist in the Palm Springs area, who concurred with the first surgeon's opinion, told me that he knew of no other patient in the United States in my condition who had refused it. The impact of the accident had compressed my T-8 vertebra into a wedge shape that would prevent my spine from being able to bear the weight of my body if I were to stand up: My backbone would collapse, pushing those shattered bits of the vertebra deep into my spinal cord, causing instant paralysis from my chest down. That was hardly an attractive option either.

I was transferred to a hospital in La Jolla, closer to my home, where I received two additional opinions, including one from the leading orthopedic surgeon in Southern California. Not surprisingly, both doctors agreed that I should have the Harrington rod surgery. It was a pretty consistent prognosis: have the surgery or be paralyzed, never to walk again. If I had been the medical professional making the recommendation, I'd have said the same thing: It was the safest option. But it wasn't the option I chose for myself.

Maybe I was just young and bold at that time in my life, but I decided against the medical model and the expert recommendations. I believe that there's an intelligence, an invisible consciousness, within each of us that's the giver of life. It supports, maintains, protects, and heals us every moment. It creates almost 100 trillion specialized cells (starting from only 2), it keeps our hearts beating hundreds of thousands of times per day, and it can organize hundreds of thousands of chemical reactions in a single cell in every second—among many other amazing functions. I reasoned at the time that if this intelligence was real and if it willfully, mindfully, and lovingly demonstrated such amazing abilities, maybe I could take my attention off my external world and begin to go within and connect with it—developing a relationship with it.

But while I intellectually understood that the body often has the capacity to heal itself, now I had to apply every bit of philosophy that I knew in order to take that knowledge to the next level and beyond, to create a true experience with healing. And since I wasn't going anywhere and I wasn't doing anything except lying facedown, I decided on two things. First, every day I would put all of my conscious attention on this intelligence within me and give it a plan, a template, a vision, with very specific orders, and then I would surrender my healing to this greater mind that has unlimited power, allowing it to do the healing for me. And second, I wouldn't let any thought slip by my awareness that I didn't want to experience. Sounds easy, right?

A Radical Decision

Against the advice of my medical team, I left the hospital in an ambulance that brought me to the home of two close friends. where I stayed for the next three months to focus on my healing. I was on a mission. I decided that I would begin every day reconstructing my spine, vertebra by vertebra, and I would show this consciousness, if it was paying attention to my efforts, what I wanted. I knew that it would demand my absolute presence . . . that is, for me to be present in the moment—not thinking about or regretting my past, worrying about the future, obsessing about the conditions in my external life, or focusing on my pain or symptoms. Just as in any relationship we have with anybody, we all know when someone is present or not with us, right? Because consciousness is awareness, awareness is paying attention, and paying attention is being present and noticing, this consciousness would be aware of when I was present and when I wasn't. I would have to be totally present when I interacted with this mind; my presence would have to match its presence, my will would have to match its will, and my mind would have to match its mind.

So for two hours twice a day, I went within and began creating a picture of my intended result: a totally healed spine. Of course, I became aware of how unconscious and unfocused I was. It's ironic. I realized back then that when crisis or trauma occurs, we spend too much of our attention and energy thinking about

what we *don't* want instead of what we *do* want. During those first several weeks, I was guilty of this tendency on what seemed like a moment-to-moment basis.

In the middle of my meditations on creating the life I wanted with a fully healed spine, I would all of a sudden become aware that I'd been unconsciously thinking about what the surgeons had told me a few weeks prior: that I would probably never walk again. I would be in the midst of inwardly reconstructing my spine, and the next thing I knew I was stressing over whether I should sell my chiropractic practice. While I was step-by-step mentally rehearsing walking again, I would catch myself imagining what it would be like to live the rest of my life sitting in a wheelchair—you get the idea.

So every time I lost my attention and my mind wandered to any extraneous thoughts, I would start from the beginning and do the whole scheme of imagery over again. It was tedious, frustrating, and, quite frankly, one of the most difficult things I'd ever done. But I reasoned that the final picture that I wanted the observer in me to notice had to be clear, unpolluted, and uninterrupted. In order for this intelligence to accomplish what I hoped—what I knew—it was capable of doing, from start to finish I had to stay conscious and not go unconscious.

Finally, after six weeks of battling with myself and making the effort to be present with this consciousness, I was able to make it through my inward reconstruction process without having to stop and start over from the beginning. I remember the day I did it for the first time: It was like hitting a tennis ball on the sweet spot. There was something *right* about it. It clicked. I clicked. And I felt complete, satisfied, and whole. For the first time, I was truly relaxed and present—in mind and body. There was no mental chatter, no analyzing, no thinking, no obsessing, no trying; something lifted, and a kind of peace and silence prevailed. It was as if I no longer cared about all of the things I should have been worried about in my past and future.

And that realization solidified the journey for me, because right around that time, as I was creating this vision of what I

wanted, reconstructing my vertebrae, it started to get easier every day. Most important, I started to notice some pretty significant physiological changes. It was in that moment that I began to correlate what I was doing inside of me to create this change with what was taking place outside of me—in my body. The instant I made that correlation, I paid greater attention to what I was doing and did it with more conviction; and I did it again and again. As a result, I kept doing it with a level of joy and inspiration instead of such a dreadful, compromised effort. And all of a sudden, what had originally taken me two or three hours to accomplish in one session, I was able to do in a shorter period.

Now, I had quite a bit of time on my hands. So I started to think about what it would be like to see a sunset again from the water's edge or eat lunch with my friends at a table in a restaurant, and I thought about how I would never take any of that for granted. In detail, I imagined taking a shower and feeling the water on my face and body, or simply sitting up while using the toilet or taking a walk on the beach in San Diego, the wind blowing on my face. These were some things that I had never fully appreciated before the accident, but now they had meaning—and I took my time to emotionally embrace them until I felt as if I were already there.

I didn't know what I was doing at the time, but now I do: I was actually starting to think about all these future potentials that existed in the quantum field, and then I was emotionally embracing each of them. And as I selected that intentional future and married it with the elevated emotion of what it would be like to be there in that future, in the present moment my body began to believe it was actually *in* that future experience. As my ability to observe my desired destiny got sharper and sharper, my cells began to reorganize themselves. I began to signal new genes in new ways, and then my body *really* started getting better faster.

What I was learning is one of the main principles of quantum physics: that mind and matter are not separate elements, that our conscious and unconscious thoughts and feelings are the very blueprints that control our destiny. The persistence, conviction, and focus to manifest any potential future lies within the human

mind and within the mind of the infinite potentials in the quantum field. Both of these minds must work together in order to bring about any future reality that potentially already exists. I realized that in that way, we are all divine creators, independent of race, gender, culture, social status, education, religious beliefs, or even past mistakes. I felt really blessed for the first time in my life.

I made other key decisions about my healing as well. I set up a whole regimen (described in detail in *Evolve Your Brain*) that included diet, visits from friends who practiced energy healing, and an elaborate rehabilitation program. But nothing was more important to me during that time than getting in touch with that intelligence within me and, through it, using my mind to heal my body.

At nine and a half weeks after the accident, I got up and walked back into my life—without having any body cast or any surgeries. I had reached full recovery. I started seeing patients again at 10 weeks and was back to training and lifting weights again, while continuing my rehabilitation, at 12 weeks. And now, almost 30 years after the accident, I can honestly say that I've hardly ever had back pain since.

Research Begins in Earnest

But that wasn't the end of this adventure. Not surprisingly, I couldn't go back into my life as my same self. I was changed in many ways. I'd been initiated into a reality that no one I knew could really understand. I couldn't relate with a lot of my friends, and I certainly couldn't return to the same life. The things that were once so important to me really no longer mattered. And I started asking big questions like "Who am I?"; "What is the meaning of this life?"; "What am I doing here?"; "What's my purpose?"; and "What or who is God?" I left San Diego within a short time and moved to the Pacific Northwest, eventually opening a chiropractic clinic near Olympia, Washington. But at first, I pretty much retreated from the world and studied spirituality.

In time, I also became very interested in spontaneous remissions: when people healed from a serious disease or condition deemed terminal or permanent, without traditional medical interventions like surgery or drugs. On those long, lonely nights during my recovery when I couldn't sleep, I had made a deal with that consciousness that if I were ever able to walk again, I'd spend the rest of my life investigating and researching the mind-body connection and the concept of mind over matter. And that's pretty much what I've been doing in the nearly three decades since then.

I traveled to several different countries, seeking out many people who had been diagnosed with illnesses and treated conventionally or nonconventionally, either staying the same or getting worse until, all of a sudden, they got better. I started interviewing these people to discover what their experiences had in common so I could understand and document what had made them improve, because I had a passion to marry science with spirituality. What I found was that each of these miraculous cases relied on a strong element of mind.

The scientist in me started getting very itchy, becoming even more inquisitive. I became re-involved in attending university classes and studying the latest research in neuroscience, and I advanced my postgraduate training in brain imaging, neuroplasticity, epigenetics, and psychoneuroimmunology. And I figured, now that I knew what these people had done to get better and now that I knew all about the science of changing your mind (or at least I *thought* I did), I should be able to reproduce it—in both sick people and people who are well who want to make changes to support not only their health, but also their relationships, careers, families, and lives in general.

I was then invited to be one of the 14 scientists and researchers featured in the 2004 documentary film *What the Bleep Do We Know!?* and that movie became an overnight sensation. *What the Bleep Do We Know!?* invited people to question the nature of reality and then try it out in their lives to see if their observation mattered or, perhaps more accurately put, if their observation *became* matter. People around the world were talking about the film and

the concepts it espoused. In the wake of that, my first book, *Evolve Your Brain: The Science of Changing Your Mind*, was published in 2007. After *Evolve Your Brain* had been out for a while, people started to ask me, "How do you *do* it? How do you change, and how do you create the life you want?" It soon became the most common question people asked me.

So I assembled a team and started teaching workshops across the United States and internationally on how the brain is wired and how you can reprogram your thinking using neurophysiological principles. At first, these workshops were mostly just a sharing of information. But people wanted more, so I added meditations to synergize and complement the information, giving participants practical steps to making changes in their minds and bodies, and, as a result, changes in their lives as well. After I taught my introductory workshops in different parts of the world, people would then ask me, "What's next?" So I began teaching another level to the introductory workshop. After that was completed, more folks asked if I could teach another level, a more advanced workshop. This continued in most of the places where I presented.

I kept thinking that I was done, that I'd taught all I could teach, but people kept asking for more, so I'd learn more myself and then refine the presentations and meditations. A momentum developed, and I was getting good feedback; people were able to eliminate some of their self-destructive habits and lead happier lives. Even though up to this point, my associates and I had seen only small changes—nothing really significant—people loved the information and wanted to continue the practice. So I kept going where I was invited. I figured that when the time came that they stopped inviting me, I'd know I was done with this work.

About a year and a half after our first workshop, my team and I started receiving several e-mails from our participants commenting on positive changes they were experiencing from doing the meditations on a consistent basis. A flood of change began to manifest in people's lives, and they were overjoyed. The feedback we received over the next year caught my attention and that of my staff as well. Our participants began reporting not only subjective

changes in their physical health, but also improvements in objective measurements from their medical tests. Sometimes the tests would even come back totally normal! These people were able to reproduce the exact physical, mental, and emotional changes that I studied, observed, and ultimately wrote about in *Evolve Your Brain*.

This was incredibly exciting for me to witness, because I knew that anything that is repeatable verges on becoming a scientific law. It seemed as though many folks were sending us e-mails starting with the same verbiage: "You're not going to believe this . . ." And those changes were now more than coincidence.

Then a little later that year, during each of two events in Seattle, some amazing things began to happen. At the first event, a woman with multiple sclerosis (MS), who was using a walker when she arrived, was walking unassisted by the time the workshop was over. At the second Seattle event that year, another woman, who had suffered with MS for ten years, started dancing around, declaring that the paralysis and numbness she'd experienced in her left foot were completely gone. (You'll read more about one of these women, and others like them, in the chapters to come.) By demand, in 2010 I taught a more progressive workshop in Colorado, where people started noticing that they were shifting their well-being right there, during the event. People stood up, took the microphone, and reported some pretty inspiring stories.

Around this time, I was also invited to speak to a lot of business leaders about the biology of change, the neuroscience of leadership, and the concept of how to transform individuals in order to transform a culture. After a keynote address to one group, several executives approached me about adapting the ideas for a corporate model of transformation. So I created an eight-hour course that could be tailored for companies and organizations, and the course was so successful that it spawned our "30 Days to Genius" corporate program. I found myself working with business clients such as Sony Entertainment Network, Gallo Family Vineyards, the telecommunications company WOW! (originally called Wide Open West), and many others. This led to offering private coaching for upper management.

The demand for our corporate programs became so great that I began training a coaching staff; I now have more than 30 active trainers, including ex-CEOs, corporate consultants, psychotherapists, attorneys, physicians, engineers, and Ph.D. professionals who travel all around, teaching this model of transformation to different companies. (We now have plans to begin certifying independent coaches in using the model of change with their own clients.) Never in my wildest dreams had I ever imagined this type of future for myself.

I wrote my second book, *Breaking the Habit of Being Yourself: How to Lose Your Mind and Create a New One,* published in 2012, to serve as a practical how-to companion to *Evolve Your Brain.* I not only explained more about the neuroscience of change and epigenetics, but also included a four-week program with step-by-step directions for implementing these changes, based on the workshops I was teaching at the time.

Then I did another, more advanced event in Colorado, where we had *seven* spontaneous remissions of various conditions. One woman who was living on lettuce because of severe food allergies was healed that weekend. Other people were healed of gluten intolerance, celiac disease, a thyroid condition, severe chronic pain, and other conditions. All of a sudden, I started seeing some really significant changes in people's health and in their lives, while they retreated from their then-current reality in order to create a new one. It was happening right before my eyes.

Information to Transformation

That event in Colorado in 2012 was the turning point in my career, because I could finally see that people not only were being helped to change their sense of well-being, but now also were signaling new genes in new ways *right there* during the meditations, in real time, in big ways. In order for someone who had been sick for years with a health condition like lupus to become well during a one-hour meditation, something significant *must* have occurred in the person's mind as well as her body. I wanted to figure out

how to measure these changes while they were happening in the workshops so that we could see exactly what was going on.

So in early 2013, I offered a brand-new type of event that shot our workshops to a whole new level. For this event, which was in Arizona, I invited a team of researchers, including neuroscientists, technicians, and quantum physicists, with specialized instruments to join me for a four-day workshop attended by more than 200 participants. The experts used their equipment to measure the ambient electromagnetic field in the workshop room to see if the energy was changing as the workshop progressed. They also measured the field of energy around the participants' bodies and the energy centers of their bodies (also called *chakras*) to see if they were able to influence these centers.

To take these measurements, they used very sophisticated instrumentation, including electroencephalography (EEG) to gauge the brain's electrical activity, quantitative electroencephalography (QEEG) to make a computerized analysis of the EEG data, heart rate variability (HRV) to document the variation in time interval between heartbeats and heart coherence (a heart-rhythm measurement that reflects the communication between the heart and the brain), and gas discharge visualization (GDV) to measure changes in bioenergetic fields.

We did brain scans on many of the participants both before and after the event so that we could see what was going on in the inner world of people's brains, and we also randomly selected people to scan during the event to see if we could measure any changes in brain patterns in real time during the three meditations I led each day. It was a great event. A person with Parkinson's disease no longer had any tremors. Another person with a traumatic brain injury was healed. People with tumors in their brains and bodies found that these growths went away. Many individuals with arthritic pain experienced relief for the first time in years. All of these occurrences were among many other profound changes.

During this amazing event, we were finally able to capture objective changes in a scientific realm of measurement and document the subjective changes participants reported in their health. I don't think it's an exaggeration to say that what we observed

and recorded made history. Later in the book, I'll show you what you're capable of doing, by sharing some of these stories—stories about ordinary people doing the extraordinary.

Here was my idea in developing that workshop: I wanted to give people scientific information and then provide them with the necessary instruction on how to apply that information so that they could achieve heightened degrees of personal transformation. Science is, after all, the contemporary language of mysticism. I learned that the moment you start talking in the language of religion or culture, the moment you start quoting tradition, you divide your audience members. But science unifies them and demystifies the mystical.

And I discovered that if I could teach people the scientific model of transformation (bringing in a little quantum physics to help them understand the science of possibility); combine it with the latest information in neuroscience, neuroendocrinology, epigenetics, and psychoneuroimmunology; give them the right kind of instruction; and provide the opportunity to apply that information, then they would experience a transformation. And if I could do this in a setting where I could measure the transformation as it was happening, then that measurement of transformation would become more information that I could use to teach the participants about the transformation they had just experienced. And with that information, they could have another transformation, and on it goes as people begin to close the gap between who they think they are and who they really are—divine creators—making it easier for them to keep doing it. I called this concept "information to transformation," and it has become my new passion.

Now, I offer a 7-hour introductory online intensive, and I also personally teach about nine or ten 3-day progressive workshops a year all around the world, plus one or two 5-day advanced workshops, where we have the aforementioned scientists come in with their equipment to measure brain changes, changes in heart function, changes in genetic expression, and energetic changes in real time. The results are nothing short of astounding, and they form the basis of this book.

INTRODUCTION

Making Minds Matter

The incredible results I've seen in the advanced workshops I offer and all the scientific data that has come out of that have led me to the idea of the *placebo*: how people can take a sugar pill or get a saline injection and then their belief in something outside of themselves makes them get better.

I began to ask myself, "What if people begin to believe in themselves instead of in something outside of themselves? What if they believe that they can change something inside of them and move themselves to the same state of being as someone who's taking a placebo? Isn't that what our workshop participants have been doing in order to get better? Do people really need a pill or injection to change their state of being? Can we teach people to accomplish the same thing by teaching them how the placebo really works?"

After all, the snake-handling preacher who drinks strychnine and has no biological effects certainly has changed his state of being, right? (You'll read more about this in the first chapter.) So if we can then begin to measure what's taking place in the brain and look at all this information, can we teach people how to do it themselves, without relying on something outside of them—without a placebo? Can we teach them that they *are* the placebo? In other words, can we convince them that instead of investing their

belief in the known, like a sugar pill or a saline injection, they can place their belief in the unknown and make the unknown known?

And really that's what this book is about: empowering you to realize that you have all the biological and neurological machinery to do exactly that. My goal is to demystify these concepts with the new science of the way things really are so that it is within the reach of more people to change their internal states in order to create positive changes in their health and in their external world. If that sounds too amazing to be true, then as I've said, toward the end of the book you'll see some of the research compiled from our workshops to show you exactly how it's possible.

What This Book Is Not About

I want to take just a moment to talk about a few things that this book is *not* about, to clear up any potential misconceptions right from the start. For one, you won't read here about the ethics of using placebos in medical treatment. There's much debate about the moral correctness of treating a patient who isn't part of a medical trial with an inert substance. While a discussion about whether the end justifies such means may well be worthwhile in a broader conversation about placebos, that issue is completely separate from the message this book aims to deliver. *You Are the Placebo* is about putting you in the driver's seat of creating your own change, not about whether or not it's okay for other people to trick you into it.

This book is also not about denial. None of the methods you'll read about here involve denying whatever health condition you may presently have. Much to the contrary, this book is all about transforming illness and disease. My interest is in measuring the changes people make when they move from sickness to health. Instead of being about rejecting reality, *You Are the Placebo* is about projecting what's possible when you step into a *new* reality.

You'll discover that honest feedback, in the form of medical tests, will inform you if what you're doing is working. Once you see the effects you've created, you can pay attention to what you did to arrive at that end, and do it again. And if what you're doing isn't working, then it's time to change it until it is. That's combining science and spirituality. Denial, on the other hand, occurs when you're not looking at the reality of what's happening within and around you.

This book also won't question the efficacy of the various healing modalities. Many different modalities exist, and many of them work quite well. All of them have some type of measurable beneficial effect in at least some people, but a complete cataloging of these methods isn't what I want to focus on in this book. My purpose here is to introduce you to the particular modality that has most captured my attention: healing yourself through thought alone. I encourage you to continue using any and all healing modalities that work for you, be they prescription drugs, surgery, acupuncture, chiropractic, biofeedback, therapeutic massage, nutritional supplements, yoga, reflexology, energy medicine, sound therapy, and so on. *You Are the Placebo* is not about rejecting anything except your own self-imposed limitations.

What's Inside This Book?

You Are the Placebo is divided into two parts:

— Part I gives you all the detailed knowledge and background information you need to be able to understand what the placebo effect is and how it operates in your brain and body, as well as how to create the same kind of miraculous changes in your own brain and body *all by yourself, by thought alone*.

Chapter 1 starts off the book by sharing some incredible stories demonstrating the amazing power of the human mind. Some of these tales relate how people's thoughts have healed them, and others show how people's thoughts have actually made them sick (and sometimes even hastened their death). You'll read about a man who died after hearing he had cancer, even though his autopsy revealed that he'd been misdiagnosed; a woman plagued by depression for decades who improved dramatically during an

antidepressant drug trial, despite the fact that she was in the group receiving a placebo; and a handful of veterans hobbled by osteoarthritis who were miraculously cured by fake knee surgery. You'll even read some startling stories about voodoo curses and snake handling. My purpose in sharing these dramatic stories is to show the wide range of what the human mind is capable of doing all on its own, without any help from modern medicine. And hopefully, it will lead you to the question "How is that possible?"

Chapter 2 gives a brief history of the placebo, tracing accounts of related scientific discoveries from the 1770s (when a Viennese doctor used magnets to induce what he thought were therapeutic convulsions) all the way through the modern day, as neuroscientists solve exciting mysteries about the intricacies of how the mind works. You'll meet a doctor who developed techniques of hypnotism after arriving late for an appointment only to find his waiting patient mesmerized by a lamp flame, a World War II surgeon who successfully used saline injections as an analgesic on wounded soldiers when he ran out of morphine, and early psychoneuro-immunology researchers in Japan who switched poison-ivy leaves with harmless leaves and found that their test group reacted more to what they were told they were experiencing than to what they actually did experience.

You'll also read about how Norman Cousins laughed himself to health; how Harvard researcher Herbert Benson, M.D., was able to reduce cardiac patients' risk factors for heart disease by figuring out how Transcendental Meditation worked; and how Italian neuroscientist Fabrizio Benedetti, M.D., Ph.D., primed subjects who had been given a drug, and then switched the drug for a placebo—and watched the brain continue to signal the production of the same neurochemicals the drug produced without interruption. And you'll also read a striking new study that's a real game changer: It shows that irritable bowel syndrome (IBS) patients were able to dramatically improve their symptoms by taking placebos—even though they *knew full well* that the medication they were given was a placebo, not an active drug.

Chapter 3 will take you through the physiology of what happens in your brain when the placebo effect is operating. You'll read that, in one sense, the placebo works because you can embrace or entertain a new thought that you can be well, and then use it to replace the thought that you'll always be sick. That means you can change your thinking from unconsciously predicting that your future is your same familiar past to beginning to anticipate and expect a new potential outcome. If you agree with this idea, then it means that you'll have to examine how you think, what the mind is, and how these things affect the body.

I'll explain how as long as you're thinking the same thoughts, they'll lead to the same choices, which cause the same behaviors, which create the same experiences, which produce the same emotions, which in turn drive the same thoughts—so that neurochemically, you stay the same. In effect, you're reminding yourself of who you think you are. But hold on; you're not hardwired to be the same way for the rest of your life. I'll then explain the concept of neuroplasticity and how we now know that the brain is capable of changing throughout our lives, creating new neural pathways and new connections.

Chapter 4 moves into a discussion of the placebo effect in the body, explaining the next step of the physiology of the placebo response. It starts out telling the story of a group of elderly men who attend a weeklong retreat set up by Harvard researchers who asked the men to pretend they were 20 years younger. By the end of the week, the men had made numerous measurable physiological changes, all turning back the clock on their bodies, and you'll learn the secret behind how they did it.

To explain that, the chapter also discusses what genes are and how they are signaled in the body. You'll learn how the relatively new and exciting science of epigenetics has basically torched the old-school idea that your genes are your destiny, by teaching us that the mind truly can instruct new genes to behave in new ways. You'll discover how the body has elaborate mechanisms for turning some genes on and others off, which means that you're not doomed to express whatever genes you've inherited. This means

you can learn how to change your neural wiring to select new genes and create real physical changes. You'll also read about how our bodies access stem cells—the physical matter that's behind many placebo-effect miracles—to make new, healthy cells in areas that have been damaged.

Chapter 5 ties the previous two chapters together, explaining how thoughts change your brain and your body. It begins by asking the question "If your environment changes and you then signal new genes in new ways, is it possible to signal the new gene ahead of the changing of the actual environment?" I'll then explain how you can use a technique called *mental rehearsal* to combine a clear intention with an elevated emotion (to give the body a sampling of the future experience) in order to experience the new future event in the present moment.

The key is making your inner thoughts more real than the outer environment, because then the brain won't know the difference between the two and will change to look as if the event has taken place. If you're able to do this successfully enough times, you'll transform your body and begin to activate new genes in new ways, producing epigenetic changes—just as though the imagined future event were real. And then you can walk right into that new reality and *become* the placebo. This chapter not only outlines the science behind how this happens, but also includes stories of many public figures from different walks of life who have used this technique (whether or not they were fully aware of what they were doing at the time) to make their wildest dreams come true.

Chapter 6, which concentrates on the concept of suggestibility, begins with a fascinating but chilling story of how a team of researchers set out to test whether a regular, law-abiding, mentally healthy person who was highly suggestible to hypnosis could be programmed to do something he or she would normally deem unthinkable: shoot a stranger with the intent to kill.

You'll see that people have differing degrees of suggestibility, and the more suggestible you are, the better able you are to gain access to your subconscious mind. This is key to understanding the placebo effect, because the conscious mind is only 5 percent of who we are. The remaining 95 percent is a set of subconscious

programmed states in which the body has become the mind. You'll learn that you must get beyond the analytic mind and enter into the operating system of your subconscious programs if you want your new thoughts to result in new outcomes and change your genetic destiny, as well as learn how meditation is a powerful tool for doing just that. The chapter ends with a brief discussion of different brain-wave states and which are the most conducive to your becoming more suggestible.

Chapter 7 is all about how attitudes, beliefs, and perceptions change your state of being and create your personality—your personal reality—and how you can shift them to create a new reality. You'll read about the power that unconscious beliefs exert and have a chance to identify some of those beliefs you've been harboring without realizing it. You'll also read about how the environment and your associative memories can sabotage your ability to change your beliefs.

I'll explain more fully that in order for you to change your beliefs and perceptions, you must combine a clear intention with an elevated emotion that conditions your body to believe that the future potential that you selected from the quantum field has already happened. The elevated emotion is vital, because only when your choice carries an amplitude of energy that's greater than the hardwired programs in your brain and the emotional addiction in your body will you be able to change your brain's circuitry and your body's genetic expression, as well as recondition your body to a new mind (erasing any trace of the old neurocircuitry and conditioning).

In Chapter 8, I'll introduce you to the quantum universe, the unpredictable world of the matter and energy that make up the atoms and molecules of everything in the universe, which turn out to really be more energy (which looks like empty space) than solid matter. The quantum model, which states that all possibilities exist in this present moment, is your key to using the placebo effect for healing, because it gives you permission to choose a new future for yourself and actually *observe it into reality*. You'll then understand just how possible it really is to cross the river of thange and make the unknown known.

Chapter 9 introduces you to three people from my workshops who have reported some truly remarkable results from using these same techniques to change their health for the better. First, you'll meet Laurie, who, at age 19, was diagnosed with a rare degenerative bone disease that her doctors told her was incurable. Although the bones in Laurie's left leg and hip suffered 12 major fractures over several decades, leaving her dependent on crutches for getting around, today she walks perfectly normally, without even needing a cane. Her x-rays show no evidence of any fractures in her bones.

Then I'll introduce you to Candace, who was diagnosed with Hashimoto's disease—a serious thyroid condition with a host of complications—during a time in her life when she was resentful and full of rage. Candace's doctor told her she'd have to take medication for the rest of her life, but she proved him wrong after she eventually was able to turn her condition around. Today, Candace is totally in love with a brand-new life and takes no medication for her thyroid, which blood tests show is completely normal.

Finally, you'll meet Joann (the woman mentioned in the Preface), a mother of five who was a successful businesswoman and entrepreneur whom many considered a superwoman—before she collapsed quite suddenly and was diagnosed with an advanced form of multiple sclerosis. Joann's condition went downhill quickly, and she was eventually unable to move her legs. When she first came to my workshops, she made only small changes—until one day when the woman who hadn't moved her legs in years walked around the room, completely unassisted, after just one hour-long meditation!

Chapter 10 shares more remarkable stories from workshop participants, along with the brain scans that go with them. You'll meet Michelle, who completely healed herself of Parkinson's disease, and John, a paraplegic who stood up from his wheelchair after a meditation. You'll read how Kathy (a CEO living on the fast track) learned to find the present moment and how Bonnie healed herself of fibroids and heavy menstrual bleeding. Finally, you'll meet Genevieve, who went into such states of bliss in meditation that tears of joy ran down her face, and Maria, whose experience can only be described as having an orgasm in her brain.

I'll show you the data my team of scientists collected from these people's brain scans so that you can see the changes we witnessed in real time during the workshops. The best part of all this data is that it proves you don't have to be a monk or nun, a scholar, a scientist, or a spiritual leader to accomplish similar feats. You don't need a Ph.D. or a medical degree. The folks in this book are ordinary people like you. After reading this chapter, you'll understand that what these people did is not magic or even all that miraculous; they simply learned and applied teachable skills. And if you practice the same skills, you'll be able to make similar changes.

— Part II of the book is all about meditation. It includes Chapter 11, which outlines some simple preparation steps for meditation and goes over specific techniques you'll find helpful, and Chapter 12, which gives you step-by-step instructions for using the meditation techniques I teach in my workshops—the very same techniques that participants used to produce the remarkable results you'll have read about earlier in the book.

I'm happy to say that although we don't have all the answers yet about harnessing the power of the placebo, all sorts of people are actually using these ideas *right now* to make extraordinary changes in their lives, the kinds of changes that many others consider practically impossible. The techniques I share in this book need not be limited to healing a physical condition; they can also be applied to improving any aspect of your life. My hope is that this book will inspire you to try these techniques, too, and to make possible in *your* life the same kind of seemingly impossible changes.

Author's note: While the stories of the individuals in my workshops who experienced healing are true, their names and certain identifying details have been changed in this book to protect their privacy.

Chapter Ten

Information to Transformation: Proof That You *Are* the Placebo

This book is about making your mind matter. You now understand that the placebo works because a person accepts and believes in a *known* remedy—a fake pill, injection, or procedure substituted for its real counterpart—and then surrenders to the outcome without overanalyzing how it's going to happen. We could say that a person associates her future experience of a particular *known* person (say, a doctor) or thing (a medication or procedure) at a specific time and place in her external environment with a change in her internal environment—and in doing so, she alters her state of being. After a few consistent experiences, the person will expect her future to be exactly like her past. Once that link is in place, the process becomes highly effective. It's about a *known* stimulus automatically producing a *known* response.

The bottom line is this: In the classic placebo effect, our belief lies in something outside of us. We give our power away to the material world, where our senses define reality. But can the placebo work by creating from the *immaterial* world of thought and making that unknown possibility a new reality? That would be a more prudent use of the quantum model.

The three workshop participants you read about in the last chapter accomplished this feat. They all chose to believe in *themselves* more than they believed in anything else. They changed

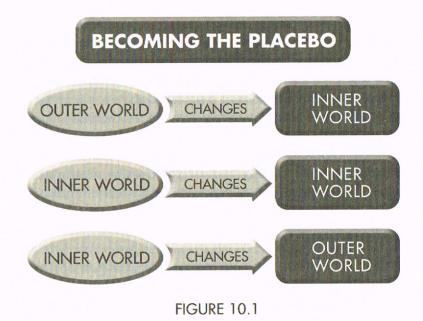
from the inside and moved into the same state of being as someone who'd taken a placebo—without any material thing causing the phenomenon. That's what many students continue to do to get better. Once they know how the placebo really works, the pill, injection, or procedure can be taken away, and the same outcome unfolds.

Because of the research in these workshops, as well as the constant testimonials I've received from people around the world, I now know that *you are the placebo*. My students demonstrate that instead of investing their belief in the known, they can place their belief in the *unknown* and make the unknown *known*.

Think about this for a moment. The idea of verifiable healing exists as an unknown potential reality in the quantum field, until it is observed and realized, and has materialized. It lives as a possibility in an infinite field of information defined as nothing physically but all material possibilities combined. So the potential future of experiencing a spontaneous remission from a disease exists as an unknown located beyond space and time, until it's personally experienced and made known in this space and time. Once the unknown beyond the senses becomes a known experience with your senses, you're on the path of evolution.

So if you can experience a healing over and over again in the inner world of thoughts and feelings, then in time, that healing should finally manifest as an outer experience. And if you make a thought as real as the experience in the external environment, shouldn't there be evidence in your body and brain sooner or later? In other words, if you mentally rehearse that unknown future with a clear intention and an elevated emotion, and do it repeatedly, then based on what you've learned, you should have real neuroplastic changes in your brain and epigenetic changes in your body.

And if you keep moving into a new state of being each day by reminding your brain and conditioning your body to that same mind, then you should see the same structural and functional changes within you as if you took the placebo. Figure 10.1 gives a simple graphic showing how this process unfolds.



Most change starts with the simple process of something outside of us altering something inside of us. If you begin the inward journey and start to change your inner world of thoughts and feelings, it should create an improved state of well-being. If you keep repeating the process in meditation, then in time, epigenetic changes should begin to alter your outer presentation—and you become your own placebo.

So instead of aligning your faith (which I define as believing in a thought more than anything else) and your belief in something known, can you place your attention on an unknown possibility and then, by the principles discussed in this book, make that unknown reality known? By emotionally embracing the experience in your mind enough times, can you move from the immaterial to the material—from thought to reality?

By now, you should understand that you don't need any fake pills, holy shrines, ancient symbols, witch doctors (whether of the modern-day or traditional variety), sham surgery, or sacred ground in order to heal you. This chapter introduces the scientific evidence showing how our students did just that. They changed their biology by thought alone. It wasn't just in their minds—it was in their brains.

All of the supporting evidence in this chapter is provided to inspire you to see, firsthand, the power of meditation. It's my desire that once you see proof of what's possible, you'll apply the same principles to your own personal transformation and reap the benefits in all areas of your life. After you read these stories, by the time you get to Part II of the book, you'll have more intention behind your inward journey, because you'll assign more meaning to what you're doing—and therefore you'll get better results.

From Knowledge to Experience

I've learned something very important in teaching this work. I've come to the realization that everyone secretly believes in his or her greatness. When you get right down to it, on some level, everyone—whether you're a corporate CEO, a janitor at an elementary school, a single mother of three, or a prison inmate—innately believes in him- or herself.

We all believe in possibility. We all imagine a better future for ourselves than the reality where we currently reside. So I thought that if I could offer sincere individuals vital scientific information and then provide them with the necessary instruction on how to apply that information, they could experience varying degrees of personal transformation. Science is, after all, the contemporary language of mysticism. It transcends religion, culture, and tradition. It demystifies the mystical and unifies a community. I've seen it occur time and time again in my seminars around the world.

In my advanced workshops where my colleagues and I measure biological as well as energetic changes in participants, individually and in the group as a whole, I use several principles outlined in this book (and many additional ones as well) to teach people the scientific model of transformation. The model continues to progress as students evolve their skill sets. I constantly tie in more quantum physics to help people understand possibility. I then combine it with the latest information in neuroscience,

neuroendocrinology, epigenetics, cellular biology, brain-wave science, energy psychology, and psychoneuroimmunology. We see new possibilities manifest as a result of learning new information.

Once our students learn and embrace this information, they can assign more meaning to their meditations and contemplative practices. But it's not enough for the students to merely understand the information intellectually or conceptually. They must be able to repeat what they've learned on command. Once they can explain the advancing knowledge, the progressing model will become more wired in their brains—and they can then install the neurological hardware. By then repeating what they've learned enough times, they create a hardwired software program. If they apply this new knowledge correctly, it can then serve as the forerunner to a new experience.

That is, once they align their minds and bodies, they'll gain wisdom from a novel experience by embracing the associated new emotion. Now they'll start to *embody* the information, because they are chemically instructing their bodies to emotionally understand what their minds intellectually understand. At this point, they'll begin to believe and know that it's the truth. But my desire is that instead of just doing it once, my students repeat the experience over and over again at will, until it becomes a new skill, habit, or state of being.

Once we achieve consistency, we're on the precipice of a new scientific paradigm—because anything that's repeatable *is* science. When you and I arrive at the level of competence where we can change our internal states by thought alone, and this is repeatedly observed, measured, and documented, we're on the verge of a new scientific law. Now we can contribute new knowledge about the nature of reality to the overall scientific model that the world presently embraces so that we can empower more people. This has been my ambition for years.

I've gone to great lengths to teach our workshop participants the specifics of how inward practices biologically change the brain and body so that they understand explicitly what they are doing. When nothing is left to conjecture, dogma, or supposition, we're more suggestible to a quantum possibility. And great strides result from great efforts. Nevertheless, the measurements are only as good as the students' abilities.

So in my workshops, the students retreat from their lives for three to five days to help them no longer define themselves by their present-past personal reality. They practice moving into new states of being. By no longer reaffirming aspects of their old-personality self that don't belong to their future and by pretending to be someone else—or by reinventing a new-personality self—they become the new self they envision, so they should produce epigenetic changes, just as did the older men in Chapter 4 who pretended they were 22 years younger.

It's my desire that workshop participants get beyond them-selves—and their identities—in their meditations to become no body, no one, no thing, and to be in no place and in no time—so that they become pure consciousness. Once this occurs, I've seen them change their brains and bodies ahead of their environments (their familiar lives) so that when they return to their lives after the workshop is over, they're no longer the victims of unconscious conditioning from the external world. This is the domain where the uncommon and the miraculous happen.

Because I want to give students the right kind of instruction and provide them with opportunities to personalize all of the novel information they're learning so that they can ultimately produce some type of personal transformation, I created a new kind of event in 2013. If you remember, I discussed the evolution of this idea in the Preface. In this new workshop offering (held first in February of that year in Carefree, Arizona, and again in July in Englewood, Colorado), I wanted to measure the transformation as it was happening in real time.

My intention was that once these measurements were obtained, the data would then become more information that I could use to teach participants about the transformation they'd just experienced. And with *that* information, they could have *another* transformation, which could be measured, and on it would go as people began to close the gap between the two worlds of

knowledge and experience. I call these workshops "Information to Transformation." It's where my passion lies.

Measuring Change

When I began the journey, I discovered a brilliant and talented neuroscientist named Jeffrey Fannin, Ph.D., who selflessly helped me measure what students' brains were doing. Dr. Fannin, the founder and executive director of the Center for Cognitive Enhancement in Glendale, Arizona, has worked in the field of neuroscience for more than 15 years and has extensive experience in training the brain for optimal performance. He specializes in head trauma, stroke, chronic pain, attention deficit disorder (ADD) and attention deficit hyperactivity disorder (ADHD), anxiety disorders, depression, and trauma recovery, as well as high-performance training that includes brain mapping for sports, enhancing leadership skills through brain-wave entrainment, improving brain function, enhancing mental and emotional dexterity, and personal transformation.

Over the years, he has been involved in cutting-edge research using electroencephalograph (EEG) technology (which measures the electrical activity of neurons) to accurately assess how balanced a person's brain-wave energy is, a measurement he calls the person's *whole-brain state*. His research focuses on subconscious belief patterns and merging personal success with balanced brain performance.

Dr. Fannin has also worked as part of a research team at Arizona State University, studying neuroscience and leadership using data gathered at the United States Military Academy at West Point. This research allowed him to co-develop and co-teach a unique course at Arizona State University called "The Neuroscience of Leadership." He also served for several years on the faculty at Walden University near Phoenix, teaching cognitive neuroscience at the master's and doctoral levels.

I invited Dr. Fannin and his whole team to both of these new workshop events, where we measured specific brain qualities and elements like coherence versus incoherence (the orderliness or disorderliness of brain waves), amplitude (the energy of the brain waves), phase organization (the degree to which the different parts of the brain are working together in harmony), the relative time it takes for a person to enter deep meditation (how long it takes to change brain waves and move into a more suggestible state), the theta/alpha ratio (the degree to which the brain functions in a holistic state and how different brain compartments communicate with each other across entire regions—the front with the back and the left side with the right side), the delta/theta ratio (the ability to regulate and control mind chatter and intrusive thoughts), and sustainability (the brain's ability to consistently maintain a state of meditation over time).

We also created four brain-scan stations equipped with EEG machines to measure participants both before and after the workshop so that we could observe how students' brain-wave patterns changed. We scanned more than a hundred participants in each of the two events. I also randomly selected four participants to measure during each of three meditation sessions per day, scanning their brains in real time. Altogether, in both 2013 workshops, we recorded a total of 402 EEGs. This is a safe, non-invasive procedure that takes measurements from 20 locations on the outside of the head. Those brain-wave measurements provide a host of information regarding the brain's current ability to perform.

The EEGs were then converted into quantitative EEGs (QEEGs), which is a mathematical and statistical analysis of EEG activity that's depicted as a brain-map graphic. This graphic features color gradations indicating how the activity recorded from the EEG compares to normal baseline activity. The various colors and patterns depicted at different frequencies offer greater information about how the brain-wave patterns affect a person's thoughts, feelings, emotions, and behaviors.

For starters, our overall data demonstrated that 91 percent of the individuals whose EEGs we recorded presented a significantly improved state of brain function. The majority of our students moved from a less coherent (or less orderly) state to a more coherent state by the end of the transformational meditation sessions. Furthermore, more than 82 percent of the QEEG brain maps we recorded in both events demonstrated that participants were functioning within the healthy normal range of brain activity.

I learned that when your *brain* works right, *you* work right. When your brain is more coherent, you're more coherent. When your brain is more whole and balanced, you're more whole and balanced. When you can regulate your negative and intrusive thoughts every day, you're less negative and intrusive. And that's exactly what we witnessed with the students at these events.

The national average for someone to move into and sustain a meditative state is a little over one and a half minutes.¹ That is, it takes that long for most people to change their brain waves and move into a meditative state. The average time for *our* students to enter and sustain a meditative state in the 402 cases that we measured was only 59 seconds. That's under a minute. Some of our students were able to alter their brain waves (and their state of being) in as few as four, five, and nine seconds each.

To be clear, I'm not interested in making this a competition (which would defeat our purpose). However, this data does illustrate two important points. First, moving beyond the analytical mind of beta brain waves and entering into a more suggestible state is a skill that you can improve if you keep practicing it. Second, students are able to use the methods my colleagues and I are teaching to get beyond their thinking brains and enter into the operating system of the subconscious mind relatively easily.

Interestingly, our research also shows a noticeable, consistent patterning in the way our students' brains work holistically. We see significant alternating alpha/theta patterns (how different brain compartments communicate with each other) in the frontal lobes when a person meditates. That means the two halves of the brain are talking in a more balanced and unified fashion. The dual frontal-lobe ratio patterns we repeatedly observe seem to produce the experience of high-level thankfulness and gratitude, which appear over and over again in a rhythmic, wavelike

manner. So when students are in this heightened state of gratitude during mental rehearsal, this data suggests that their inner experience is so real that they believe that the events are happening to them in real time—or that the events have already happened. They're thankful, because that's the emotion we feel when what we want happens.

Experienced meditators also showed an increase in theta and lower-range alpha brain-wave ratios, which means that they can spend quite a bit of time in altered states. Of particular significance was the increase in slow-wave regulation; these students, while in a theta brain-wave state, have higher-than-normal coherence, or brain-wave orderliness, between the activity in the front of the brain and the regions in the back of the brain. We saw the left-frontal region, which is associated with positive emotion, get activated repeatedly, which is consistent with inducing a state of meditative bliss.

In other words, when these students enter a meditation, they produce slower, more coherent brain waves that suggest they're in deep states of relaxation and heightened awareness. In addition, the unification between the front and the back of the brain, as well as between the left and right sides of the brain, indicates that they're feeling happier and more whole.

I Have a Brainstorm

Finally, while I was observing a student who was being brain mapped in real time during a meditation at the first of the two events, I understood something quite remarkable. As I was watching her brain on the scan, I saw how hard she was working and how her brain was moving further and further away from balance and from the deeper meditative states of alpha and theta. I saw how she was analyzing and judging herself and her life within the emotion she was experiencing at that time—as evidenced by the higher, more incoherent brain waves associated with a high-range beta state (indicating high stress, high anxiety, high arousal, high emergency, and general imbalance).

I witnessed how she was futilely trying to use her brain to change her brain—and it wasn't working. I knew that she was also using her ego to try to change her ego, which also wasn't working. In using one program to try to change another program, she was only endorsing her program, not rewriting it. She was still in her conscious mind, trying to change her subconscious mind, so she was keeping herself separate from the operating system, where true change resides. I approached her afterward, and when we spoke for a few minutes, she admitted to me that she was having a difficult time. The lights went on for me in that moment, and I knew exactly what I had to teach next.

She had to become detached and move beyond her body in order to change her body, move beyond the ego in order to change the ego, move beyond the program in order to change the program, and move beyond the conscious mind in order to change the subconscious mind. She had to become the unknown in order to create the unknown. She had to become an immaterial new thought in nothing materially in order to create a new experience materially. She had to move beyond space and time in order to change space and time.

The student had to become pure consciousness. She had to get beyond her associations with an identity that was associated with her known environment (her home, her job, her spouse, her kids, her problems), beyond her body (her face, her gender, her age, her weight, and her looks), and beyond time (the predictable habit of living in the past or the future, always missing the present moment). She had to get beyond her current self to create a new self. She had to get out of her own way so that something greater could take over.

When we are matter trying to change matter, it never works. When we are the particle trying to change the particle, nothing will happen, because we're vibrating at the same speed as matter and so can't have any significant effect on it. It's our consciousness (our intentional thought) and our energy (our elevated emotion) that influences matter. Only when we are consciousness can

we alter our brains, our bodies, and our lives and create a new future in time.

And because it's consciousness that gives form to all things and that uses the brain and body to produce different levels of mind, once you arrive in the place where you are pure consciousness, you're free. So I began to let students linger for extended periods of time in their meditations and become no *one*, no *body*, no *thing*, and be in no *place* and in no *time*, until they were comfortable in the infinite field of possibilities.

I wanted students' subjective consciousness to merge with the objective consciousness of the field for long periods of time. They had to find the sweet spot of the present moment and invest their energy and awareness in a void that is not really empty space but is actually filled with an infinite number of possibilities, until they were comfortable in the unknown. Only once they were truly present in this potent place beyond space and time—the place from where all things materially come—could they start to create. This was when the real changes during the workshops began to happen.

A Quick Overview of the Brain Scans Used

I want to introduce you to two types of brain-scan readings so that you can see and understand the changes I'm about to show you. Let's make it simple. The first type of scan we used measures degrees of activity between brain areas (see Figure 10.2, located along with the rest of the figures for this chapter in the full-color insert pages). The scans map two relative types of this activity. Hyperactivity (or overregulation) is depicted by red lines connecting different locations in the brain. Imagine telephone lines connecting one place to another in order to establish communication between those areas. Having too many red lines at any one time indicates too much action taking place within the brain. Hypoactivity (lack of regulation) is depicted by blue lines indicating that minimal information is being communicated between the different brain areas.

The thickness of the lines represents the *standard deviation*, or how much *dysregulation* (or abnormal regulation) exists between the two locations the line connects. For example, the thin red lines indicate that the level of activity between those locations is 1.96 standard deviations (SD) above normal. The thin blue lines indicate that the level of activity between those locations is 1.96 SD below normal. The medium lines indicate 2.58 SD either above (red) or below (blue) normal. And the thick lines indicate 3.09 SD above or below normal. So when you see a lot of thick red lines in a scan, it means the brain is working too hard. When you see a lot of thick blue lines, it suggests there's little communication between different areas of the brain and, therefore, the brain is underactive. Think of it like this: The thicker the red line, the higher the volume of data the brain is processing, and the thicker the blue line, the lower the volume of data the brain processing.

The second type of scan we used comes from the QEEG analysis and is called a *Z-Score report*. *Z-Score* is a statistical measure that tells us not only whether a point is above or below average, but also how far from normal the measurement is. The scale on this report ranges from –3 to +3 SD. The darker blue represents 3 or more SD below normal, while the lighter blues range from about 2.5 to 1 SD below normal. Blue-green is approximately 0 to 1 SD below normal, while green is baseline normal. Light green registers at the outer area of normal but is considered from 0 to 1 SD above normal, while yellow and light orange are approximately 1 to 2 SD above normal, darker orange is about 2 to 2.5 SD above normal, and red is 3 or more SD above normal. (See Figure 10.3.)

The Z-Score report that will be used is called *relative power*, and it shows information about the amount of energy in the brain at different frequencies. Because green, as explained previously, indicates the normal range, the more green there is in a scan, the more the person is conforming to normal brain-wave activity. Each colored circle (resembling a person's head when viewed from the top) represents what one person's brain is doing at each brain-wave frequency. The circle in the upper-left region of each scan shows the lowest brain-wave frequency (in delta brain waves), and each

circle after that depicts a higher and higher brain-wave state, moving progressively up to the highest beta brain waves at the bottom-right region. A cycle per second in brain-wave frequency is known as hertz, or Hz. From left to right and from top to bottom, it progresses from 1 to 4 cycles per second (delta) to 4 to 8 cycles per second (theta) to 8 to 13 cycles per second (alpha) to 13 to 30-plus cycles per second (low mid-range and high-range beta). The beta activity can be broken down into different frequency bands, such as 12 to 15 Hz, 15 to 18 Hz, 18 to 25 Hz, and 25 to 30 Hz.

Therefore, the relative colors in each area show what's happening in each different brain-wave state. For example, a lot of blue in a majority of the brain in 1 cycle per second of delta suggests that there's little activity of the brain in that delta range. And if there's a lot of red in 14 Hz alpha in the frontal lobe, it means that there's heightened alpha activity in that area of the brain.

It should also be understood that these measurements could be interpreted differently depending on what the subject is doing when the scan is taken. For example, if 1 Hz delta were depicted in blue, that would suggest that the energy in the brain at that frequency is 3 SD below normal. In a clinical sense, that might be interpreted as being abnormally low. But because it was recorded when the subject was meditating, such a scan would actually suggest that the 1 Hz delta had opened the door to a stronger connection to the collective conscious energy field. In other words, as the energy in the neocortex is turned way down, the autonomic nervous system is more readily accessed. In just a bit, you'll see several examples that will make all of this clear. In the meantime, glance at Figure 10.3 again. It will give you an overview to illustrate what I've just explained.

Coherence vs. Incoherence

Now look at Figure 10.4. The image to the left (labeled "before meditation") represents a brain that has a lot of chatter. It's functioning in a high level of arousal (high-range beta) and is quite incoherent. The thickness of the red lines shows that this

brain is 3 SD above normal (because the thicker the red line, the more revved up and imbalanced the brain is). By looking at the red lines, you can see excessive incoherent activity happening throughout the entire brain. The blue in the front of the brain represents hypoactivity (2 to 3 SD below normal) in the frontal lobes, showing that the frontal lobes are shut down or turned off and so aren't restraining the hyperactivity in the rest of the brain.

This is a brain with attention problems; it's so overloaded that it has no leader to control the chatter. It's like a TV satellite system with 50 channels where the volume is turned up really loud and the channels are changing every second. Too many quick shifts in attention span occur from one thought process to the next, so the brain is overly vigilant, highly aroused, overworked, and overregulated. We call this an incoherent brain pattern, because the different parts of the brain are not working together at all.

Now take a look at the second image (labeled "after meditation"). You don't have to be a neuroscientist to see the difference between the first image and this one. Here, you see hardly any red or blue lines, demonstrating normal brain activity—with very little hyperactivity or hypoactivity. The chatter has stopped, and the brain is working more holistically. This person's brain is now in balance, so we can say that this brain demonstrates a more coherent pattern. (The remaining activity in blue and red, as indicated by the arrow, represents sensory-motor activity, which probably means the person is twitching or blinking and in a state of rapid eye movement, or REM, which typically happens in very light sleep.) This change took place in one of the students after only *one* meditation.

Now let's explore some more case studies of students from the workshops. For each, I'll first give you a bit of background so that you can see what state of being students were in when they began the workshop, then I'll explain what their scans showed, and finally I'll describe the new state of being each student created.

Healing Parkinson's Disease Without a Placebo or Drug

Michelle's old self: Michelle is in her 60s and was diagnosed with Parkinson's disease in 2011, after she noticed progressive involuntary shaking of her left arm, left hand, and left foot. In November 2012, she became a patient at Barrow Neurological Institute in Phoenix. Her attending physician told her that she'd probably had Parkinson's for 10 to 15 years already and that she'd have to live with the symptoms. Her plan was to cope with the progression of the bodily limitations as she aged. She began taking Azilect (rasagiline mesylate), a medication used for Parkinson's disease that stops the uptake of dopamine at the receptor-site level, slowing its breakdown in the body. The drug produced very few noticeable changes.

Michelle became a student in November 2012. The month of December was outstanding. Her daily meditation routine brought a feeling of peace and joy, which began to reduce her symptoms to a noticeable degree. Michelle was certain that this course of action would assist her in overcoming Parkinson's.

She continued experiencing great meditation sessions through early February 2013. In mid-February, however, Michelle's mother was admitted to intensive care in Sarasota, Florida, so Michelle flew to Florida to be with her. The day Michelle flew back to Arizona for our February 2013 workshop, her mother was placed in hospice care. Michelle's plane landed in Phoenix about an hour and a half before her first brain scan. Needless to say, she was both physically and emotionally exhausted at the time of the brain scan, which indeed showed the extreme stress she was experiencing.

By the end of that workshop, she was certainly in a calmer, more positive state of being, with barely noticeable Parkinson's symptoms. Following the workshop, Michelle returned to Florida to be with her mother again. Although she and her mother always had a difficult relationship, as a result of her efforts in the workshop, Michelle felt sufficiently strengthened to be supportive, loving, and totally free of any old issues that could have interfered with the love she felt for her mother.

Nevertheless, because of her mother's illness and eventual passing, as well as her sister in Texas having a major stroke, Michelle was forced to fly back and forth to Florida and Texas to deal with her family challenges. Her routine was greatly affected, and by June, she stopped doing her meditations. Life had gotten in the way, and she had too many responsibilities. Stopping her meditations was like stopping taking the placebo. When she noticed her symptoms returning, she started meditating again and made significant strides.

Michelle's scans: Because Michelle lives close to Dr. Fannin's clinic in Arizona, we were able to track her progress for more than five months, by taking a series of six periodic brain scans. I want to explain her evolution during that time.

Take a look at the "before meditation" part of Figure 10.5. This is her scan at the February 2013 event after she came home from Florida, stressed and exhausted from her mother's illness. The thick red lines indicate her brain in all areas is 3 SD from normal. She's displaying too much brain activity, hyperincoherence, and overregulation. In Parkinson's disease, this is quite common. The lack of the proper neurotransmitters (specifically dopamine) causes the neurons to display an erratic communication system between each region of the brain, with neural networks firing out of control. The result is a type of spastic or hyperactive neuronal firing, which affects the brain and the body. As a result, involuntary motor functions interfere with normal movement.

Now review the "after meditation" part of the same figure. This is Michelle's brain after four days of changing her state of being during meditation. This is very close to a normal brain, with very little hyperactivity, incoherence, or overregulation. At the end of our event, she was experiencing no involuntary tremors, twitches, or motor problems—and her brain scan confirms this change.

Now let's look at the QEEG readings in Figure 10.6A, labeled "before meditation." If you look from the middle of the second row all the way to the last row—the images in blue—you'll see that Michelle's brain is showing no alpha or beta brain-wave functioning.

Remember that blue means cooled-off brain activity. With Parkinson's, this is typically represented by lessened cognitive activity, compromised learning, and a loss of engagement. Here, you can see that Michelle can't consolidate new information. She has no ability to sustain an internal picture, because she's not producing alpha brain waves. Her very low-range beta patterns also show that she is having difficulty with sustaining levels of awareness. All of the energy in her brain is going toward dealing with her hyperincoherence, so it's like a lightbulb going from 50 watts to 10 watts. The volume of energy in the brain is turned down.

If you look at the "after-meditation" part of the graphic, you'll see what looks like a much-improved and balanced brain. All of those green areas in most of the images indicated with arrows represent normal and balanced brain activity. Her brain can now function in alpha, and she can move into internal states more easily, cope with stress better, and enter into the subconscious operating system to influence autonomic functions. Even her beta activity returned back to normal (green), indicating that she is more conscious, alert, and attentive. The balanced activity resulted in very few motor problems.

The red areas circled at the bottom in higher-range beta signify anxiety. This is the attitude that Michelle struggles with and is working on changing from an internal perspective. Coincidentally, anxiety is exactly what has amplified her Parkinson's symptoms in the past. As she lowers her anxiety, she lowers the symptoms of Parkinson's. To Michelle, her tremors now represent when she's out of balance in her life. When she regulates her internal states, she produces changes in her external reality.

Three months later, Michelle again had her brain scanned at Dr. Fannin's office. The May 9, 2013, scan in Figure 10.6B still shows her brain improving, which is exactly what Michelle reported. She's still getting better in the midst of all of the different stresses in her life. Because she does her meditations every day (think of it as taking her placebo daily), Michelle is continually changing her brain and body to be greater than the conditions in her environment. The scan shows that she's dropped almost

another standard deviation from her previous scan at the bottom of the graph. You can clearly see that her anxiety is still getting better, and as a result, so is her condition. Less anxiety means fewer tremors. She's sustaining and thus memorizing that state of being for a longer period of time—and her brain is showing the changes.

If you look at Michelle's brain scan from June 3, 2013, in Figure 10.6C, you'll see a slight regression of her progress—although she's still better than when she started. Here, she'd stopped doing her meditation (and therefore stopped taking the placebo), so her brain slightly regressed to what it knew before. The brain with the arrow at the blue area of 13 Hz means she's hypoactive in the sensory-motor area and, thus, has less ability to control her involuntary tremors. In this brain-wave pattern, Michelle has less energy to control her body. You can also see the red areas circled again in the bottom of the scan returning in higher-range beta, which correlate with her anxiety.

By her June 27, 2013, scan shown in Figure 10.6D, Michelle had gone back to her meditations at the beginning of that month, and her brain scan showed a significantly better brain. She had less overall anxiety, as demonstrated in red at the bottom row at 17 to 20 Hz. Now compare that scan to her next one, on July 13, 2013, after our workshop, as depicted in Figure 10.6E. There's even less red, and the blue that showed up in her first scan in February during alpha (indicating hypoactivity) is completely gone. Michelle continues to improve, and her changes are becoming more consistent.

Michelle's new self: Today, Michelle hardly ever has any of the involuntary motor symptoms associated with Parkinson's disease. Very minor twitches do present themselves when she gets stressed or overtired at times, but for the most part, she's high functioning and normal. When Michelle is balanced and joyful, doing her meditations daily, her brain is working well—and so is she. From both our continued scans and her own reports, Michelle isn't merely maintaining her condition; she continues to get better and

better. She keeps meditating, because she understands that she has to be the placebo every day.

Changing Traumatic Brain and Spinal-Cord Injury by Thought Alone

John's old self: In November 2006, John broke his neck at the seventh cervical and first thoracic vertebrae while he was a passenger in a car that spun out of control and rolled at high speed. Due to the impact, he suffered a severe head injury as well. The doctors were quick and sure about his prognosis. He would be a quadriplegic for the rest of his life. He would never walk again and would have very limited use of his arms and hands. His vertebrae were 100 percent dislocated, resulting in spinal-cord damage. It wasn't until John had surgery that his doctors saw the exact extent of his injuries. Two days later, the neurologist told John's wife that his spinal cord was somewhat "intact" but that his type of injury could have the same outcome as a complete cord severing. It would be, as with all spinal-cord injuries, a waiting game.

When you're caught up in the day-to-day reality of living in the intensive care unit, and later a rehab center, it can be extremely difficult not to get swept away by conventional thinking. When John and his family asked about his possible recovery, the doctors said that given the injury and the lack of return to any kind of normal functioning up to that point, they should begin accepting the inevitable. John would be physically handicapped for the rest of his life. His doctors hammered this message home over and over, as a necessary part of "moving on." But somehow, both John and his wife couldn't accept it.

I met John while he was in his wheelchair in 2009, along with his wife and family and an amazing physical therapist who understands neuroplasticity. They are some of the most energetic and optimistic people I've ever met, and we eagerly began our journey together. John's scans: Take a look at John's "before meditation" brain scan in Figure 10.7. His first picture demonstrates quite a bit of hypoactivity. It's more than 3 SD below normal. John's coherence measurement, with such significant thick blue lines, is the opposite of our study of Michelle's Parkinson's condition, which showed thick red lines. This scan reveals a diminished capacity for different parts of the brain working well together. His brain here is on idle and has no energy, and he has limited ability to respond to anything for any length of time. He couldn't sustain attention, and his awareness was limited. Because of his traumatic brain injury, his brain was in a state of super-low arousal, and it showed a high degree of incoherence.

Now look at his brain scan after four days of meditation. In the first image on the upper-left margin at 1 Hz delta, he has some more activity demonstrated in red. In this case, it's a good sign, because more coherence is happening in delta in both hemispheres. Here, John is starting to show more balanced dual-brain processing. Because his traumatic brain injury is most visible in delta and theta, the hyperactivity in delta suggests that his brain is waking up. The rest of his brain in alpha and beta is showing more balanced activity and better cognitive function. This shows he has more access to control his mind and body.

Now view Figure 10.8. The blue color starting from about the middle of the second row until the end of the bottom row once again indicates that John has no alpha or beta brain waves. This blue color distributed throughout the alpha and beta realms in the left and right hemispheres suggests that he's vegetating and working on limited resources. The blue shows less cognitive ability and less capacity to control his body. John's mind is just not there.

After four days of meditation, 90 percent of John's brain has returned back to normal, as shown by all the green. That's pretty good! He still has some hypoactivity in his left hemisphere, where the arrows are pointing, indicating some problems with verbal skills and expressing himself, but it's still so much better than his first scan. John continues to do his meditations, and his brain continues to show more energy, more balance, and more coherence.

John has regained access to the latent neuropathways that were there before. His brain woke up, remembered how to work again, and now has the energy to work better.

John's new self: John stood up at the end of our February 2013 event. He has regained full control of his bowels and his bladder. To date, he is now standing in a more normal and integrated posture. His movements are more coordinated. The frequency, intensity, and duration of his spastic tremors have diminished considerably. He's even doing a total gym workout on a regular basis, thanks to the help of his amazing therapist, B. Jill Runnion (director of Synapse–Center for Neuro Re-Activation in Driggs, Idaho), who also studies my work and has the skills and unlimited mind to challenge John by setting up the right conditions. His unassisted vertical-squat exercises have progressed from a 10-degree angle to a 45-degree angle.

John is now in complete control of lowering his body to a seated position. He can also perform a specific physical therapy exercise that involves loading his leg and torso muscles and pushing a sled away from his body with resistance. John is now going from lying facedown to supporting himself on all fours, completely under his own power, and he's now starting to crawl.

Just months after the workshop, John astounded his medical team with all of his improvements in cognitive functioning. His advances exceeded anything any of the specialists had ever seen in a spinal-cord-injury patient. It was as if John finally woke up, and his scans show that he now has more access to his brain and body. John is still demonstrating more control over dormant areas of his brain and body, because he now has more capacity to regulate his body.

John's overall integration and coordinated movement patterns progressed considerably, enabling him to sit up at a table unassisted, with his feet planted on the floor. John's fine motor skills improved to the point where he can now hold a pen and sign his name, use a smartphone to send a text message, grip the steering wheel to drive, and hold a regular toothbrush. His cognitive

changes demonstrate more self-confidence and greater inner joy. He has a much greater sense of humor and is more aware than ever.

During the summer of 2013, John was able to go on a white-water rafting trip, where he held himself unassisted in a raft for six hours a day and slept in a tent on the ground. He managed to live in the Idaho wilderness, away from contact with the outside world, for seven days and six nights. He couldn't have done this a year ago. Every time John and I talk, he always says the same thing: "Dr. Joe, I have no idea what's happening."

I always give him the same response: "The moment you know what's happening, John, it's all over. The unknown is beyond our comprehension. Welcome it."

I'd like to make one final point about John's case. Everyone knows that a spinal-cord injury doesn't heal with typical conventional approaches. I'm sure that it's not *matter* that's changing *matter* for John. That is, it's not chemistry or molecules that are altering his damaged spinal cord. From a quantum perspective, he'd have to be in a coherent frequency of heightened energy that would have to consistently lift or entrain matter to a new mind. He'd have to display an elevated energy or wave that vibrates at a frequency faster than matter, combined with a clear intention, in order to alter the particles of matter. So it's *energy*, which is the epiphenomenon of matter, that is rewriting the genetic program and healing his spinal cord.

Overcoming the Analytical Mind and Finding Joy

Kathy's old self: Kathy is the CEO of a large company, an attorney, and a committed wife and mother. She has been trained to be highly analytical and rational. She uses her brain every day to anticipate outcomes and to be prepared for every possible forecasted scenario based on her experience. Before she was introduced to my work, she'd never actually meditated. In the beginning, Kathy became very aware of how much she was analyzing everything in her life. She had a huge daily to-do list and described her brain as

never shutting off. In hindsight, she confesses that she was never in the present moment.

Kathy's scans: Take a look at Kathy's "before meditation" brain scan in Figure 10.9. These delta-to-theta ratio measurements represent her ability to maintain focus and concentration in order to process and deal with intrusive and extraneous thoughts. The first arrow in the back of her brain on the right side, where the larger red spot is located, shows that she is seeing pictures in her mind. The second arrow, near the smaller red area on the left side, indicates that Kathy is internally talking to herself about those pictures. The imagery and constant mind chatter are causing her brain to be stuck in a loop.

In the "after meditation" scan, taken at the end of the workshop, you can clearly see that Kathy's brain is more balanced, more whole, and more normal. She no longer has any brain chatter, because her brain is integrating and processing information more efficiently. She's in a state of coherence. And the change in her brain state is accompanied by much greater joy, clarity, and love.

Now let's look at her coherence measurements in Figure 10.10. At the beginning of the workshop, Kathy's brain was in high-range beta, a state of high arousal, high analysis, and high-emergency mode. The thick red lines in alpha and beta show that she's three SD above normal. Her brain is hyperactive, out of balance, and highly incoherent—and she's having trouble controlling her anxiety.

Now take a look at the "after meditation" scan, taken on the last day of the February event. You should, by now, be able to recognize a more normal and balanced brain, which has much fewer high-range beta brain waves and far more coherence.

Kathy still had some work to do, so we set up an experiment after the workshop, because she lives in the Phoenix area and could visit Dr. Fannin's clinic. Dr. Fannin showed her a picture of a healthy, balanced, and normal brain on a QEEG scan (in green) and told her that this was where she needed to focus her attention. He suggested that when she moved into a new state of being every

day in her meditation, she should select that potential outcome for the next 29 days. Since she then could assign more meaning to the placebo, she held a greater degree of intention about the benefits of the outcome.

It worked. If you look at Figure 10.11, which shows the scan dated April 8, 2013, about six weeks later, you'll see an even more normal brain, with no evidence of anxiety (seen in red). In addition, check out Figure 10.12. Can you see the progression from February 20, 2013, where Kathy's brain scan is red in the higher brain-wave frequencies (21 to 30 Hz), to the end of the February event, where her brain scan has changed to green in the second image (and so is much more normal)? The red areas represented show very high levels of anxiety (high-range beta) and overanalysis because her brain waves in the higher frequencies (21 to 30 Hz) are hyperactive—her brain was working too hard. By the beginning of April (shown in Figure 10.13), Kathy's brain is balanced, coherent, and much more synchronized. Kathy has a much different brain today and reports truly feeling like a different person.

Kathy's new self: Kathy reports that she has seen numerous positive changes in her career, her daily life, and her relationships. She meditates daily, and when she thinks she doesn't have time to meditate, that's when she makes sure to find the time to do it. She understands that the attitude that created her out-of-balance mind and brain is related to time and the conditions in her external environment. Kathy says that the answers to her questions come more easily and with far less of a struggle. She listens to her heart more often, and she catches herself before she moves into cycles of vigilance. She rarely gets caught up in those loops, and she finds herself acting in a kinder and more patient manner. Kathy is happier from the inside out.

Healing Fibroid Tumors by Changing Energy

Bonnie's old self: In 2010, Bonnie developed significant pain and excessive bleeding during her menstrual cycle. She was diagnosed

3.09

Z-Score ≥

≥ 2.58

Z-Score

Z-Score ≥ 1.98

with excessive estrogen production and was encouraged to begin bioidentical hormones. At age 40, she found this solution to her diagnosis to be extreme.

Bonnie remembered that her mother had had the same symptoms at her age. Her mother had taken hormone pills and eventually died of bladder cancer. While there may be no specific connection between the hormone therapy and bladder cancer, what caught Bonnie's attention was that she was having the same physical symptoms as her mother. She didn't want to develop the same outcome.

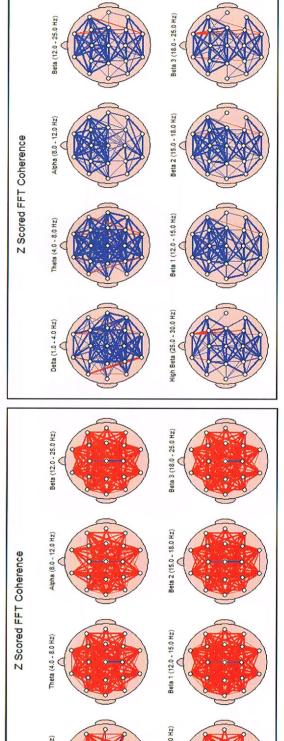
Her vaginal bleeding began to last even longer (sometimes up to two weeks), and Bonnie became anemic and lethargic, and gained about 20 pounds. She would lose an average of two liters of blood each month during her menstrual cycle. A pelvic sonogram confirmed fibroid tumors. Bonnie went through myriad blood tests and was told she was perimenopausal and most likely had an ovarian cyst. Her specialist who recommended the hormone therapy told Bonnie that fibroids don't go away and that the severe bleeding would continue for the rest of her life.

I randomly selected Bonnie for one of the extra brain maps during our Englewood, Colorado, event in July 2013; she was mortified when I pointed at her to indicate she was selected for the scan. Bonnie's menstrual cycle had started the evening before the workshop, and she typically had to wear a large diaper to capture the amount of blood she lost during her period. When, after several meditations, I instructed the students to lie down, Bonnie was concerned that she would bleed all over herself and the floor.

Because of the extreme pain that accompanied Bonnie's periods, even sitting was uncomfortable. Even so, she was determined to continue practicing the meditation techniques every day for her own peace of mind. During the first meditation in which she was being brain mapped, Bonnie had an experience that she can only describe as mystical. She felt her heart open and expand. Her head pushed back, and her breathing changed. Bonnie saw light flood into her body, and she experienced a tremendous sense of peace. She also heard the words: "I am loved, blessed, and not

HYPO-AROUSAI HYPOACTIVIT

HYPER-AROUSA

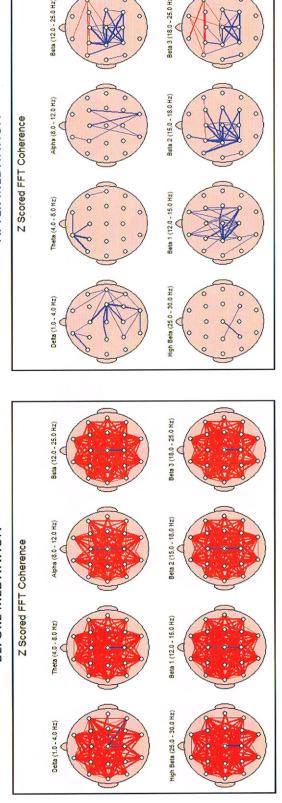


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CHANGES IN PARKINSON'S DISEASE AFTER MEDITATION

BEFORE MEDITATION

AFTER MEDITATION



Z-Score ≥ 1.98 Z-Score ≥ 2.58

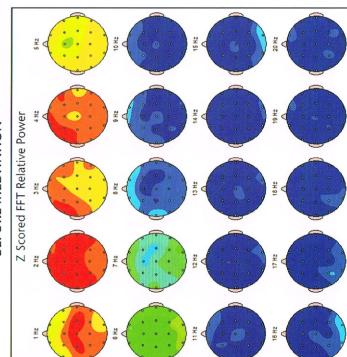
Z-Score ≥ 3.09

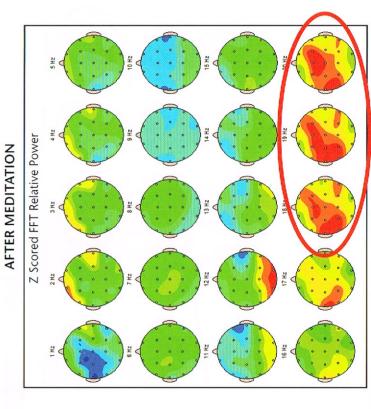
Figure 10.5

CHANGES IN PARKINSON'S DISEASE AFTER MEDITATION

February 20, 2013

BEFORE MEDITATION





-2 -1 0 1 2 3

Figure 10.6A

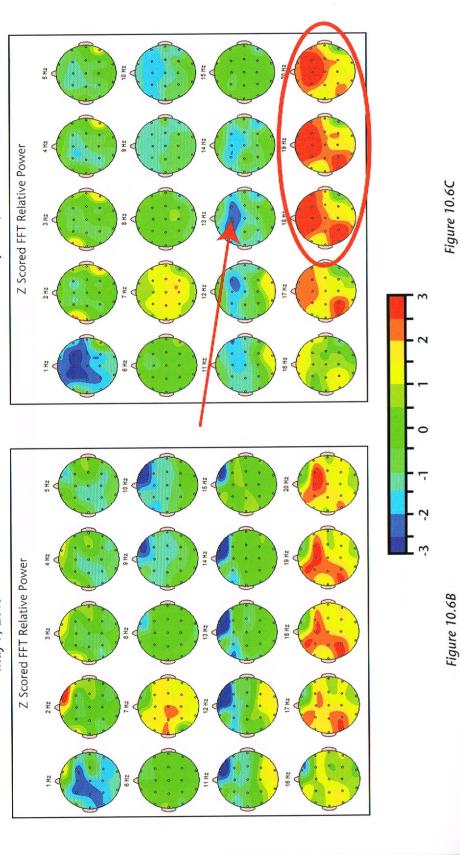
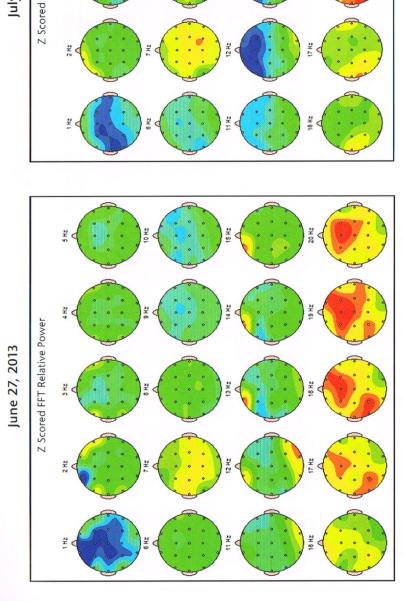


Figure 10.6B



July 13, 2013

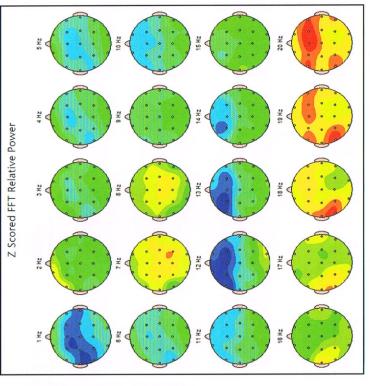
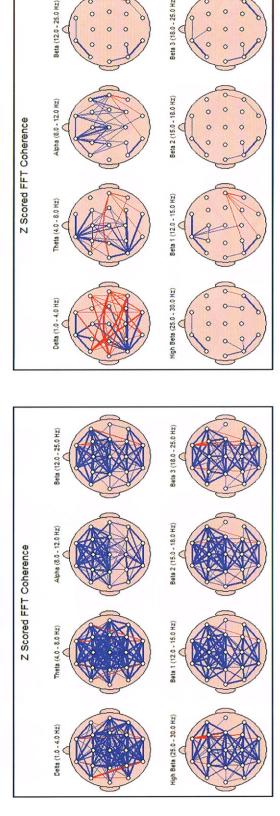


Figure 10.6D

CHANGES IN TRAUMATIC BRAIN INJURY AFTER MEDITATION

BEFORE MEDITATION

AFTER MEDITATION



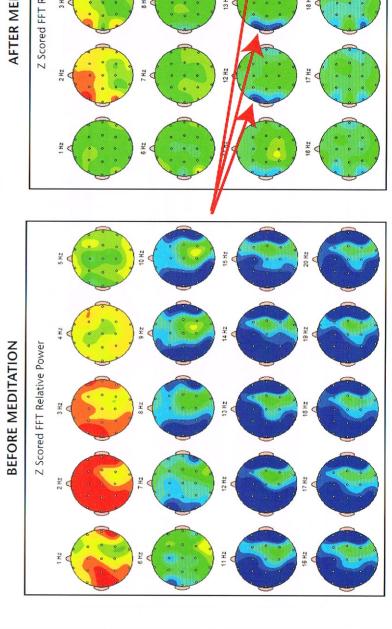
Z-Score ≥ 1.98

Z-Score ≥ 2.58

Z-Score ≥ 3.09

Figure 10.7

CHANGES IN TRAUMATIC BRAIN INJURY AFTER MEDITATION



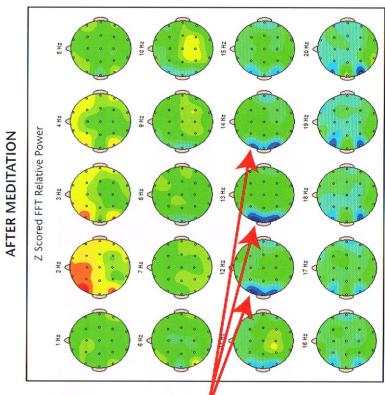


Figure 10.8

CHANGES IN DELIA/THETA RATIO IN MEDITATION

Delta/Theta

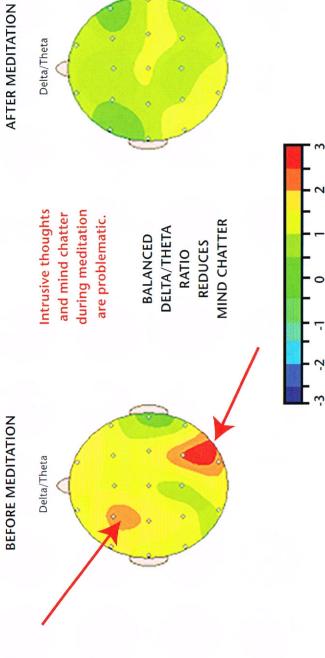
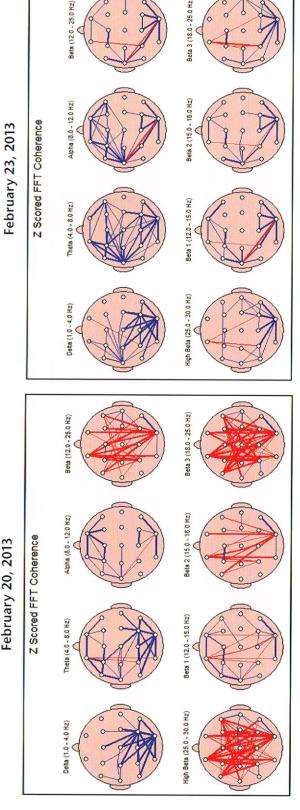


Figure 10.9

February 20, 2013



Z-Score ≥ 2.58

Z-Score ≥ 1.98

Z-Score ≥ 3.09

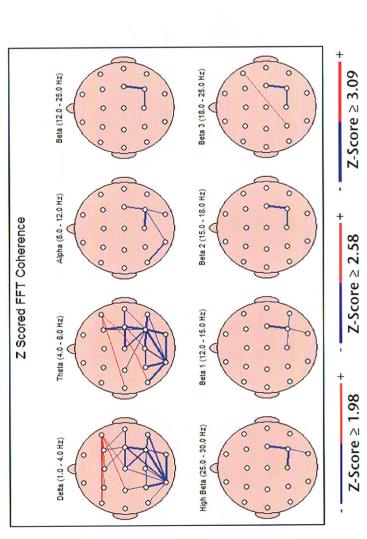


Figure 10.11

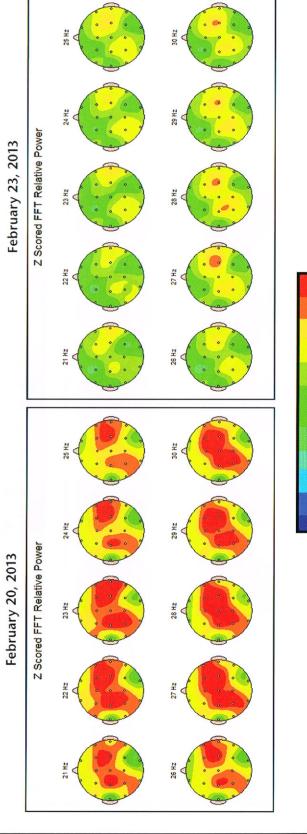


Figure 10.12

April 8, 2013

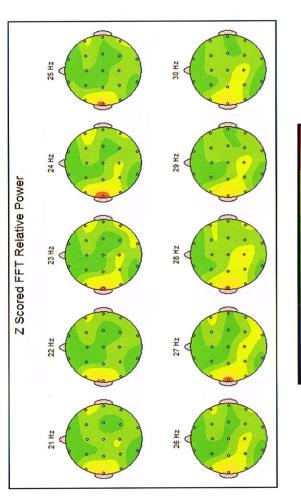


Figure 10.13

NORMAL EEG SCAN

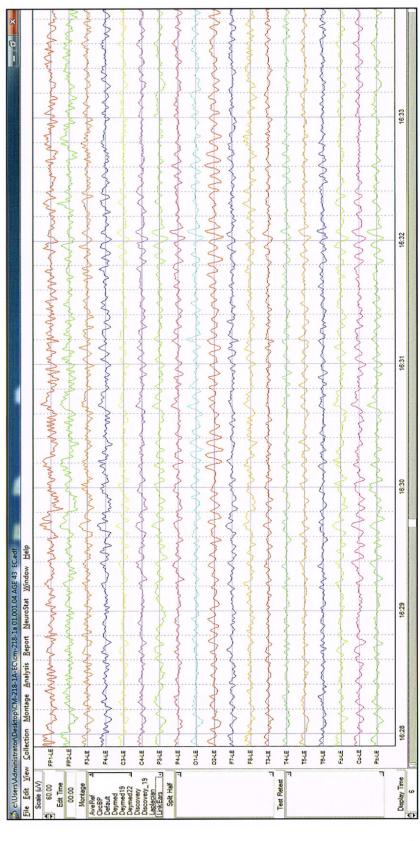


Figure 10.14

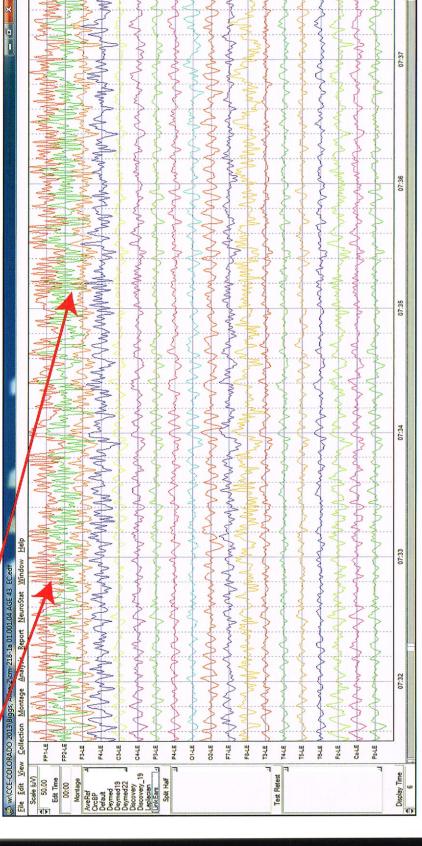


Figure 10.15A

HEIGHTENED ACTIVITY IN THE FRONTAL LOBE

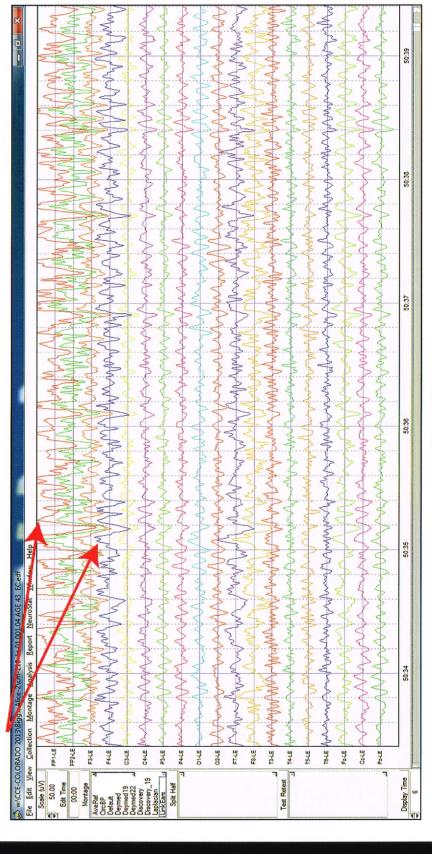


Figure 10.15B

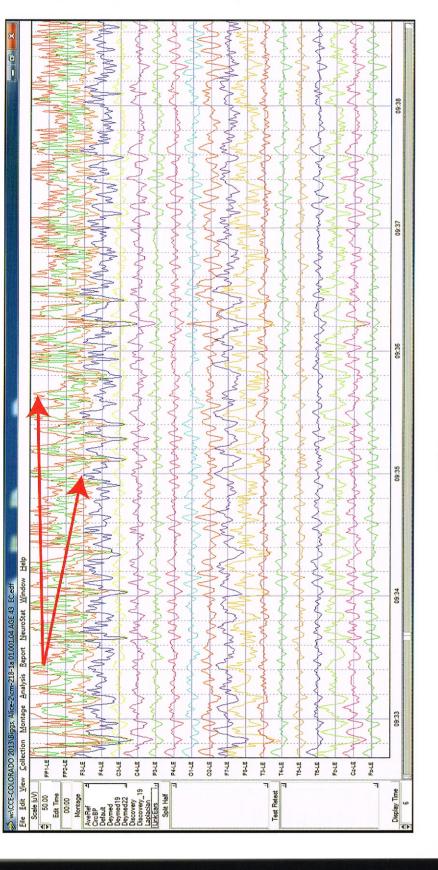


Figure 10.15C

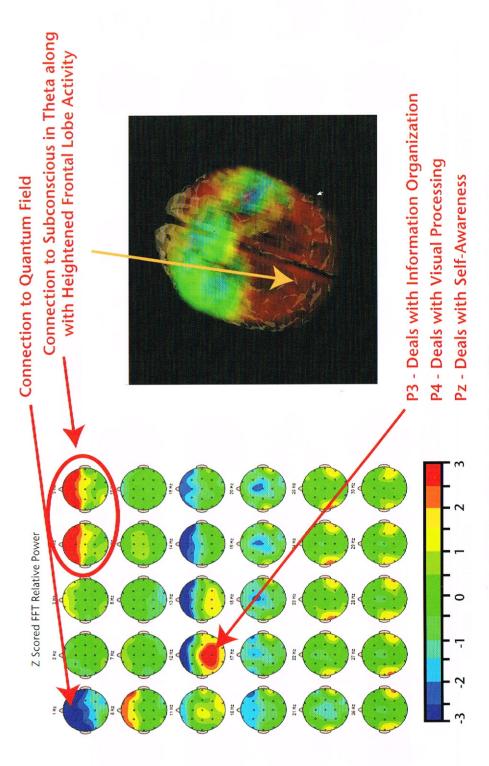
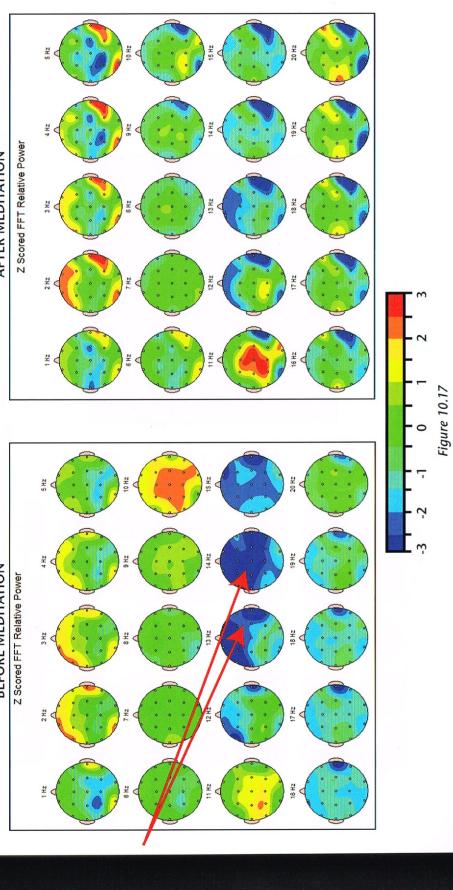
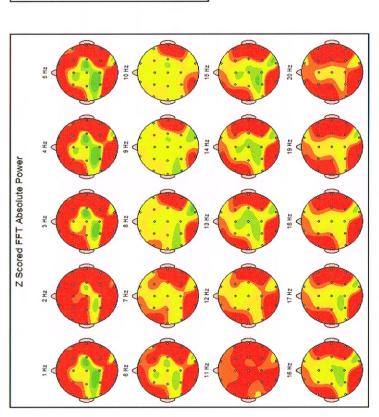
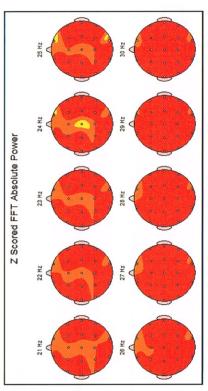


Figure 10.16



EXPERIENCING FULL OUT ECSTACY DURING MEDITATION





-3 -2 -1 0 1 2 3

Figure 10.18

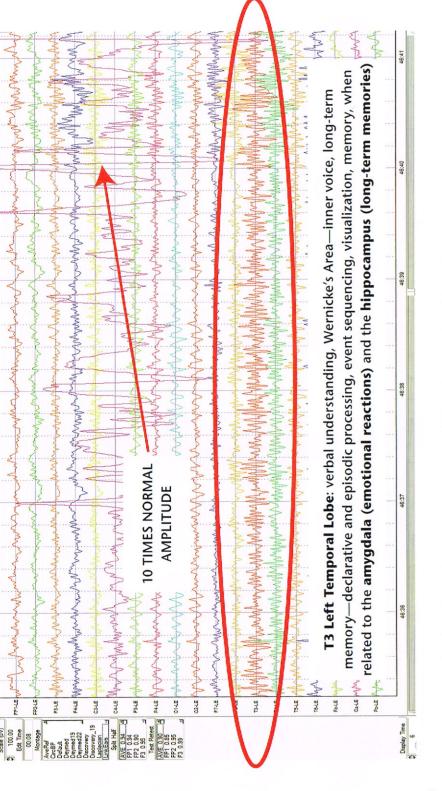
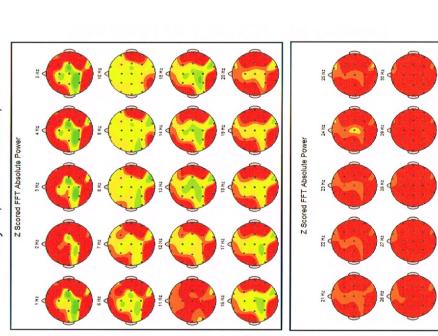


Figure 10.19

February 20, 2013–Carefree, AZ



July 11, 2013–Englewood, CO

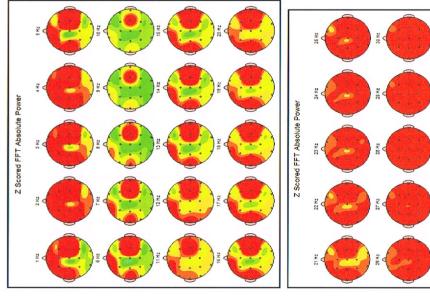
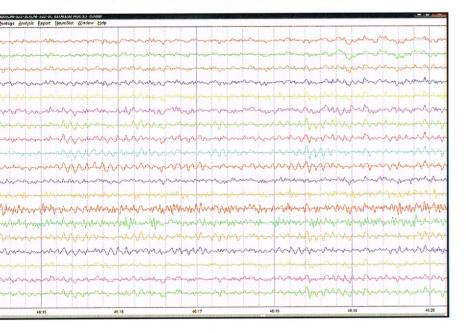
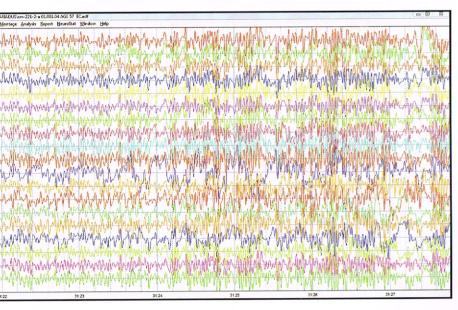


Figure 10.20

NORMAL BRAIN-WAVE ACTIVITY



KUNDALINI-ECSTACY EXPERIENCE



forgotten." Bonnie burst into tears during the meditation, and her brain scan showed that she was in a state of bliss.

Bonnie's scans: Take a look at Bonnie's EEG scan in Figure 10.14. We were lucky enough to catch the whole experience in real time. The first graphic shows normal brain-wave activity. Everything is in balance and quiet. If you review Bonnie's three scans in Figure 10.15, which capture what was happening to her at different times during her meditation, you can see elevated energy and amplitude in her frontal lobes, which represents her processing quite a bit of information and emotion. She's in an expanded state of consciousness and is experiencing peak moments at different intervals. Most of the activity is happening in the theta brain waves, and it signifies that she is in her subconscious mind. The inner experience is very real to her in that moment. She's so completely focused on the thought that it becomes the experience. The emotional quotient is represented by the amount of energy (amplitude) her brain is processing. Take a look at the vertical length of the lines where the arrows are pointing. That's very coherent energy. Bonnie is in a heightened state of awareness.

Now glance at Figure 10.16. Bonnie's QEEG scan in real time has an arrow pointing to 1 Hz in delta brain waves, illustrating her connection to the quantum field (shown in blue). Bonnie also has heightened energy in her frontal lobe in theta brain waves (demonstrated in red) to match exactly what was happening in her EEG scan. Look at the red circle that is highlighting her frontal lobes as well as the arrow pointing to a top view of the brain's frontal lobe immediately below. The image you are seeing is a snapshot of a motion picture of Bonnie's brain activity during her entire meditation. Because one of the functions of the frontal lobe is to make thoughts real, what she is experiencing in theta with her eyes closed is very real to her. We could say that Bonnie's inner experience was like a very vivid, lucid dream. The red arrow at 12 Hz alpha—isolating the red spot in the center of her brain—shows Bonnie's attempt to make sense of her inner experience and then

process what she was seeing in her mind's eye. The rest of her brain is healthy and balanced (shown in green).

Bonnie's new self: Bonnie's experience that day changed her for good. The amplitude of energy related to the inward experience was greater than any past experience from her external environment, and thus her past was biologically removed. The energy of the momentous peak of her meditation superseded the hardwired programs in her brain and the emotional conditioning in the body—and her body instantly responded to a new mind, to a new consciousness. Bonnie had changed her state of being. In less than 24 hours, her bleeding stopped completely. She had no symptoms of pain and instinctively knew that she was healed. In the months since the event, Bonnie has experienced only normal menstrual cycles. She hasn't had any excessive bleeding or pain since the workshop.

Experiencing Ecstasy

Genevieve's old self: Genevieve, a 45-year-old artist and musician, currently resides in Holland and travels quite a bit because of her vocation. During the February event, I was watching her brain scan with Dr. Fannin during her meditation. We started to notice some significant changes in her energy during the middle of her inward journey. When we both saw a particular reading on her scan at the same time, we looked at each other, knowing something was about to happen. Within moments, when we turned to look at her, we saw tears of joy running down her face. Genevieve was in ecstasy. She was in utter pleasure, and her body was responding quite readily. We'd never seen anything like this before.

Genevieve's scans: If you look at Figure 10.17, you'll see a relatively normal brain scan before Genevieve's meditation. The areas of green spread throughout the brain signify a healthy, well-adjusted woman with a balanced brain. The blue areas of lessened sensory-motor activity before she begins, in alpha 13 to 14

Hz, where you see the arrows, probably indicate jetlag, because she'd just arrived from Europe that day. If you observe Genevieve's brain during the meditation, you see an overall increase in balance. What happens next is off-the-chart amazing. When we saw her reach this peak moment at the end of her meditation, we knew from watching her scans that she had quite a bit of energy in her brain.

Now take a peek at Figure 10.18. This type of red activity, showing high amounts of energy in all brain-wave range frequencies, suggests that Genevieve is in a highly altered state. Someone who didn't know that she was meditating and who just saw the brain scan would say that she was experiencing an extreme level of anxiety or psychosis. But because her personal testimonial described her being in sheer ecstasy, we know that all of the red represents a lot of energy in her brain. Her brain is at 3 SD above normal. It's energy, in the form of emotion stored in her body as the mind, that is being released and is traveling back to her brain.

Figure 10.19, which shows her EEG reading, validates this position. If you review the purple lines where the arrow is, you'll see that this part of the brain is processing ten times the normal amounts of energy. The area that's circled in red tells us that the experience is so emotionally profound that it's being stored in Genevieve's long-term memory. At the same time, she is also trying to verbally understand and make sense of what's happening to her in that moment. She might be saying something to herself like, *Oh my God! This is amazing. I feel so great! What is this feeling?* Her inner experience is as real as any outward event, and she's not trying to make it happen—it's just happening to her. She's not visualizing; she's experiencing a profound moment.

Interestingly, we scanned Genevieve again in July, at the event in Colorado, and she still displayed the same energy changes. When we handed her the microphone during both events, all she could say was that she was so in love with life that her heart was fully open and that she felt connected to something greater than herself. She was in a state of grace, and she felt so great that she wanted to stay in the present moment. If you look at Figure 10.20,

you'll see that her brain had the same patterns and effects at the July event as it had at the February event. The experience was still happening to her months later. She was truly altered from her personal transformation.

Genevieve's new self: I spoke with Genevieve several weeks after the July event. She told me that she's not the same person she was at the beginning of the year. Her mind has deepened, and she's more present and much more creative. She feels profound love for all things, and most important, she feels so lifted that she no longer feels as if she needs or wants anything. She feels whole.

Bliss: Moving the Mind Out of the Body

Maria's old self: Maria is a highly functional woman with normal brain activity. During the first meditation of the day, a 45-minute exercise, she experienced a significant change in her brain waves within moments.

Maria's scans: Look at Figure 10.21 and notice the difference between Maria's normal brain waves and her state of ecstasy. I watched her as she went into a heightened state of increased energy, and it appeared as though she were having an orgasm in her brain. Her scan shows a fully active brain having a full-on kundalini experience (kundalini is a latent energy stored in the body, which, when aroused, brings on higher states of consciousness and energy in the brain). If you look at Maria's scans, you can see that all areas of her brain were experiencing a very heightened energy. When the kundalini energy is awakened, it can rise from the lower spine to reach the top of the brain, at which point it can produce an extremely profound mystical experience. Many students in the workshops have these brain orgasms. In Maria's scan, all areas of the brain are fully engaged with energy, and her brain waves show three to four times the normal amplitude. Her brain is coherent and very synchronized. If you look at the scans, you'll see that the ecstasy comes in waves, just like an orgasm. She was

not trying to do any of this. It was actually just happening *to* her. Her entire brain was engaged in the inner event, and as a result, she was filled with profound energy.

Maria's new self: Today, Maria continues to have similar mystical experiences. Each time they occur, she reports feeling more relaxed, more conscious, more aware, and more whole. She welcomes the next unknown moment.

Now It's Your Turn

These few examples (out of many that were documented) prove that it is indeed possible to *teach* the placebo effect. Now that you've received all of the information, stories, and proof of what's possible, it's time for you to learn the "how-to" so that you can experience your own transformation. The next two chapters will outline the steps you can take to begin your personal meditation process. It's my desire for you to put into practice all of the knowledge you've learned so far so that you experience the truth of your efforts. Once you receive the tools that you need to cross the river of change, I hope to see you on the other side.